

Waterloo North Hydro Inc.
Application for Approval of 2011 Electricity Distribution Rates

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EXECUTIVE SUMMARY
2011
DISTRIBUTION
RATE APPLICATION

EXECUTIVE SUMMARY

APPLICATION: (Exhibit 1)

Waterloo North Hydro Inc. (WNH) is submitting this Application for revised distribution rates effective May 1, 2011 in accordance with the Board's June 28, 2010 Chapter 2 of the Filing Requirements for Transmission and Distribution Applications.

The proposed distribution rates are required to:

- 1) Maintain capital investment in infrastructure at the levels necessary to ensure a reliable distribution system.
- 2) Construction of new Administration Building and Service Centre to improve efficiencies, consolidate inventory in one location, house larger vehicles, improve staff working conditions and meet support facility needs for a utility that has over double the number of customers it had when the current building was constructed.
- 3) Meet future staffing requirements.
- 4) Manage staffing levels and skills to ensure regulatory compliance, promote conservation programs, and implement changes resulting from the adoption of International Financial Reporting Standards.
- 5) Maintain or improve the level of service expected by our customers.
- 6) To provide a reasonable rate of return to the Shareholders.

The Schedule of Proposed Rates and Charges is set out in this Exhibit 1.

The information presented in this Application is WNH's forecasted results for its 2011 Test Year. WNH is also presenting the historical information for the OEB-approved data for 2006, Actual data for fiscal years 2006 through 2009, and forecast results for the 2010 Bridge Year.

The financial information supporting the Test Year for this Application will be Waterloo North Hydro's fiscal year ending December 31, 2011 (the "2011 Test Year"). However, this information will be used to set rates for the period May 1, 2011 to April 30, 2012.

Background

Waterloo North Hydro Inc. (WNH) is a medium sized LDC in the Province of Ontario and is responsible for providing all regulated electricity distribution services to over 51,000 residential and business customers in the City of Waterloo, the Township of Wellesley and the Township of Woolwich. With predecessors that date back to 1905, WNH was created in 1978 as a result of Bill 55. Waterloo PUC and four other utilities were amalgamated creating a service territory that even today is still one of the largest in the province at 672 sq. km, a service area slightly larger than Toronto Hydro.

WNH notes that of its 672 sq km. service territory, approximately 90% of the area is rural and 10% is urban. A larger rural component adds costs above an urban area due to the distance to travel the service area to respond to outages, to travel to construction sites, to perform inspections and to perform maintenance. In addition it takes a greater amount of investment to service customers in the rural areas as the density is much lower than in an urban area. In WNH's cost allocation model (Exhibit 7) the density based on road kilometres is 41 customers/km, which is closer to the rural area defined in this model (<30 customers/km), than the urban area (>60 customers/km). Some parts of the service area are home to Mennonite farmers that do not use electricity from WNH, which results in a greater distance between customers using WNH plant and generating revenue.

Home to two prominent universities and many high-tech and knowledge based businesses; WNH operates in a robust localized economy that has seen electrical demand over the last 20 years grow at over 2.5 times the provincial average. However, as noted below, the electrical demand and consumption has decreased in recent years.

WNH is focused on providing excellent customer service and provides educational information through various sources to its customers. As evidenced by the customer service survey in this exhibit, 91% of our customers agree that we provide excellent service and rank WNH higher than the provincial average.

WNH also operates and makes decisions based from a sound business perspective. It has a progressive Board of Directors that provides oversight in not only providing what is best for WNH's customers, it also ensures that it is done using sound business analysis and practices. WNH is always striving to contain its costs where possible and it is aware that all costs are ultimately borne by its customers.

1 WNH, similar to many LDCs, is facing an aging workforce and looming retirements. WNH
2 experienced the beginning of the wave of retirements recently. WNH works diligently to
3 maintain its level of staff members and with upcoming retirements WNH is prudently preparing
4 for the future by hiring apprentices and trainees. Apprenticeship training periods are four to five
5 years, thus, planning is imperative to have trainees part way through their apprenticeship in
6 advance of a Journeyperson retiring.

7 WNH's capital and operating programs have a history of adapting based on asset inspection
8 findings and in keeping with industry best practices WNH maintains excellent inspection and
9 maintenance practices, as evidenced in Exhibit 2, with the third party generated report
10 *"Waterloo North Hydro Inc. Asset Management Strategy"*.

11 WNH stays current with all Regulatory Proceedings, including OEB, OPA, IESO, ESA and MEI.
12 It ensures that its practices and reporting are in compliance with the regulatory rules and
13 participates in many proceedings, working groups, and assists the Board in testing some of its
14 rate models.

15 WNH owns and operates three (3) Transmission Grid Connected Transformer Stations (TS) and
16 a fourth TS is projected to commence construction in 2015. WNH has performed major
17 overhauls and upgrades to two (2) of its older Transformer Stations (40+ years old) in recent
18 years.

19 WNH has a competent and results oriented senior management. All members of the executive
20 team with the exception of one Vice President have significant industry experience.

21 In 2004, WNH began implementation of their first ever enterprise-wide software solution
22 integrating the existing billing system software with new modules in accounting, payroll, general
23 ledger, purchasing, inventory and work order systems to name a few.

24 In 2005 WNH installed their first ever GIS (Geographical Information System) software to track
25 plant and equipment assets in the field, as well as provide a new tool for planning and design
26 purposes. WNH continues to migrate data and legacy systems to the GIS to assist with asset
27 management, maintenance and outage management systems.

28 In 2007, after almost 20 years of customer growth without a major expansion to the WNH
29 Administration Building and Service Centre, WNH staff recognized that a significant shortage of
30 building space in all parts of the business needed to be addressed. In 2010, WNH commenced
31 constructing a new building/service centre, with a completion date in 2011. The project
32 information is detailed in Exhibit 2.

1 The amalgamation in 1978 of five utilities resulted in many voltage levels and WNH has worked
2 diligently to reduce this to the two most common distribution voltages used in the province, 13.8
3 kV and 27.6 kV. WNH has increased their rate of conversion to higher distribution voltage
4 levels in the past few years, in order to provide more reliable service to their customers in a
5 more cost efficient manner. This activity is detailed in Exhibit 3.

6
7 WNH's application has been prepared over many months, beginning in the third quarter of
8 2009. It has been approved by WNH's Senior Management for use in this application on
9 August 13, 2010.

Canadian Generally Accepted Accounting Principles (CGAAP)

This application has been filed in accordance with Canadian Generally Accepted Accounting Principles (CGAAP) as allowed for in the Board's July 28, 2009 EB-2008-0408 *Report of the Board: Transition to International Financial Reporting Standards*. The Filing Requirements for Rate Applications Section states, "The Board will require electricity distributors filing for 2011 rates to provide the required years, the 2010 bridge year and the 2011 forecasts in CGAAP based format. An electricity distributor may choose to present modified IFRS based forecasts for 2010 and 2011, if the distributor prefers to have rates set on the basis of modified IFRS." WNH has chosen to provide the required years, the 2010 bridge year and the 2011 forecast in CGAAP based format. The CGAAP based format extends itself to all costs in this application, including Rate Base, Depreciation and OM&A Costs and is prepared under the same CGAAP basis that WNH's audited financial statements are prepared under. WNH submits that the application of the format is not severable, an example of which is that capitalization of direct and indirect costs (overheads) cannot be on a CGAAP basis, while depreciation rates are subject to the new IFRS componentization rules. WNH notes that the Board's letter of April 30, 2010 "Depreciation Study for Electricity Distributors (EB-2010-0178) – Transition to International Financial Reporting Standards ("IFRS") clearly defines the depreciation study, and any changes as a result of the application of the study, under the realm of IFRS.

WNH is not submitting an updated depreciation study and thus, has adhered to the depreciation rates contained in the 2006 EDR Handbook, Appendix B.

Harmonized Sales Tax (HST)

WNH has not adjusted its 2010 Rate Base and OM&A Bridge Year Costs for the impacts of the Harmonized Sales Tax (HST) which is effective July 1, 2010, as WNH is required to record the incremental input tax credit (ITC) it receives on distribution revenue requirement items that were previously subject to PST and become subject to HST into the deferral account 1592 (PILs and Tax Variances, Sub-account HST/OVAT Input Tax Credits (ITCs) as a result of the March 25, 2010 Board Decision EB-2009-0210 on its May 1, 2010 distribution rate application. 50% of the confirmed balances in this account will be returned to the ratepayers in the future.

WNH submits that reduction of its 2010 rate base expenditures would penalize WNH as it would reduce its rate base, and thus, its Return on Capital, and as WNH will be returning monies to ratepayers for the applicable 2010 amounts, WNH would be in essence returning monies to the ratepayers twice.

WNH has reviewed each line item in its 2011 Rate Base and OM&A Test Year Costs and adjusted for impacts of the HST. These impacts include removal of any Provincial Sales Tax (PST) that had been included in the cost where the PST portion of the HST is recoverable by WNH as an input tax credit. WNH notes that as a company with sales in excess of \$10,000,000, it is subject to input tax credit (ITC) restrictions. These restrictions include:

- Non-recovery of the PST portion of the HST on energy costs
- Non-recovery of the PST portion of HST on telecommunication costs, excluding 1-800 numbers and internet charges
- Non-recovery of the PST portion of HST on certain costs for road vehicles weighing less than 3,000 kilograms
- Non-recovery of the PST portion of HST on meals and entertainment costs

WNH notes that expenses, where the previously paid PST is now fully recoverable through HST, will reduce its costs.

However, with the ITC restrictions above, some expenses that previously were not subject to PST are now subject to HST, and the PST portion of the HST is not recoverable. The net effect of this restriction is that it adds costs to our business.

1 In addition, some expenses previously did not attract PST (i.e. audit fees), thus, the
2 charging of HST is simply a pass-through, and, there is no impact to the costs, which is
3 no different than when the only Goods & Services Tax (GST) was charged.

4

CAPITAL EXPENDITURES & RATE BASE: (Exhibit 2)

WNH owns and operates three (3) transmission grid connected Transformer Stations (TS's) operating at 230kV/115kV – 27.6kV/13.8kV. In addition WNH receives power from one (1) Hydro One 115/27.6kV TS, one (1) 44kV feeder supplied by Hydro One, and two (2) 27.6kV feeders supplied by Kitchener Wilmot Hydro and Cambridge North Dumfries Hydro. WNH also owns and operates two (2) 44kV/8kV rural Distribution Stations (DS's), seven (7) rural 27.6/8kV DS's and nine (9) 13.8/4kV urban Municipal Stations (MS's).

WNH's existing distribution assets range in age from new to 65 years old. WNH has established a systematic approach of inspections, condition and age assessment, data analysis and maintenance for overhead distribution system, underground distribution system, transformer stations and substations. Generally, accurate and current asset and inspection records are maintained within the Geographic Information System (GIS) and other electronic databases.

WNH annually prepares a five year capital expenditure forecast and plan. The following are some of the key elements of the current plan:

- Convert the 4 kV and 8 kV systems to 13.8kV and 27.6 kV voltages to improve efficiency, replace end-of-life infrastructure and increase circuit capacity on existing overhead lines. Most of this infrastructure dates back to the 1960's and 1970's.
- Complete the construction of a new Administration Building and Service Centre in 2011
- Maintain investments in Information Technology, Vehicles and Other Equipment to improve efficiencies and continue to meet the servicing needs of our customers.
- Projected construction of Transformer Station #4 in 2015; as outlined in the five year Capital Expenditures Plan.
- The 2011 Capital Expenditures have been adjusted by the impact of the introduction of the Harmonized Sales Tax (HST) as discussed above, and, as such, no further adjustments are necessary. The 2010 Capital Expenditures have not been adjusted as discussed above.
- The rate base expenditures and amortization have been prepared in the CGAAP format, as discussed above.

LOAD FORECAST & OPERATING REVENUE: (Exhibit 3)

Waterloo North Hydro has a long and proud history of serving its customers in the City of Waterloo (since 1905), and in the Townships of Woolwich and Wellesley (since 1978) when the local electricity distribution service areas were restructured in the Regional Municipality of Waterloo.

WNH's service area has been an area of steady growth at approximately 2.5% per year, until recently due to the current economic downturn that has affected all sectors of the economy, conservation measures and the City of Waterloo's recent development restrictions suddenly put into place on the west side of Waterloo have held up residential and commercial development in that area. The load forecast model and Operating Revenue calculations are included in Exhibit 3.

OPERATING COSTS: (Exhibit 4)

Waterloo North Hydro has two factors of note that increase its costs compared to many other distributors. WNH's service territory is larger than the service area of Toronto Hydro; however, approximately 90% is rural. A large service territory with such a large rural component, results in additional costs in labour and trucking for WNH to reach customers to respond to service calls, to inspect and maintain its plant. In addition WNH has sections of its service territory that have very few customers per kilometre, increasing the cost to construct and maintain on a per customer basis. An additional factor that would reflect in increased cost per customer in comparison to other distributors is WNH's ownership and maintenance of three Transformer Stations (TS). All costs to own and maintain the TS' are included in distribution expenses, while those distributors that do not own their own TS' do not incur these expenses; the customer is charged via the Retail Transmission Network Connection Charge, rather than the distribution charge.

WNH notes that despite the factors mentioned above, it still ranks well in its cohort grouping.

Based on the OEB's *Comparison of Ontario Electricity Distributors Costs (EB-2006-0268)*, as updated with 2007 Data issued on December 4, 2009, Waterloo North Hydro's OM&A costs per customer compare favorably with its 'Mid Size Southern Medium-High Undergrounding' cohort. In 2007, the average OM&A cost per customer for the cohort was \$186.00 while Waterloo North Hydro's cost was \$179.00. Over the 3-year average from 2005-2007, WNH's cost was \$179.00 while the average for the cohort was \$182.00. Details of the calculations supporting this analysis are included in Table 1-1.

As the distribution system expands and ages, however, it is reasonable to expect that additional costs will be incurred to maintain the additional assets. Likewise, additional investments in new distribution system infrastructure and facilities increase amortization expense.

The 2011 OM&A Expenditures have been adjusted by the impact of the introduction of the Harmonized Sales Tax (HST) as discussed above in "Application (Exhibit 1)", and, as such, no further adjustments are necessary. The 2010 OM&A Expenditures have not been adjusted as discussed above in Application (Exhibit 1)".

The rate base expenditures and amortization have been prepared in the CGAAP format, as discussed above in Application (Exhibit 1)".

1 As detailed, in the evidence of the application, WNH strives to maintain the appropriate
2 employee complement; however, as demonstrated in the sections of the application, the effect
3 of an aging workforce, long training or apprenticeship periods and the increased regulatory
4 environment has culminated with increases in staff in 2010. Apprenticeships for Powerline
5 Workers and System Control Operators occur over a four year period, training periods for
6 Stations Protection and Control Technician occur over a six year period and training periods for
7 Engineering Technologist/Technician occur over a five year period.

8 WNH is experiencing what others in the industry are experiencing, an aging workforce and a
9 high volume of retirements in the foreseeable future. WNH has also experienced in 2009 and
10 2010, employees exercising their option to retire earlier than age 65, in its Powerline Workers,
11 necessitating the need to increase its number of Powerline Worker apprentices. In addition,
12 increased requirements for regulatory requirements (MDM/R, expense in Smart Meter Deferral
13 Account 1556), and Programming and Reporting needs, have increased WNH's staffing
14 compliment.

15 Effective January 1, 2010 WNH ceased providing services to the City of Waterloo for Water and
16 Sewer Billings. The cessation of services was initiated by the City of Waterloo and their desire
17 to perform these services in-house. WNH complied with the provisions of the Affiliate
18 Relationship Code (ARC) Section 2.3.3.6. Section 2.3.3.6 states where a reasonably
19 competitive market exists for a service, product, resource or use of asset, a utility shall charge
20 no less than the greater of (i) the market price of the service, product, resource or use of asset
21 and (ii) the utility's fully-allocated cost to provide service, product, resource or use of asset,
22 when selling that service, product, resource or use of asset to an affiliate. WNH charged the
23 market price which was in excess of the fully-allocated cost as a market exists to provide these
24 services. WNH recorded the revenue in USoA 4375 Non-Distribution Revenue and the related
25 costs in USoA 4380 Non-Distribution Expenses. WNH removed the costs from Meter Reading,
26 Billing and Collecting and transferred these to USOA 4380. As such, in 2010 and 2011, WNH
27 will no longer have the revenue and will have a reduction in costs, however, this reduction does
28 not equate to the loss in revenue. WNH will have reduced payroll costs, as it will not fill a mid-
29 2010 year retirement and reduced meter reading costs. Items such as postage will remain the
30 same; however, the cost can no longer be split among two parties (electricity and water &
31 sewer). WNH submits that full recovery of the Meter Reading, Billing and Collection Costs
32 should be allowed and argues that with its adherence to the ARC in charging Fair Market Value,
33 customers have enjoyed a benefit in reduced rates since WNH commenced providing water and
34 sewer billing services to the City of Waterloo.

Table 1-1
Comparison of Waterloo North Hydro Inc.
OM&A Costs to “Mid Size Southern Medium-High Undergrounding”
Cohort Grouping

Cohort Groupings	Total OM&A	
	2005-2007 3 Year Avg.	2007
By Distribution Company		
Barrie Hydro Distribution Inc.	\$ 121.00	\$ 124.00
Kitchener-Wilmot Hydro Inc.	\$ 145.00	\$ 149.00
Cambridge and North Dumfries Hydro Inc.	\$ 158.00	\$ 172.00
Oshawa PUC Networks Inc.	\$ 163.00	\$ 172.00
Waterloo North Hydro Inc.	\$ 179.00	\$ 179.00
Newmarket – Tay Power Distribution Ltd.	\$ 189.00	\$ 186.00
Oakville Hydro Electricity Distribution Inc.	\$ 196.00	\$ 189.00
Burlington Hydro Inc.	\$ 196.00	\$ 189.00
Brantford Power Inc.	\$ 197.00	\$ 217.00
Guelph Hydro Electric Systems Inc.	\$ 197.00	\$ 213.00
Milton Hydro Distribution Inc.	\$ 201.00	\$ 198.00
Whitby Hydro Electric Corporation	\$ 206.00	\$ 214.00
Halton Hills Hydro Inc.	\$ 220.00	\$ 220.00
Average for Cohort Group	\$ 182.00	\$ 186.00

SOURCE:

Comparison of Ontario Electricity Distributors Costs [EB-2006-0268], updated with 2007 Data
Issued December 4, 2008.

Service Quality Indicators

Every year, Waterloo North Hydro tracks and files its Service Quality Indicators with the Board through its RRR reporting. The results are reviewed by Senior Management to ensure that WNH is maintaining the high level of service that its customers expect. When deficiencies are identified, Waterloo North Hydro's Senior Management team investigates to correct any issues that may exist.

Waterloo North Hydro has consistently exceeded the OEB's Service Quality Indicators and has targeted to maintain its performance at levels equal to or above the OEB's standards in 2010 and 2011.

WNH tracks service reliability statistics including and excluding loss of supply incidents for SAIDI (System Average Interruption Duration Index) and SAIFI (System Average Frequency Index), CAIDI (Customer Average Interruption Duration Index) and MAIFI (Momentary Average Interruption Frequency Index).

Waterloo North Hydro is committed to the reliability of the distribution system and continues to make capital investments in infrastructure in order to maintain or improve its reliability statistics.

WNH has successfully maintained a high level of service to its customers as indicated in its Service Quality Indicators presented in Table 1-2, and in its 2008 Customer Satisfaction Survey (attached as Appendix D) which reported a 91% customer satisfaction rate with WNH.

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Table 1-2
WATERLOO NORTH HYDRO'S SERVICE QUALITY INDICATORS
THREE YEAR COMPARISON

Appointments Met – at the appointed time		
SQI Standard: 90% of the time		
2007	2008	2009
99.80%	99.90%	99.80%
Appointments Scheduled – within 5 working days (new 2009)		
SQI Standard: 90% of the time		
2007	2008	2009
n/a	n/a	100.00%
Rescheduling a Missed Appointment – contact before missed and reschedule within 1 day (new 2009)		
SQI Standard: 100% of the time		
2007	2008	2009
n/a	n/a	100.00%
Telephone Accessibility – answered in person within 30 seconds		
SQI Standard: 65% of the time		
2007	2008	2009
86.80%	88.60%	87.70%
Telephone Call Abandon Rate – calls abandoned before they are answered (new 2009)		
SQI Standard: 10% or less		
2007	2008	2009
n/a	n/a	3.30%
Underground Cable Locates – within 5 working days		
SQI Standard: 90% of the time		
2007	2008	2009
99.95%	100.00%	N/A – now included in Other Standards (7.3, 7.4, 7.5)
Connection of New Low Voltage Services – within 5 working days		
SQI Standard: 90% of the time		
2007	2008	2009
100.00%	100.00%	100.00%
Connection of New High Voltage Services – within 10 working days		
SQI Standard: 90% of the time		
2007	2008	2009
100.00%	100.00%	100.00%
Emergency Response – Urban within 60 minutes		
SQI Standard: 80% of the time		

2007	2008	2009
90.30%	87.40%	91.30%
Table 1-2 WATERLOO NORTH HYDRO'S SERVICE QUALITY INDICATORS THREE YEAR COMPARISON Continued		
Emergency Response – Rural within 120 minutes		
SQI Standard: 80% of the time		
2007	2008	2009
98.00%	96.70%	94.70%
Written Responses to Inquiries – within 10 working days		
SQI Standard: 80% of the time		
2007	2008	2009
99.40%	100.00%	100.00%

COST OF CAPITAL & CAPITAL STRUCTURE: (Exhibit 5)

Waterloo North Hydro completed its transition to a capital structure of 60% debt and 40% equity through its 2010 electricity distribution rate application (EB-2009-0210) as outlined in the Report of the Board on Cost of Capital and 2nd Generation Incentive Regulation for Ontario Electricity Distributors dated December 20, 2006 (the "Cost of Capital Report"). WNH plans to maintain its current capital structure with no changes in 2011.

Waterloo North Hydro has assumed a return on equity of 9.85% consistent with the Cost of Capital Parameter Updates for 2010 Cost of Service Applications issued by the OEB on February 24, 2010. WNH understands the OEB will be finalizing the return on equity for 2011 rates based on January 2011 market interest rate information.

WNH will hold a mortgage commencing in December 2011 which will provide the long-term financing for the construction of its new Administration Building and Service Centre. WNH has secured a 4.95% mortgage for \$26,300,000 from Infrastructure Ontario.

Waterloo North Hydro has assumed a short-term debt rate of 2.07% and a long-term debt rate of 5.87% on its debts with its affiliates, which is consistent with the Cost of Capital Parameter Updates for 2010 Cost of Service Applications issued by the OEB on February 24, 2010. WNH understands the OEB will be finalizing the return on equity for 2011 rates based on January 2011 market interest rate information.

CALCULATION OF REVENUE REQUIREMENT: (Exhibit 6)

Waterloo North Hydro's requested service revenue requirement for 2011 in the amount of \$30,036,603 includes the recovery of its costs to provide distribution services and its' permitted Return on Equity ("ROE") as shown on Table 6-3 and on the enclosed Revenue Requirement Work Form. When forecasted energy and demand levels for 2011 are considered, WNH estimates that its present rates will produce a deficiency in Gross Distribution Revenue of \$5,012,440 for the 2011 Test Year as shown in Table 1-3. Should this revenue deficiency continue, Waterloo North Hydro will not be able to sustain the current capital investment, staffing requirements and maintenance required to ensure a safe and reliable distribution system.

The revenue deficiency is primarily the result of:

- Additions to capital assets in all years exceeded depreciation levels resulting in an increased rate base on which the rate of return is calculated. In particular, in 2011, WNH will put in-service its administration building and service centre and WNH has rebuilt two of its Transformer Stations in recent years.
- Increases in OM&A expenses (discussed in Exhibit 4) primarily due to:
 - Increases in direct and indirect labour costs
 - o Economic wage increases have increased salaries and wages paid each year. Effective April 1 of each year, economic increases negotiated through collective agreements were 3.5%, 3.3% and 3.3% for 2006, 2007 and 2008 respectively. WNH has a 3% annual increase in estimating its incremental payroll for 2010 and 2011.
 - Inflation
 - Increase in planned maintenance programs
 - Loss of Water and Sewer Billing services provided to the City of Waterloo, resulting in a loss of revenue in excess of the cost decrease
 - Increasing Regulatory Expenses
 - o WNH's regulatory expenses have been steadily increasing year to year (discussed in Exhibit 4) and it further expects to incur \$160,000 in additional expenses due to the 2011 rate application.

Table 1-3
Calculation of Revenue Deficiency

Description	2010 Bridge Actual	2011 Test Existing Rates	2011 Test - Required Revenue
Revenue			
Revenue Deficiency			5,012,440
Distribution Revenue	24,432,409	23,968,200	23,968,200
Other Operating Revenue (Net)	676,874	1,055,963	1,055,963
Total Revenue	25,109,283	25,024,163	30,036,603
Costs and Expenses			
Administrative & General, Billing & Collecting	4,763,756	4,747,123	4,747,123
Operation & Maintenance	5,044,327	5,436,715	5,436,715
Depreciation & Amortization	7,464,713	7,816,331	7,816,331
Property Taxes	-	-	-
Capital Taxes	86,367	-	-
Deemed Interest	5,586,645	4,803,477	4,803,477
Total Costs and Expenses	22,945,808	22,803,645	22,803,645
Less OCT Included Above	86,367	0	0
Total Costs and Expenses Net of OCT	23,032,174	22,803,645	22,803,645
Utility Income Before Income Taxes	2,077,109	2,220,518	7,232,958
Income Taxes			
Corporate Income Taxes	112,443	(135,388)	1,212,310
Total Income Taxes	112,443	(135,388)	1,212,310
Utility Net Income	1,964,666	2,355,906	6,020,648
Capital Tax Expense Calculation			
Total Rate Base	130,155,551	152,808,317	152,808,317
Exemption	0	0	0
Deemed Taxable Capital	130,155,551	152,808,317	152,808,317
Ontario Capital Tax	86,367	0	0
Income Tax Expense Calculation			
Accounting Income	2,077,109	2,220,518	7,232,958
Tax Adjustments to Accounting Income	(1,516,155)	(2,724,063)	(2,724,063)
Taxable Income	560,953	(503,545)	4,508,895
Income Tax Expense	112,443	(135,388)	1,212,310
Tax Rate Reflecting Tax Credits	20.04%	26.89%	26.89%
Actual Return on Rate Base			
Rate Base	130,155,551	152,808,317	152,808,317
Interest Expense	5,586,645	4,803,477	4,803,477
Net Income	1,964,666	2,355,906	6,020,648
Total Actual Return on Rate Base	7,551,311	7,159,383	10,824,124
Actual Return on Rate Base	5.80%	4.69%	7.08%
Required Return on Rate Base			
Rate Base	130,155,551	152,808,317	152,808,317
Return Rates			
Return on Debt (Weighted)	7.15%	5.24%	5.24%
Return on Equity	9.00%	9.00%	9.00%
Deemed Interest Expense	5,586,645	4,803,477	4,803,477
Return On Equity	4,685,600	6,020,648	6,020,648
Total Return	10,272,245	10,824,124	10,824,124
Expected Return on Rate Base	7.89%	7.08%	7.08%
Revenue Deficiency After Tax	2,720,934	3,664,741	0
Revenue Deficiency Before Tax	3,403,077	5,012,440	0

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Table 1-4
Revenue Requirement Work Form

Table 1-4 commences on the next page.



REVENUE REQUIREMENT WORK FORM

Name of LDC: **Waterloo North Hydro Inc.** (1)
File Number: **EB-2010-0144**
Rate Year: **2011** Version: **2.11**

Table of Content

<u>Sheet</u>	<u>Name</u>
A	<u>Data Input Sheet</u>
1	<u>Rate Base</u>
2	<u>Utility Income</u>
3	<u>Taxes/PILS</u>
4	<u>Capitalization/Cost of Capital</u>
5	<u>Revenue Sufficiency/Deficiency</u>
6	<u>Revenue Requirement</u>
7A	<u>Bill Impacts -Residential</u>
7B	<u>Bill Impacts - GS < 50 kW</u>

Notes:

- (1) Pale green cells represent inputs
- (2) Pale yellow cells represent drop=down lists
- (3) **Please note that this model uses MACROS. Before starting, please ensure that macros have been enabled.**
- (4) **Completed versions of the Revenue Requirement Work Form are required to be filed in working Microsoft Excel format.**

Copyright

This Revenue Requirement Work Form Model is protected by copyright and is being made available to you solely for the purpose of preparing or reviewing your draft rate order. You may use and copy this model for that purpose, and provide a copy of this model to any person that is advising or assisting you in that regard. Except as indicated above, any copying, reproduction, publication, sale, adaptation, translation, modification, reverse engineering or other use or dissemination of this model without the express written consent of the Ontario Energy Board is prohibited. If you provide a copy of this model to a person that is advising or assisting you in preparing or reviewing your draft rate order, you must ensure that the person understands and agrees to the restrictions noted above.



REVENUE REQUIREMENT WORK FORM

Name of LDC: Waterloo North Hydro Inc.
File Number: EB-2010-0144
Rate Year: 2011

Data Input									
		Initial Application		(7)		Per Board Decision			
1	Rate Base								
	Gross Fixed Assets (average)	\$243,087,168			\$ 243,087,168			\$243,087,168	
	Accumulated Depreciation (average)	(\$109,118,578)	(5)		-\$ 109,118,578			(\$109,118,578)	
	Allowance for Working Capital:								
	Controllable Expenses	\$10,183,838			\$ 10,183,838			\$10,183,838	
	Cost of Power	\$115,414,347			\$ 115,414,347			\$115,414,347	
	Working Capital Rate (%)	15.00%			15.00%			15.00%	
2	Utility Income								
	Operating Revenues:								
	Distribution Revenue at Current Rates	\$23,968,200							
	Distribution Revenue at Proposed Rates	\$28,980,640							
	Other Revenue:								
	Specific Service Charges	\$245,845							
	Late Payment Charges	\$180,000							
	Other Distribution Revenue	\$278,819							
	Other Income and Deductions	\$351,299							
	Operating Expenses:								
	OM+A Expenses	\$10,183,838			\$ 10,183,838			\$10,183,838	
	Depreciation/Amortization	\$7,816,331			\$ 7,816,331			\$7,816,331	
	Property taxes								
	Capital taxes								
	Other expenses								
3	Taxes/PILs								
	Taxable Income:								
	Adjustments required to arrive at taxable income	(\$2,724,063)	(3)						
	Utility Income Taxes and Rates:								
	Income taxes (not grossed up)	\$886,355							
	Income taxes (grossed up)	\$1,212,310							
	Capital Taxes		(6)			(6)			(6)
	Federal tax (%)	16.50%							
	Provincial tax (%)	10.39%							
	Income Tax Credits								
4	Capitalization/Cost of Capital								
	Capital Structure:								
	Long-term debt Capitalization Ratio (%)	56.0%							
	Short-term debt Capitalization Ratio (%)	4.0%	(2)		(2)				(2)
	Common Equity Capitalization Ratio (%)	40.0%							
	Preferred Shares Capitalization Ratio (%)								
		100.0%							
	Cost of Capital								
	Long-term debt Cost Rate (%)	5.47%							
	Short-term debt Cost Rate (%)	2.07%							
	Common Equity Cost Rate (%)	9.85%							
	Preferred Shares Cost Rate (%)								

Notes:

(Rate Base through Revenue Requirement), except for Notes that the utility may wish to use to support the data. Notes should be put on the applicable pages to explain numbers shown.

- (1) All inputs are in dollars (\$) except where inputs are individually identified as percentages (%)
 - (2) 4.0% unless an Applicant has proposed or been approved for another amount.
 - (3) Net of addbacks and deductions to arrive at taxable income.
 - (4) Average of Gross Fixed Assets at beginning and end of the Test Year
 - (5) Average of Accumulated Depreciation at the beginning and end of the Test Year. Enter as a negative amount.
 - (6) Not applicable as of July 1, 2010
 - (7) Select option from drop-down list by clicking on cell M10. This column allows for the application update reflecting the end of discovery or Argument-in-Chief. Also, the outcome of any Settlement Process can be reflected.
- Note - Provincial tax rate reduced to reflect the fact that there are \$61,453 in tax credits



REVENUE REQUIREMENT WORK FORM

Name of LDC: Waterloo North Hydro Inc.
File Number: EB-2010-0144
Rate Year: 2011

Version: 2.11

Rate Base									
Line No.	Particulars	Initial Application							Per Board Decision
1	Gross Fixed Assets (average) (3)	\$243,087,168		\$ -	\$243,087,168		\$ -		\$243,087,168
2	Accumulated Depreciation (average) (3)	(\$109,118,578)		\$ -	(\$109,118,578)		\$ -		(\$109,118,578)
3	Net Fixed Assets (average) (3)	\$133,968,589		\$ -	\$133,968,589		\$ -		\$133,968,589
4	Allowance for Working Capital (1)	\$18,839,728		\$ -	\$18,839,728		\$ -		\$18,839,728
5	Total Rate Base	\$152,808,317		\$ -	\$152,808,317		\$ -		\$152,808,317
(1) Allowance for Working Capital - Derivation									
6	Controllable Expenses	\$10,183,838		\$ -	\$10,183,838		\$ -		\$10,183,838
7	Cost of Power	\$115,414,347		\$ -	\$115,414,347		\$ -		\$115,414,347
8	Working Capital Base	\$125,598,185		\$ -	\$125,598,185		\$ -		\$125,598,185
9	Working Capital Rate % (2)	15.00%		0.00%	15.00%		0.00%		15.00%
10	Working Capital Allowance	\$18,839,728		\$ -	\$18,839,728		\$ -		\$18,839,728

Notes

- (2) Generally 15%. Some distributors may have a unique rate due as a result of a lead-lag study.
(3) Average of opening and closing balances for the year.



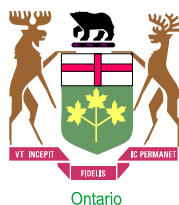
REVENUE REQUIREMENT WORK FORM

Name of LDC: Waterloo North Hydro Inc.
File Number: EB-2010-0144
Rate Year: 2011

		Utility income						
Line No.	Particulars	Initial Application				Per Board Decision		
Operating Revenues:								
1	Distribution Revenue (at Proposed Rates)	\$28,980,640		(\$28,980,640)		\$ -		\$ -
2	Other Revenue	(1) \$1,055,963		(\$1,055,963)		\$ -		\$ -
3	Total Operating Revenues	\$30,036,603		(\$30,036,603)		\$ -		\$ -
Operating Expenses:								
4	OM+A Expenses	\$10,183,838		\$ -		\$10,183,838		\$ -
5	Depreciation/Amortization	\$7,816,331		\$ -		\$7,816,331		\$ -
6	Property taxes	\$ -		\$ -		\$ -		\$ -
7	Capital taxes	\$ -		\$ -		\$ -		\$ -
8	Other expense	\$ -		\$ -		\$ -		\$ -
9	Subtotal (lines 4 to 8)	\$18,000,168		\$ -		\$18,000,168		\$ -
10	Deemed Interest Expense	\$4,803,477		(\$4,803,477)		\$ -		\$ -
11	Total Expenses (lines 9 to 10)	\$22,803,645		(\$4,803,477)		\$18,000,168		\$ -
12	Utility income before income taxes	\$7,232,958		(\$25,233,126)		(\$18,000,168)		\$ -
13	Income taxes (grossed-up)	\$1,212,310		\$ -		\$1,212,310		\$ -
14	Utility net income	\$6,020,648		(\$25,233,126)		(\$19,212,478)		\$ -

Notes

(1)	Other Revenues / Revenue Offsets					
	Specific Service Charges	\$245,845	\$ -	\$ -	\$ -	\$ -
	Late Payment Charges	\$180,000	\$ -	\$ -	\$ -	\$ -
	Other Distribution Revenue	\$278,819	\$ -	\$ -	\$ -	\$ -
	Other Income and Deductions	\$351,299	\$ -	\$ -	\$ -	\$ -
	Total Revenue Offsets	\$1,055,963	\$ -	\$ -	\$ -	\$ -



REVENUE REQUIREMENT WORK FORM

Name of LDC: Waterloo North Hydro Inc.
File Number: EB-2010-0144
Rate Year: 2011

Taxes/PILs

Line No.	Particulars	Application	Per Board Decision
<u>Determination of Taxable Income</u>			
1	Utility net income before taxes	\$6,020,648	\$ -
2	Adjustments required to arrive at taxable utility income	(\$2,724,063)	(\$2,724,063)
3	Taxable income	\$3,296,585	(\$2,724,063)
<u>Calculation of Utility income Taxes</u>			
4	Income taxes	\$886,355	\$886,355
5	Capital taxes	\$ - (1)	\$ - (1)
6	Total taxes	\$886,355	\$886,355
7	Gross-up of Income Taxes	\$325,955	\$325,955
8	Grossed-up Income Taxes	\$1,212,310	\$1,212,310
9	PILs / tax Allowance (Grossed-up Income taxes + Capital taxes)	\$1,212,310	\$1,212,310
10	Other tax Credits	\$ -	\$ -
<u>Tax Rates</u>			
11	Federal tax (%)	16.50%	16.50%
12	Provincial tax (%)	10.39%	10.39%
13	Total tax rate (%)	26.89%	26.89%

Notes

(1) Capital Taxes not applicable after July 1, 2010 (i.e. for 2011 and later test years)



REVENUE REQUIREMENT WORK FORM

Version: 2.11

Name of LDC: Waterloo North Hydro Inc.
File Number: EB-2010-0144
Rate Year: 2011

Capitalization/Cost of Capital

Line No.	Particulars	Capitalization Ratio		Cost Rate	Return
Initial Application					
		(%)	(\$)	(%)	(\$)
Debt					
1	Long-term Debt	56.00%	\$85,572,658	5.47%	\$4,676,951
2	Short-term Debt	4.00%	\$6,112,333	2.07%	\$126,525
3	Total Debt	60.00%	\$91,684,990	5.24%	\$4,803,477
Equity					
4	Common Equity	40.00%	\$61,123,327	9.85%	\$6,020,648
5	Preferred Shares	0.00%	\$ -	0.00%	\$ -
6	Total Equity	40.00%	\$61,123,327	9.85%	\$6,020,648
7	Total	100.00%	\$152,808,317	7.08%	\$10,824,124

		(%)	(\$)	(%)	(\$)
Debt					
1	Long-term Debt	0.00%	\$ -	0.00%	\$ -
2	Short-term Debt	0.00%	\$ -	0.00%	\$ -
3	Total Debt	0.00%	\$ -	0.00%	\$ -
Equity					
4	Common Equity	0.00%	\$ -	0.00%	\$ -
5	Preferred Shares	0.00%	\$ -	0.00%	\$ -
6	Total Equity	0.00%	\$ -	0.00%	\$ -
7	Total	0.00%	\$152,808,317	0.00%	\$ -

Per Board Decision					
		(%)	(\$)	(%)	(\$)
Debt					
8	Long-term Debt	0.00%	\$ -	5.47%	\$ -
9	Short-term Debt	0.00%	\$ -	2.07%	\$ -
10	Total Debt	0.00%	\$ -	0.00%	\$ -
Equity					
11	Common Equity	0.00%	\$ -	9.85%	\$ -
12	Preferred Shares	0.00%	\$ -	0.00%	\$ -
13	Total Equity	0.00%	\$ -	0.00%	\$ -
14	Total	0.00%	\$152,808,317	0.00%	\$ -

Notes

(1) 4.0% unless an Applicant has proposed or been approved for another amount.



REVENUE REQUIREMENT WORK FORM

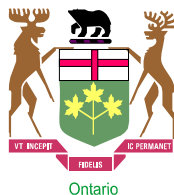
Name of LDC: Waterloo North Hydro Inc.
File Number: EB-2010-0144
Rate Year: 2011

Version: 2.11

Revenue Sufficiency/Deficiency							
Line No.	Particulars	Initial Application				Per Board Decision	
		At Current Approved Rates	At Proposed Rates	At Current Approved Rates	At Proposed Rates	At Current Approved Rates	At Proposed Rates
1	Revenue Deficiency from Below		\$5,012,440		(\$6,969,798)		\$18,000,168
2	Distribution Revenue	\$23,968,200	\$23,968,201	\$23,968,200	\$35,950,438	\$ -	(\$18,000,168)
3	Other Operating Revenue Offsets - net	\$1,055,963	\$1,055,963	\$ -	\$ -	\$ -	\$ -
4	Total Revenue	\$25,024,163	\$30,036,603	\$23,968,200	\$28,980,640	\$ -	\$ -
5	Operating Expenses	\$18,000,168	\$18,000,168	\$18,000,168	\$18,000,168	\$18,000,168	\$18,000,168
6	Deemed Interest Expense	\$4,803,477	\$4,803,477	\$ -	\$ -	\$ -	\$ -
	Total Cost and Expenses	\$22,803,645	\$22,803,645	\$18,000,168	\$18,000,168	\$18,000,168	\$18,000,168
7	Utility Income Before Income Taxes	\$2,220,518	\$7,232,958	\$5,968,032	\$10,980,472	(\$18,000,168)	(\$18,000,168)
8	Tax Adjustments to Accounting Income per 2009 PILs	(\$2,724,063)	(\$2,724,063)	(\$2,724,063)	(\$2,724,063)	\$ -	\$ -
9	Taxable Income	(\$503,545)	\$4,508,895	\$3,243,969	\$8,256,409	(\$18,000,168)	(\$18,000,168)
10	Income Tax Rate	26.89%	26.89%	26.89%	26.89%	26.89%	26.89%
11	Income Tax on Taxable Income	(\$135,388)	\$1,212,310	\$872,208	\$2,219,907	(\$4,839,718)	(\$4,839,718)
12	Income Tax Credits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	Utility Net Income	\$2,355,906	\$6,020,648	\$5,095,824	(\$19,212,478)	(\$13,160,450)	(\$19,212,478)
14	Utility Rate Base	\$152,808,317	\$152,808,317	\$152,808,317	\$152,808,317	\$152,808,317	\$152,808,317
	Deemed Equity Portion of Rate Base	\$61,123,327	\$61,123,327	\$ -	\$ -	\$ -	\$ -
15	Income/Equity Rate Base (%)	3.85%	9.85%	0.00%	0.00%	0.00%	0.00%
16	Target Return - Equity on Rate Base	9.85%	9.85%	0.00%	0.00%	0.00%	0.00%
17	Sufficiency/Deficiency in Return on Equity	-6.00%	0.00%	0.00%	0.00%	0.00%	0.00%
18	Indicated Rate of Return	4.69%	7.08%	3.33%	0.00%	-8.61%	0.00%
19	Requested Rate of Return on Rate Base	7.08%	7.08%	0.00%	0.00%	0.00%	0.00%
20	Sufficiency/Deficiency in Rate of Return	-2.40%	0.00%	3.33%	0.00%	-8.61%	0.00%
21	Target Return on Equity	\$6,020,648	\$6,020,648	\$ -	\$ -	\$ -	\$ -
22	Revenue Deficiency/(Sufficiency)	\$3,664,741	\$0	(\$5,095,824)	\$ -	\$13,160,450	\$ -
23	Gross Revenue	\$5,012,440 (1)		(\$6,969,798) (1)		\$18,000,168 (1)	
	Deficiency/(Sufficiency)						

Notes:

(1) Revenue Sufficiency/Deficiency divided by (1 - Tax Rate)



REVENUE REQUIREMENT WORK FORM

Version: 2.11

Name of LDC: Waterloo North Hydro Inc.
File Number: EB-2010-0144
Rate Year: 2011

Revenue Requirement

Line No.	Particulars	Application				Per Board Decision	
1	OM&A Expenses	\$10,183,838		\$10,183,838		\$10,183,838	
2	Amortization/Depreciation	\$7,816,331		\$7,816,331		\$7,816,331	
3	Property Taxes	\$ -		\$ -		\$ -	
4	Capital Taxes	\$ -		\$ -		\$ -	
5	Income Taxes (Grossed up)	\$1,212,310		\$1,212,310		\$1,212,310	
6	Other Expenses	\$ -					
7	Return						
	Deemed Interest Expense	\$4,803,477		\$ -		\$ -	
	Return on Deemed Equity	\$6,020,648		\$ -		\$ -	
8	Distribution Revenue Requirement before Revenues	<u>\$30,036,603</u>		<u>\$19,212,478</u>		<u>\$19,212,478</u>	
9	Distribution revenue	\$28,980,640		\$ -		\$ -	
10	Other revenue	<u>\$1,055,963</u>		<u>\$ -</u>		<u>\$ -</u>	
11	Total revenue	<u>\$30,036,603</u>		<u>\$ -</u>		<u>\$ -</u>	
12	Difference (Total Revenue Less Distribution Revenue Requirement before Revenues)	<u>\$0</u>	(1)	<u>(\$19,212,478)</u>	(1)	<u>(\$19,212,478)</u>	(1)

Notes

(1) Line 11 - Line 8



REVENUE REQUIREMENT WORK FORM

Name of LDC: Waterloo North Hydro Inc.
File Number: EB-2010-0144
Rate Year: 2011

Version: 2.11

Ontario

Residential

Consumption **800** kWh

	Charge Unit	Current Board-Approved			Proposed			Impact	
		Rate (\$)	Volume	Charge (\$)	Rate (\$)	Volume	Charge (\$)	\$ Change	% Change
1 Monthly Service Charge	monthly	\$ 14.5600	1	\$ 14.56	\$ 14.5600	1	\$ 14.56	\$ -	0.00%
2 Smart Meter Rate Adder	monthly	\$ 1.0000	1	\$ 1.00	\$ 1.0000	1	\$ 1.00	\$ -	0.00%
3 Service Charge Rate Adder(s)			1	\$ -		1	\$ -	\$ -	
4 Service Charge Rate Rider(s)			1	\$ -		1	\$ -	\$ -	
5 Distribution Volumetric Rate	per kWh	\$ 0.0131	800	\$ 10.48	\$ 0.0202	800	\$ 16.16	\$ 5.68	54.20%
6 Low Voltage Rate Adder	per kWh	\$ -	800	\$ -	\$ 0.0001	800	\$ 0.08	\$ 0.08	
7 Volumetric Rate Adder(s)			800	\$ -		800	\$ -	\$ -	
8 Volumetric Rate Rider(s)			800	\$ -		800	\$ -	\$ -	
9 Smart Meter Disposition Rider			800	\$ -		800	\$ -	\$ -	
10 LRAM & SSM Rate Rider	per kWh	\$ -	800	\$ -	\$ 0.0002	800	\$ 0.19	\$ 0.19	
11 Deferral/Variance Account Disposition Rate Rider	per kWh	-\$ 0.0024	800	-\$ 1.92	-\$ 0.0023	800	-\$ 1.84	\$ 0.08	-4.17%
12				\$ -			\$ -	\$ -	
13				\$ -			\$ -	\$ -	
14				\$ -			\$ -	\$ -	
15				\$ -			\$ -	\$ -	
16 Sub-Total A - Distribution				\$ 24.12			\$ 30.15	\$ 6.03	24.99%
17 RTSR - Network	per kWh	\$ 0.0058	840.4	\$ 4.87	\$ 0.0057	832.32	\$ 4.71	-\$ 0.16	-3.30%
18 RTSR - Line and Transformation Connection	per kWh	\$ 0.0020	840.4	\$ 1.68	\$ 0.0018	832.32	\$ 1.48	-\$ 0.20	-12.18%
19 Sub-Total B - Delivery (including Sub-Total A)				\$ 30.68			\$ 36.34	\$ 5.66	18.46%
20 Wholesale Market Service Charge (WMSC)	per kWh	\$ 0.0052	840.4	\$ 4.37	\$ 0.0052	832.32	\$ 4.33	-\$ 0.04	-0.96%
21 Rural and Remote Rate Protection (RRRP)	per kWh	\$ 0.0013	840.4	\$ 1.09	\$ 0.0013	832.32	\$ 1.08	-\$ 0.01	-0.96%
22 Special Purpose Charge	per kWh	\$ 0.0003725	840.4	\$ 0.31	\$ 0.0003725	832.32	\$ 0.31	-\$ 0.00	-0.96%
23 Standard Supply Service Charge	monthly	\$ 0.2500	1	\$ 0.25	\$ 0.2500	1	\$ 0.25	\$ -	0.00%
24 Debt Retirement Charge (DRC)	per kWh	\$ 0.0070	840.4	\$ 5.88	\$ 0.0070	832.32	\$ 5.83	-\$ 0.06	-0.96%
25 Energy	per kWh	\$ 0.0679	840.4	\$ 57.03	\$ 0.0679	832.32	\$ 56.48	-\$ 0.55	-0.96%
26				\$ -			\$ -	\$ -	
27				\$ -			\$ -	\$ -	
28 Total Bill (before Taxes)				\$ 99.61			\$ 104.61	\$ 5.00	5.02%
29 HST		13%		\$ 12.95	13%		\$ 13.60	\$ 0.65	5.02%
30 Total Bill (including Sub-total B)				\$ 112.56			\$ 118.21	\$ 5.65	5.02%
31 Loss Factor (%)	Note 1		5.05%			4.04%			

Notes:

Note 1: Enter existing and proposed total loss factor (Secondary Metered Customer < 5,000 kW) as a percentage.

Energy Price weighted - 600 kWh at \$.065 and 240 kWh @ \$.075 = \$.067861, used same price for both years



REVENUE REQUIREMENT WORK FORM

Version: 2.11

Name of LDC: Waterloo North Hydro Inc.
File Number: EB-2010-0144
Rate Year: 2011

Consumption **2000** kWh **General Service < 50 kW**

	Charge Unit	Current Board-Approved			Proposed			Impact	
		Rate (\$)	Volume	Charge (\$)	Rate (\$)	Volume	Charge (\$)	\$ Change	% Change
1 Monthly Service Charge	monthly	\$ 30.6300	1	\$ 30.63	\$ 30.6300	1	\$ 30.63	\$ -	0.00%
2 Smart Meter Rate Adder	monthly	\$ 1.0000	1	\$ 1.00	\$ 1.0000	1	\$ 1.00	\$ -	0.00%
3 Service Charge Rate Adder(s)			1	\$ -		1	\$ -	\$ -	
4 Service Charge Rate Rider(s)			1	\$ -		1	\$ -	\$ -	
5 Distribution Volumetric Rate	per kWh	\$ 0.0104	2000	\$ 20.80	\$ 0.0148	2000	\$ 29.60	\$ 8.80	42.31%
6 Low Voltage Rate Adder	per kWh	\$ 0.0001	2000	\$ 0.20	\$ 0.0001	2000	\$ 0.20	\$ -	0.00%
7 Volumetric Rate Adder(s)			2000	\$ -		2000	\$ -	\$ -	
8 Volumetric Rate Rider(s)			2000	\$ -		2000	\$ -	\$ -	
9 Smart Meter Disposition Rider			2000	\$ -		2000	\$ -	\$ -	
10 LRAM & SSM Rider	per kWh	\$ -	2000	\$ -	\$ 0.0001	2000	\$ 0.15	\$ 0.15	
11 Deferral/Variance Account Disposition Rate Rider	per kWh	-\$ 0.0024	2000	-\$ 4.80	-\$ 0.0024	2000	-\$ 4.80	\$ -	0.00%
12				\$ -			\$ -	\$ -	
13				\$ -			\$ -	\$ -	
14				\$ -			\$ -	\$ -	
15				\$ -			\$ -	\$ -	
16 Sub-Total A - Distribution				\$ 47.83			\$ 56.78	\$ 8.95	18.71%
17 RTSR - Network	per kWh	\$ 0.0053	2101	\$ 11.14	\$ 0.0052	2080.8	\$ 10.77	-\$ 0.37	-3.30%
18 RTSR - Line and Transformation Connection	per kWh	\$ 0.0018	2101	\$ 3.78	\$ 0.0016	2080.8	\$ 3.32	-\$ 0.46	-12.18%
19 Sub-Total B - Delivery (including Sub-Total A)				\$ 62.75			\$ 70.87	\$ 8.12	12.94%
20 Wholesale Market Service Charge (WMSC)	per kWh	\$ 0.0052	2101	\$ 10.93	\$ 0.0052	2080.8	\$ 10.82	-\$ 0.11	-0.96%
21 Rural and Remote Rate Protection (RRRP)	per kWh	\$ 0.0013	2101	\$ 2.73	\$ 0.0013	2080.8	\$ 2.71	-\$ 0.03	-0.96%
22 Special Purpose Charge	per kWh	\$ 0.0003725	2101	\$ 0.78	\$ 0.0003725	2080.8	\$ 0.78	-\$ 0.01	-0.96%
23 Standard Supply Service Charge	monthly	\$ 0.2500	1	\$ 0.25	\$ 0.2500	1	\$ 0.25	\$ -	0.00%
24 Debt Retirement Charge (DRC)	per kWh	\$ 0.0070	2101	\$ 14.71	\$ 0.0070	2080.8	\$ 14.57	-\$ 0.14	-0.96%
25 Energy	per kWh	\$ 0.0714	2101	\$ 150.08	\$ 0.0714	2080.8	\$ 148.63	-\$ 1.44	-0.96%
26				\$ -			\$ -	\$ -	
27				\$ -			\$ -	\$ -	
28 Total Bill (before Taxes)				\$ 242.22			\$ 248.62	\$ 6.40	2.64%
29 HST		13%		\$ 31.49	13%		\$ 32.32	\$ 0.83	2.64%
30 Total Bill (including Sub-total B)				\$ 273.71			\$ 280.94	\$ 7.23	2.64%
31 Loss Factor	Note 1		5.05%			4.04%			

Notes:

Note 1: See Note 1 from Sheet 1A. Bill Impacts - Residential

Energy Price weighted - 750 kWh @ \$.065 and 1,351 kWh @ \$.075 = \$.0714, used same price for both years

COST ALLOCATION: (Exhibit 7)

Waterloo North Hydro notes that for its Residential, General Service <50 kW, General Service >50 kW and Large Use rate classes, the current revenue to cost ratio of each rate class is within the applicable threshold defined by the OEB in the November 28, 2007, Report on Application of Cost Allocation for Electricity Distributors. The Street Lighting, USL and Embedded Distributors rate classes are in the Board's applicable threshold and as a result, adjustments have been made in this Application to bring all rate classes within the allowed ranges of the revenue to cost ratios.

RATE DESIGN: (Exhibit 8)

In preparing this application, Waterloo North Hydro has considered the impact on its customers, with a goal of minimizing those impacts. Customer impacts including percentage average Total Bill Impact are set out in Tables 8-16 through 8-22. Embedded in this monthly bill impact is the effect of revised distribution rates (monthly service charge and volumetric rate), Smart Meter Funding Adder at its existing level, revised Loss Factors, LRAM and SSM rate rider and Deferral and Variance Account Rate Rider to dispose of the balances in the Deferral and Variance accounts requested in this Application over a four-year period.

**Table 1-5
Monthly Bill Impacts**

Class	Typical Monthly Usage	Monthly Bill Impact	
		\$	%
Residential			
Comparison to 2010	800 kWh	\$ 5.73	5.08%
GS <50 kW			
Comparison to 2010	2,000 kWh	\$ 7.37	2.69%
GS >50 kW			
Comparison to 2010	100,000 kWh, 250 kW	\$ 407.91	3.14%
Large User			
Comparison to 2010	12,000,000 kWh, 6,500 kW	\$ 7,016.85	0.61%
Street Lighting			
Comparison to 2010	1 Connection, 50 kWh, .14 kW	\$ 0.96	11.74%
USL			
Comparison to 2010	250 kWh	\$ 3.66	8.53%

DEFERRAL AND VARIANCE ACCOUNTS: (Exhibit 9)

Waterloo North Hydro is holding a receivable position in various Deferral and Variance accounts. WNH is requesting the disposition of the amounts specified in Exhibit 9 over a four-year period, via a rate rider, allocated to the six major rate classes.

Waterloo North Hydro is also requesting the continuation of the standard Smart Meter Funding Adder of \$1.00 per metered customer per month that was approved by the Board through the 2010 electricity distribution rate application process.

As part of this application, Waterloo North Hydro Inc. will be seeking recovery of a one-time expense which is expected to be paid on June 30, 2011. If this payment is made, it will serve to resolve long-standing litigation against all former municipal electric utilities ("MEUs") in the Province in relation to late payment penalty ("LPP") charges collected pursuant to, first, Ontario Hydro rate schedules and, after industry restructuring, Ontario Energy Board rate orders (the "LPP Class Action"). The LDCs propose that, following expiry of applicable appeal and opt out periods (the "Date of Final Determination")¹, the Board hold a generic hearing to determine if the costs incurred in this litigation and settlement are recoverable from customers and, if so, the form and timing of recovery from customers. Complete details are provided in Exhibit 9 pages 18 - 19.

¹ The Date of Final Determination falls on the 30th day after the plaintiff opt out notice is published in *The Globe and Mail*, which will occur after the expiry of the appeal period. The Date of Final Determination is expected to occur on September 22, 2010.

LRAM AND SSM: (Exhibit 10)

Waterloo North Hydro seeks approval for the recovery of 2005 to 2009 LRAM and SSM amounts as part of this Application. Recovery is to be based on a volumetric rate rider commencing May 1, 2011. WNH is proposing a four-year recovery period in order to mitigate customer rate impacts, thus, the rate rider would remain in effect until April 30, 2015.

Waterloo North Hydro notes that it implemented a number of CDM programs which were included in its third-tranche CDM plans and approved by the OEB. These programs were previously summarized in WNH's 2005 to 2008 Annual CDM Reports. Additionally, WNH participated in several OPA programs in 2006 through 2009 that have been included in the LRAM calculations.

ORGANIZATION STRUCTURE

UTILITY ORGANIZATIONAL STRUCTURE:

Corporate Structure

Waterloo North Hydro Inc. is a wholly-owned subsidiary of Waterloo North Hydro Holding Corporation which is 73.2% owned by the City of Waterloo, 20.2% by the Township of Woolwich and 6.6% owned by the Township of Wellesley.

There are nine members on Waterloo North Hydro Holding Corporation's Board of Directors. Waterloo North Hydro Inc. also has nine members on its Board of Directors, and 33.3% of the members of WNH's Board of Directors are independent from any affiliate. Charts 1-1 illustrate the corporate structure.

WNH charges its shareholder, Waterloo North Hydro Holding Corporation, for its share of audit fees, accounting services and the services of applicable senior management. Details are provided in Exhibit 4, Table 4-7. The President & CEO and the Vice President of Finance & CFO of Waterloo North Hydro Inc. are also officers of the Parent Company, Waterloo North Hydro Holding Corporation.

Waterloo North Hydro provides street lighting capital and maintenance services to its shareholders, the City of Waterloo, the Township of Wellesley and the Township of Woolwich. WNH also provides street lighting capital services to the Region of Waterloo (unaffiliated) and developers. WNH does not purchase any services from its shareholders.

Mission, Vision, Corporate Values & Strategic Imperatives

WNH has established a Mission and Vision statement and a number of Corporate Values and Strategic Imperatives that define the organization and are considered in strategic planning. These corporate values and strategic imperatives are listed below:

Mission

To create value to our customers and shareholders by providing safe and reliable electrical distribution services at competitive rates.

Vision

Waterloo North Hydro will be recognized as a key partner in contributing to community prosperity and success.

Corporate Values

- *Respect*

WNH is committed to treating others with respect and dignity

- *Commitment to Excellence*

WNH strives for high reliability and quality through continuous improvement, leadership and excellence

- *Service*

WNH recognizes its commitment to be of service to customers, employees and the community and its contribution to the success of each

- *Teamwork and Collaboration*

WNH willingly shares information and best practices

- *Safety and Environmental Stewardship*

WNH is committed to its responsibility for the health and safety of employees, the protection of the public and safeguarding of the environment

- *Responsible and Accountable*

WNH takes responsibility for the quality, reliability and timelines of its work and the work of others

Strategic Imperatives

Each of the strategic imperatives is internally consistent with and contributes to achieving the corporate values outlined above.

- Improve Supply
- Improve Reliability
- Improve Health, Safety and Protection of the Environment
- Reduce Costs
- Improve Organizational Effectiveness
- Improve Customer Service
- Improve Esthetics of its Distribution System

Organizational Structure

WNH's corporate organizational structure is illustrated in Chart 1-2.

Chart 1

Ownership Structure

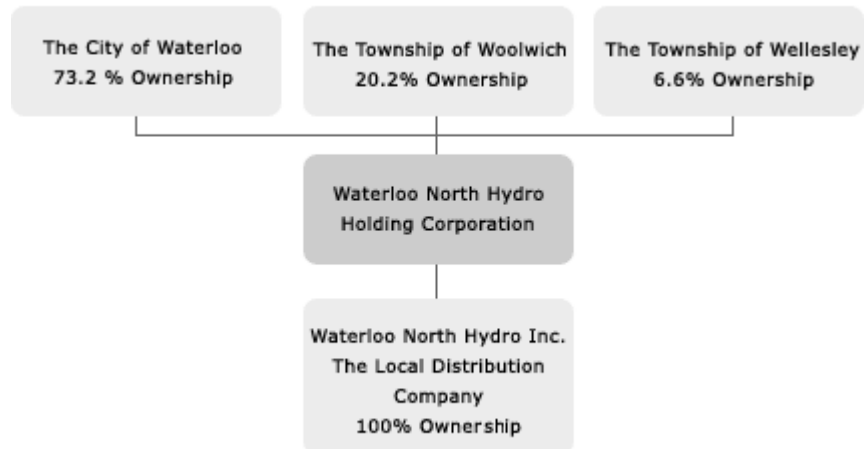
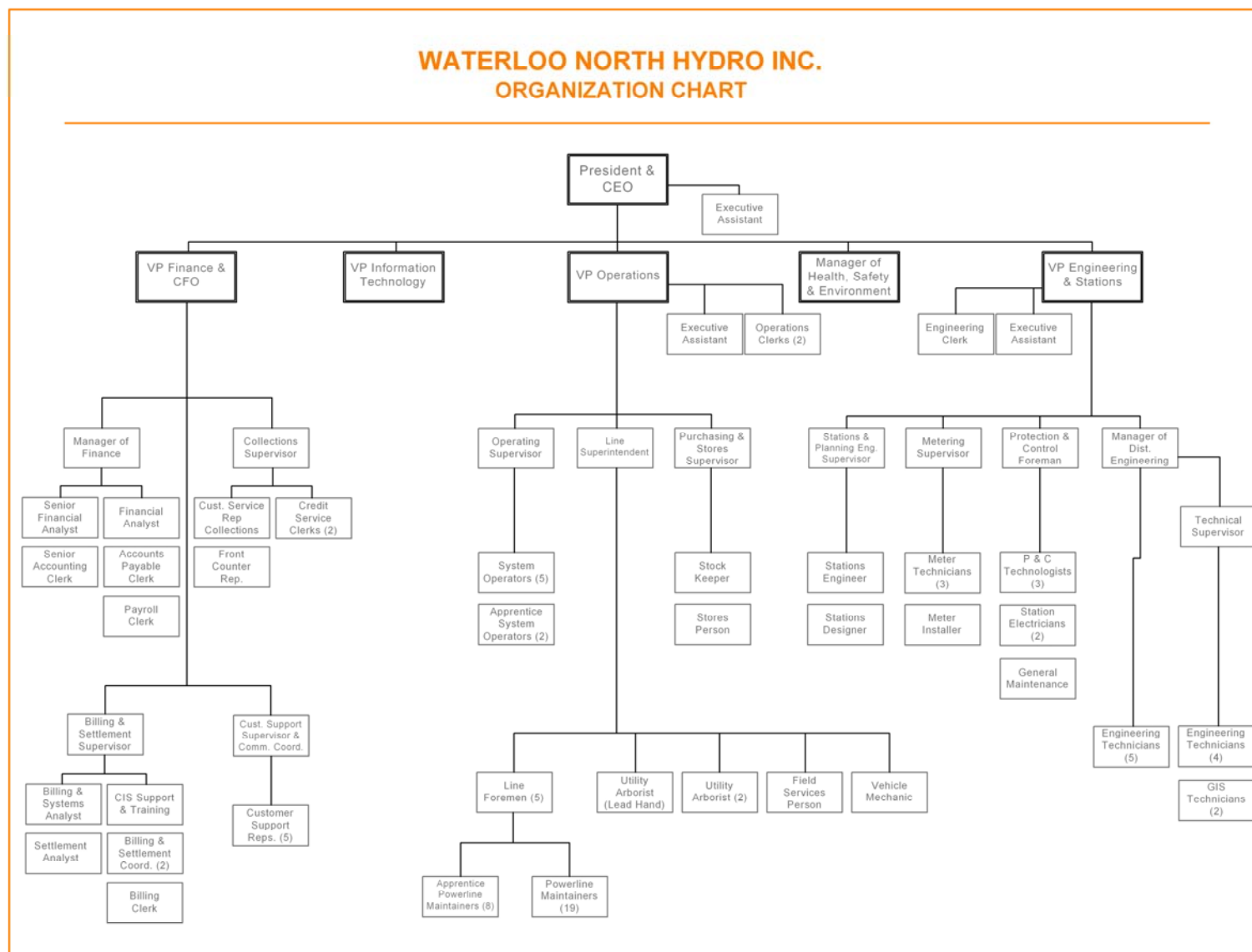


Chart 1-2

Organization Chart



PLANNED CHANGES IN CORPORATE AND OPERATIONAL STRUCTURE:

No changes to Waterloo North Hydro's corporate and operational structures are planned at the present time.

1 **LIST OF WITNESSES**

2
3 While Waterloo North Hydro requests that this Application be disposed of by way of a written hearing,
4 should a technical conference or an oral hearing be necessary the witnesses that WNH will provide
5 are as follows:
6

7 **Rene Gatien**

8
9 Rene Gatien has been the President and CEO since July 2002. Mr. Gatien previously was the Vice-
10 President of Operations for Guelph Hydro Inc. for 11 years. Mr. Gatien holds a B.A.Sc. in Electrical
11 Engineering and a Master of Business Administration degree. He is a member of the Professional
12 Engineers of Ontario and has over 30 years of experience in the electrical industry.
13

14 **Herbert Haller**

15
16 Herbert Haller is Vice-President, Engineering & Stations and has held various positions in the
17 Company over the past 20 years. Mr. Haller holds a B.A.Sc. in Electrical Engineering and
18 Management Sciences and is registered as a Professional Engineer in the Province of Ontario. Mr.
19 Haller has over 30 years of electrical industry experience in the private and public sectors.
20

21 **Dave Wilkinson**

22
23 Dave Wilkinson is the VP of Operations. Mr. Wilkinson holds a B.A.Sc. in Electrical Engineering and a
24 Master of Business Administration degree. He is a member of the Professional Engineers of Ontario.
25 Mr. Wilkinson has held various positions of increasing responsibility in Engineering and Operations for
26 over 20 years in the utility industry.
27

28 **Albert Singh**

29
30 Albert Singh is the Vice-President, Finance and Chief Financial Officer. Mr. Singh holds an MBA
31 degree and is a Certified General Accountant. He joined the utility in January 2003 and previously was
32 the Director of Finance for Hydro Vaughan Distribution Inc. for six years. Mr. Singh has over 30 years
33 of experience in the public and private sectors.

1 **Chris Amos**

2
3 Chris Amos is a Regulatory Consultant assisting Waterloo North Hydro with this rate application. Mrs.
4 Amos holds a Bachelor of Administration and is a Chartered Accountant. She was previously the
5 Controller for Cambridge & North Dumfries Hydro Inc. and has been consulting in the regulatory area
6 since 2002. She has 30 years of experience in the public and private sectors.
7

DISTRIBUTION SERVICE AREA & DISTRIBUTION SYSTEM

DISTRIBUTION SERVICE TERRITORY AND DISTRIBUTION SYSTEM:

Description of Distributor

Community Served:	City of Waterloo and the Townships of Woolwich and Wellesley
Total Service Area:	672 sq km
Rural Service Area:	607 sq km
Distribution Type:	Electricity Distribution
Service Area Population:	154,370
Municipal population:	154,370
Boundaries:	West: Hydro One North: Hydro One. East: Hydro One South: Hydro One, Cambridge & North Dumfries Hydro Inc. and Kitchener-Wilmot Hydro

A map of the Waterloo North Hydro's Distribution Service Territory is attached as Diagram 1-1.

A schematic diagram of WNH's distribution system is attached as Diagrams 1-2, 1-3 and 1-4.

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Diagram 1-2

WNH Overhead & Underground Primary – City of Waterloo

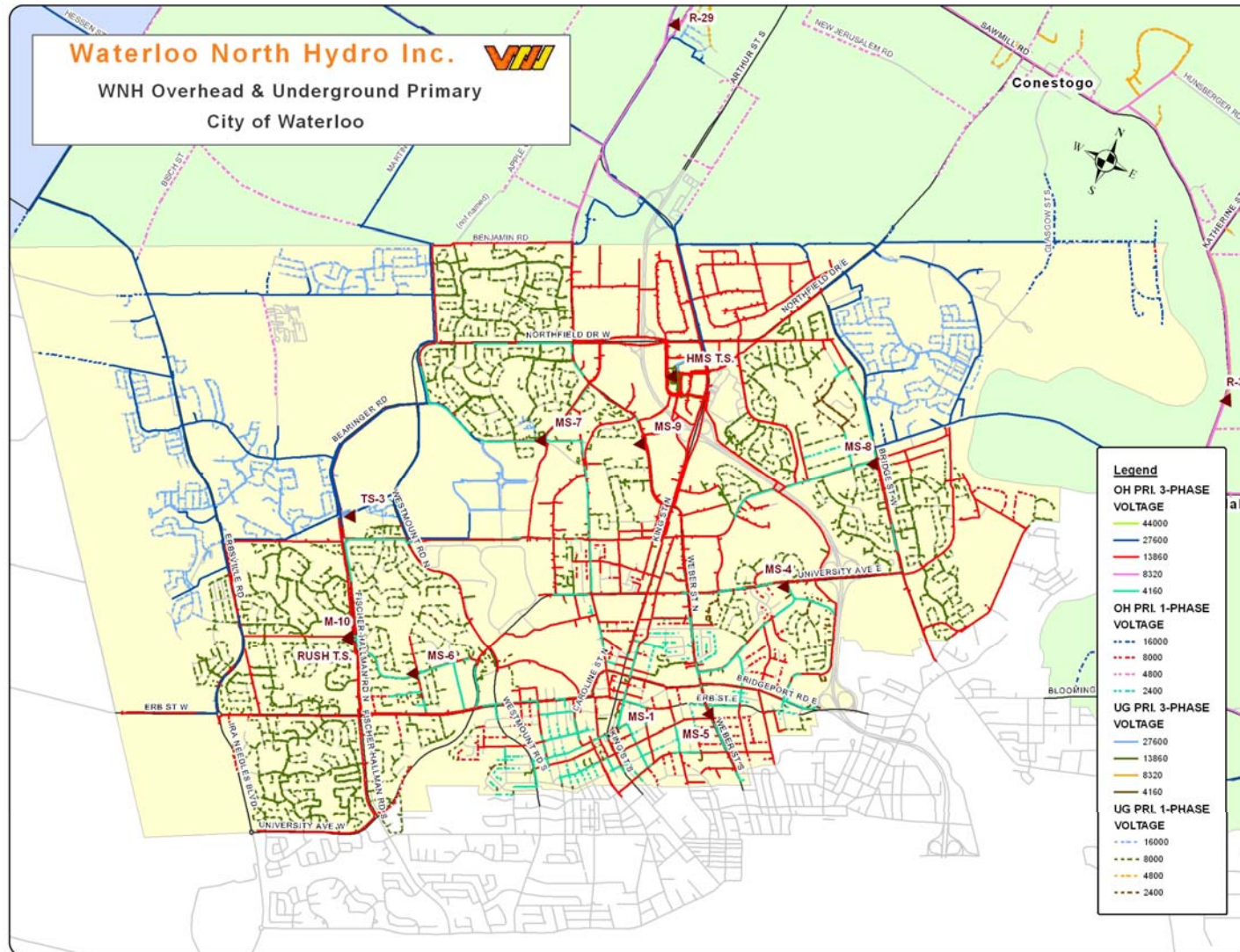


Diagram 1-3

WNH Overhead & Underground Primary – Township of Woolwich

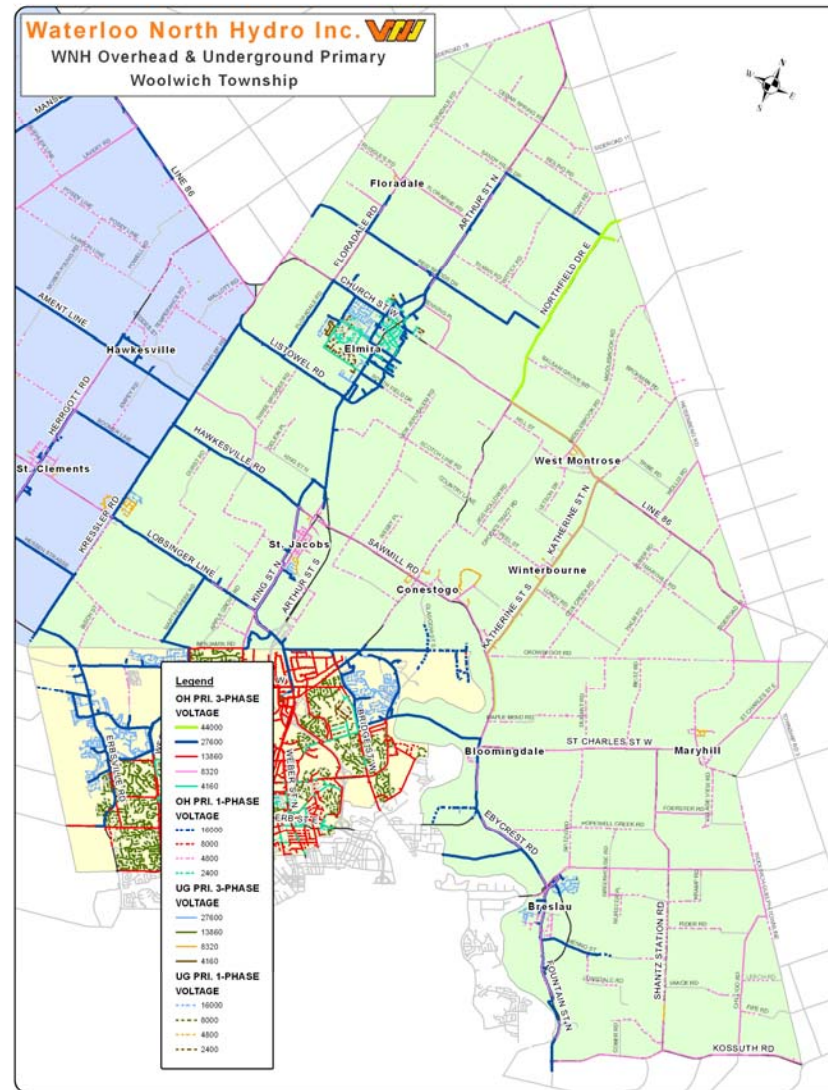
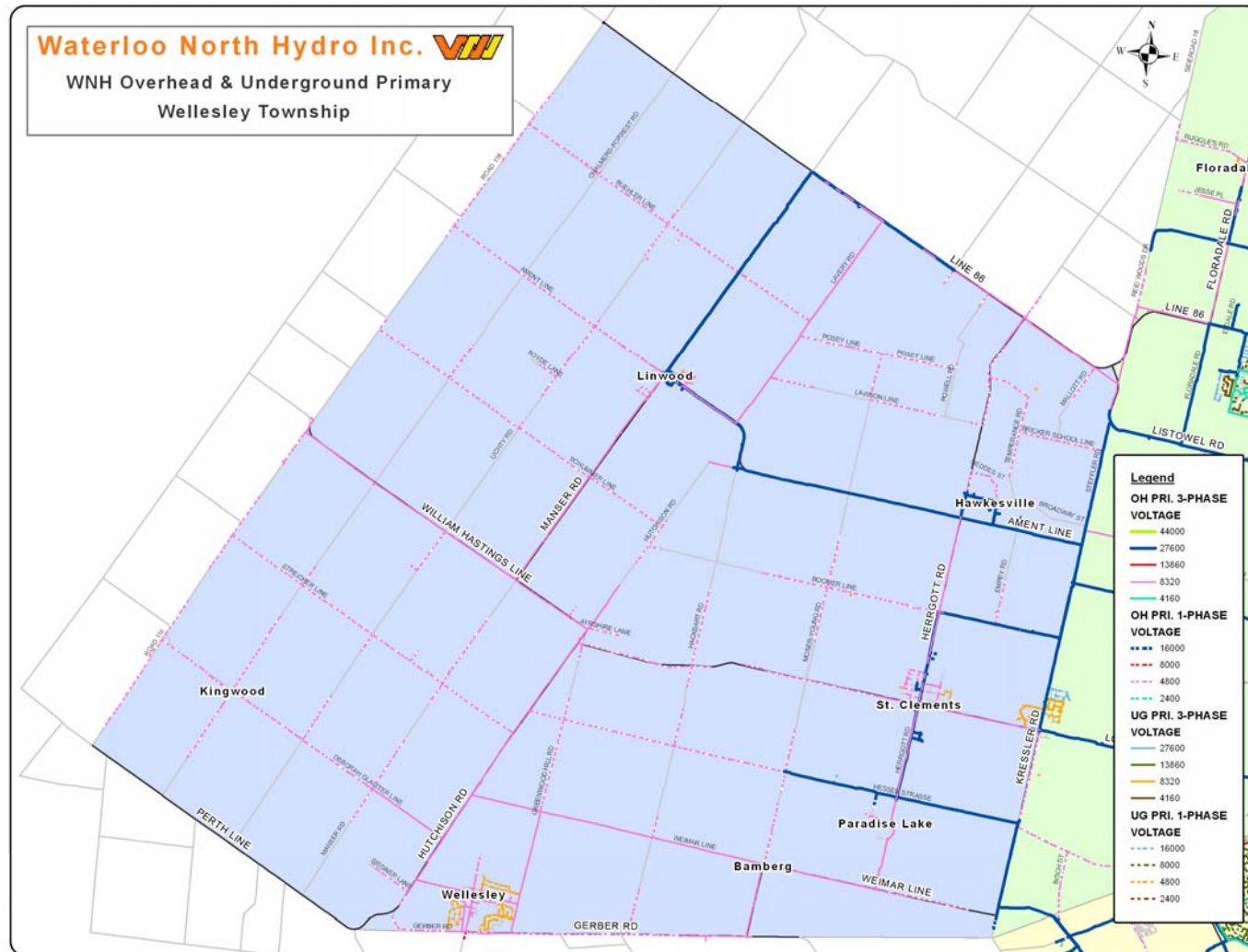


Diagram 1-4

WNH Overhead & Underground Primary – Township of Wellesley



WATERLOO NORTH HYDRO'S DISTRIBUTION SYSTEM:

Waterloo North Hydro owns and operates the electricity distribution system in its licensed service area in the City of Waterloo and the Townships of Woolwich and Wellesley, serving approximately 51,000 Residential, General Service, Large Use, Street Light, Unmetered Scattered Load and one Embedded Distributor Customers.

WNH owns and operates three (3) transmission grid connected Transformer Stations (TS's) operating at 230kV/115kV – 27.6kV/13.8kV. In addition WNH receives power from one (1) Hydro One 115/27.6kV TS, one (1) 44kV feeder supplied by Hydro One, and two (2) 27.6kV feeders supplied by Kitchener Wilmot Hydro and Cambridge North Dumfries Hydro. WNH also owns and operates two (2) 44kV/8kV rural Distribution Stations (DS's), seven (7) rural 27.6/8kV DS's and nine (9) 13.8/4kV urban Municipal Stations (MS's). Electricity is then distributed through WNH's service area of 672 square kilometres, over 482 kilometres of underground cable and 1059 kilometres of overhead conductor. Voltage is stepped down from the primary feeders through approximately 7,513 LDC owned distribution transformers.

Waterloo North Hydro monitors its distribution system through a supervisory control system at its main office. The control center operates the Supervisory Control and Data Acquisition ("SCADA") system twenty-four hours a day, seven days a week.

WNH owns and maintains approximately 51,000 meters installed on its customers' premises for the purpose of measuring consumption of electricity for billing purposes. Meters vary in type by customer and include meters capable of measuring kWh consumption, kW and kVA demand as well as hourly interval data. WNH is currently active in installing Smart Meters as part of the Province of Ontario's smart meter initiative. On June 25, 2009, Ontario Regulation 235/08 was filed by the Ontario Provincial Government giving Waterloo North Hydro Inc. authorization to proceed with its first phase of Smart Meter installation. WNH's forecast Smart Meter capital is not included in its 2011 revenue requirement but is instead included as part of its Deferral account 1555, per Board direction. Upon completion of its Smart Meter installs, WNH expects to bring a Smart Meter cost recovery application before the Board.

1 In managing its distribution system assets, WNH's main objective is to optimize performance of the
2 assets at a reasonable cost with due regard for system reliability, public and worker safety, and
3 customer service requirements. This Application incorporates WNH's 2011 Capital and OM&A
4 Expense Budgets in determining the revenue requirement to bring these plans to fruition. Further
5 information will be provided later in this Application. Waterloo North Hydro considers performance-
6 related asset information including, but not limited to, data on reliability, asset age and condition,
7 loading, customer connection requirements, and system configuration, to determine investment needs
8 of the system.

9

EXPLANATION OF HOST AND EMBEDDED UTILITIES:

WNH became a Host Distributor on May 1, 2006 and Hydro One Networks Inc. (HONI) became embedded to WNH at the Elmira Transformer Station. Prior to this date, WNH was embedded to HONI at this metering point. HONI owns and operates the Elmira TS which is located inside the service area of WNH.

WNH has not previously applied for a distribution charge for the Embedded Distributor Class, nor is it charging any distribution charges to this customer. HONI owns the circuits that cross into WNH's service territory and resides on WNH's poles. WNH receives pole rental revenue from HONI. The only costs are 1 bill per month and 1 meter read per month.

As required by the Board's Minimum Filing Requirements, WNH has modeled the Embedded Distributor in its Cost Allocation model. Costs assigned to this rate class were \$846.

WNH has included the Embedded Distributor on its Proposed Rate Order, the distribution variable only rate is based on the \$846 of costs and the Deferral and Variance Account Rate Riders are at the GS>50 kW rate. The customer's consumption was included in the calculation of the rate riders of the GS>50 kW rate class.

Waterloo North Hydro is embedded to Kitchener-Wilmot Hydro Inc., Cambridge & North Dumfries Inc. and Hydro One Networks Inc., and has included in its distribution rates Low Voltage Charges since May 1, 2006. WNH respectfully requests the continuation of Low Voltage Charges in its distribution rates as detailed in Exhibit 8, Tables 8-10 and 8-11.

APPLICATION

1 **IN THE MATTER OF** the Ontario Energy Board Act, 1998, being
2 Schedule B to the Energy Competition Act, 1998, S.O. 1998, c.15;

3 **AND IN THE MATTER OF** an Application by Waterloo North Hydro
4 Inc. to the Ontario Energy Board for an Order or Orders approving or
5 fixing just and reasonable rates and other service charges for the
6 distribution of electricity as of May 1, 2011.

7 Title of Proceeding: An application by Waterloo North Hydro Inc. for an Order
8 or Orders approving or fixing just and reasonable
9 distribution rates and other charges, effective May 1, 2011.

10 Applicant's Name: Waterloo North Hydro Inc.
11

12 Applicant's Address for Service: 300 Northfield Drive East
13 Waterloo, Ontario
14 N2J 4A3

15 Attention: Mr. Rene W. Gatien, President and CEO

16 Telephone: (519) 888-5544
17 Fax: (519) 886-8592
18 E-mail: rgatien@wnhydro.com
19

20 **APPLICATION:**
21

22 **1. Introduction**

- 23 (a) The Applicant is Waterloo North Hydro Inc. (referred to in this Application as the
24 "Applicant" or "WNH"). The Applicant is a corporation incorporated pursuant to
25 the Ontario *Business Corporations Act* with its head office in the City of Waterloo.
26 The Applicant carries on the business of distributing electricity within the City of
27 Waterloo and the Townships of Woolwich and Wellesley.
28

29 The Applicant hereby applies to the Ontario Energy Board (the "OEB") pursuant to
30 Section 78 of the Ontario Energy Board Act, 1998 (the "OEB Act") for approval of its
31 proposed distribution rates and other charges, effective May 1, 2011.

- (b) Except where specifically identified in the Application, the Applicant followed Chapter 2 of the OEB's Filing Requirements for Transmission and Distribution Applications dated June 28, 2009 (the "Filing Requirements") in order to prepare this application.

2. Proposed Distribution Rates and Other Charges

- (a) The Schedule of Rates and Charges proposed in this Application is identified in Exhibit 8 and attached to this application, and the material being filed in support of this Application sets out WNH's approach to its distribution rates and charges.

3. Proposed Effective Date of Rate Order

- (a) The Applicant requests that the OEB make its Rate Order effective May 1, 2011 in accordance with the Filing Requirements.

4. The Proposed Distribution Rates and Other Charges are Just and Reasonable

- (a) The Applicant submits the proposed distribution rates contained in this Application are just and reasonable on the following grounds:

(i) the proposed rates for the distribution of electricity have been prepared in accordance with the Filing Requirements and reflect traditional rate making and cost of service principles;

(ii) the proposed adjusted rates are necessary to meet the Applicant's Market Based Rate of Return ("MBRR") and Payments in Lieu of Taxes ("PILs") requirements;

(iii) there are no impacts to any of the customer classes or consumption level subgroups that are so significant as to warrant the deferral of any adjustments being requested by the Applicant or the implementation of any other mitigation measures; changes to other service charges proposed by the Applicant have been prepared in a manner that reflect traditional cost of service principles; and

(iv) such other grounds as may be set out in the material accompanying this Application Summary.

1 **5. Relief Sought**

- 2 (a) The Applicant applies for an Order or Orders approving the proposed distribution
3 rates and other charges set out in the following Schedules of Proposed Rates
4 and Charges as just and reasonable rates and charges pursuant to Section 78 of
5 the OEB Act, to be effective May 1, 2011, or as soon as possible thereafter; and
6

7 **6. Form of Hearing Requested**

- 8 (a) The Applicant requests that this Application be disposed of by way of a written
9 hearing.

10 DATED at Toronto, Ontario, this 26th day of August, 2010.

11 **All of which is respectfully submitted,**

12
13 ***Original Signed By***

14
15 Rene W. Gaten, P.Eng, MBA
16 President and CEO
17 Waterloo North Hydro Inc.

1

SCHEDULE OF PROPOSED RATES AND CHARGES

RESIDENTIAL SERVICE CLASSIFICATION

MONTHLY RATES AND CHARGES – Delivery Component

Service Charge	\$	14.56
Smart Meter Funding Adder	\$	1.00
Distribution Volumetric Rate	\$/kWh	0.0202
Low Voltage Service Rate	\$/kWh	0.0001
Rate Rider for Global Adjustment Sub-Account Disposition – effective until April 30, 2014	\$/kWh	0.0003
Applicable only for Non-RPP Customers		
Rate Rider for Deferral/Variance Account Disposition (2010) – effective until April 30, 2014	\$/kWh	(0.0027)
Rate Rider for Global Adjustment Sub-Account Disposition – effective until April 30, 2015	\$/kWh	0.0001
Applicable only for Non-RPP Customers		
LRAM and SSM Rate Rider	\$/kWh	0.0002
Retail Transmission Rate – Network Service Rate	\$/kWh	0.0057
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0018

MONTHLY RATES AND CHARGES – Regulatory Component

Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION

MONTHLY RATES AND CHARGES – Delivery Component

Service Charge	\$	30.63
Smart Meter Funding Adder	\$	1.00
Distribution Volumetric Rate	\$/kWh	0.0148
Low Voltage Service Rate	\$/kWh	0.0001
Rate Rider for Global Adjustment Sub-Account Disposition – effective until April 30, 2014		
Applicable only for Non-RPP Customers	\$/kWh	0.0003
Rate Rider for Deferral/Variance Account Disposition (2010) – effective until April 30, 2014	\$/kWh	(0.0027)
LRAM and SSM Rate Rider	\$/kWh	0.0001
Retail Transmission Rate – Network Service Rate	\$/kWh	0.0052
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0016

MONTHLY RATES AND CHARGES – Regulatory Component

Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION

MONTHLY RATES AND CHARGES – Delivery Component

Service Charge	\$	187.01
Smart Meter Funding Adder	\$	1.00
Distribution Volumetric Rate	\$/kW	4.4027
Low Voltage Service Rate	\$/kW	0.0561
Rate Rider for Global Adjustment Sub-Account Disposition – effective until April 30, 2014	\$/kW	0.1297
Rate Rider for Deferral/Variance Account Disposition (2010) – effective until April 30, 2014	\$/kW	(1.1063)
Rate Rider for Global Adjustment Sub-Account Disposition – effective until April 30, 2015	\$/kW	0.0005
Rate Rider for Deferral/Variance Account Disposition (2010) – effective until April 30, 2015	\$/kW	(0.0458)
LRAM and SSM Rate Rider	\$/kW	0.1402
Retail Transmission Rate – Network Service Rate – (less than 1,000 kW)	\$/kW	2.1058
Retail Transmission Rate – Network Service Rate – Interval Metered (less than 1,000 kW)	\$/kW	2.2366
Retail Transmission Rate – Network Service Rate – Interval Metered (1,000 to 4,999 kW)	\$/kW	2.2338
Retail Transmission Rate – Line and Transformation Connection Service Rate – (less than 1,000 kW)	\$/kW	0.6342
Retail Transmission Rate – Line and Transformation Connection Service Rate – Interval Metered (less than 1,000 kW)	\$/kW	0.7922
Retail Transmission Rate – Line and Transformation Connection Service Rate – Interval Metered (1,000 to 4,999 kW)	\$/kW	0.7912

MONTHLY RATES AND CHARGES – Regulatory Component

Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

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LARGE USE SERVICE CLASSIFICATION

MONTHLY RATES AND CHARGES – Delivery Component

Service Charge	\$	6,686.47
Smart Meter Funding Adder	\$	1.00
Distribution Volumetric Rate	\$/kW	3.3726
Low Voltage Service Rate	\$/kW	0.0563
Rate Rider for Global Adjustment Sub-Account Disposition – effective until April 30, 2014	\$/kW	0.1620
Applicable only for Non-RPP Customers		
Rate Rider for Deferral/Variance Account Disposition (2010) – effective until April 30, 2014	\$/kW	(1.3863)
Rate Rider for Global Adjustment Sub-Account Disposition – effective until April 30, 2015	\$/kW	0.0005
Applicable only for Non-RPP Customers		
Rate Rider for Deferral/Variance Account Disposition (2011) – effective until April 30, 2015	\$/kW	(0.0706)
Retail Transmission Rate – Network Service Rate – Interval Metered	\$/kW	1.5883
Retail Transmission Rate – Line and Transformation Connection Service Rate – Interval Metered	\$/kW	0.4902

MONTHLY RATES AND CHARGES – Regulatory Component

Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION

MONTHLY RATES AND CHARGES – Delivery Component

Service Charge (per connection)	\$	15.31
Distribution Volumetric Rate	\$/kWh	0.0190
Low Voltage Service Rate	\$/kWh	0.0001
Rate Rider for Global Adjustment Sub-Account Disposition – effective until April 30, 2014	\$/kWh	0.0003
Applicable only for Non-RPP Customers		
Rate Rider for Deferral/Variance Account Disposition (2010) – effective until April 30, 2014	\$/kWh	(0.0027)
Rate Rider for Deferral/Variance Account Disposition (2011) – effective until April 30, 2015	\$/kWh	0.0006
LRAM and SSM Rate Rider	\$/kWh	0.0044
Retail Transmission Rate – Network Service Rate	\$/kWh	0.0052
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0016

MONTHLY RATES AND CHARGES – Regulatory Component

Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

STREET LIGHTING SERVICE CLASSIFICATION

MONTHLY RATES AND CHARGES – Delivery Component

Service Charge (per connection)	\$	0.33
Distribution Volumetric Rate	\$/kW	9.6165
Low Voltage Service Rate	\$/kW	0.0347
Rate Rider for Deferral/Variance Account Disposition (2010) – effective until April 30, 2014	\$/kW	(0.9707)
Rate Rider for Global Adjustment Sub-Account Disposition – effective until April 30, 2015	\$/kW	0.0002
Applicable only for Non-RPP Customers		
Rate Rider for Deferral/Variance Account Disposition (2011) – effective until April 30, 2015	\$/kW	0.0408
LRAM and SSM Rate Rider	\$/kW	0.2330
Retail Transmission Rate – Network Service Rate	\$/kW	1.5883
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	0.4902

MONTHLY RATES AND CHARGES – Regulatory Component

Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

microFIT GENERATOR SERVICE CLASSIFICATION

MONTHLY RATES AND CHARGES – Delivery Component

Service Charge	\$	6.25
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EMBEDDED DISTRIBUTOR SERVICE CLASSIFICATION

MONTHLY RATES AND CHARGES – Delivery Component

Distribution Volumetric Rate	\$/kW	0.0118
Rate Rider for Global Adjustment Sub-Account Disposition – effective until April 30, 2014	\$/kW	0.1297
Rate Rider for Deferral/Variance Account Disposition (2010) – effective until April 30, 2014	\$/kW	(1.1063)
Rate Rider for Global Adjustment Sub-Account Disposition – effective until April 30, 2015	\$/kW	0.0005
Rate Rider for Deferral/Variance Account Disposition (2010) – effective until April 30, 2015	\$/kW	(0.0458)

MONTHLY RATES AND CHARGES – Regulatory Component

Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

ALLOWANCES

Transformer Allowance for Ownership - per kW of billing demand/month	\$	(0.60)
Primary Metering Allowance for transformer losses – applied to measured demand and energy	%	(1.00)

SPECIFIC SERVICE CHARGES

Customer Administration

Easement Letter	\$	15.00
Notification Charge	\$	15.00
Credit reference/credit check (plus credit agency costs)	\$	15.00
Returned Cheque charge (plus bank charges)	\$	15.00
Duplicate invoices for previous billing	\$	15.00
Income tax letter	\$	15.00
Account set up charge / change of occupancy charge (plus credit agency costs if applicable)	\$	30.00
Meter dispute charge plus Measurement Canada fees (if meter found correct)	\$	30.00

Non-Payment of Account

Late Payment - per month	%	1.50
Late Payment - per annum	%	19.56
Disconnect/Reconnect at meter – during regular hours	\$	65.00
Disconnect/Reconnect at meter – after regular hours	\$	185.00

Specific Charge for Access to the Power Poles – per pole/year	\$	22.35
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RETAIL SERVICE CHARGES (if applicable)

One-time charge, per retailer, to establish the service agreement between the distributor and the retailer	\$	100.00
Monthly Fixed Charge, per retailer	\$	20.00
Monthly Variable Charge, per customer, per retailer	\$/cust.	0.50
Distributor-consolidated billing charge, per customer, per retailer	\$/cust.	0.30
Retailer-consolidated billing credit, per customer, per retailer	\$/cust.	(0.30)
Service Transaction Requests (STR)		
Request fee, per request, applied to the requesting party	\$	0.25
Processing fee, per request, applied to the requesting party	\$	0.50
Request for customer information as outlined in Section 10.6.3 and Chapter 11 of the Retail Settlement Code directly to retailers and customers, if not delivered electronically through the Electronic Business Transaction (EBT) system, applied to the requesting party		
Up to twice a year		No charge
More than twice a year, per request (plus incremental delivery costs)	\$	2.00

LOSS FACTORS

Total Loss Factor – Secondary Metered Customer < 5,000 kW	1.0404
Total Loss Factor – Secondary Metered Customer > 5,000 kW	1.0150
Total Loss Factor – Primary Metered Customer < 5,000 kW	1.0300
Total Loss Factor – Primary Metered Customer > 5,000 kW	1.0050

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SPECIFIC APPROVALS REQUESTED:

In this proceeding, Waterloo North Hydro is requesting the following approvals:

- Approval to charge rates effective May 1, 2011 to recover a service revenue requirement of \$30,036,603 as set out in Exhibit 1, and Exhibit 8. The schedule of proposed rates is set out in Exhibit 1 and Exhibit 8;
- Approval of the Applicant's proposed capital structure, with a deemed common equity component of 40.0% and a deemed debt component of 60.0%, as set out in Exhibit 6, consistent with Report of the Board on Cost of Capital and 2nd Generation Incentive Regulation for Ontario's Electricity Distributors dated December 20, 2006. Waterloo North Hydro completed the transition through its 2010 rate application (EB-2009-0210);
- Approval of the proposed loss factors as set out in Exhibit 8.
- Approval to adjust the Applicant's approved Retail Transmission Network and Transformation Connection rates due to the OEB's decision on Hydro One Networks' 2010 Uniform Transmission Rate Adjustment Application (OEB File EB-2008-072) subject to any modification as a result of the OEB's decision in Hydro One Network's 2011 Uniform Transmission Rate Adjustment Application resulting in rate increases January 1, 2011:
- Approval to continue to charge Wholesale Market and Rural Rate Protection Charges approved in the OEB Decision and Order in the matter of WNH's 2010 Distribution Rates (EB-2009-0210);
- Approval to continue the Specific Service Charges that have not been changed in this rate application and approved in the OEB Decision and Order in the matter of WNH's 2010 Distribution Rates (EB-2009-0210);
- Approval to implement two new Specific Service Charges for the following services:
 - Duplicate Invoice Charge
 - Income Tax Letter

- Approval to implement rate riders for LRAM and SSM
- Approval to dispose of Deferral and Variance Account Balances as at December 31, 2009, with projected interest to April 30, 2011, over a four-year period using the method of recovery described in Exhibit 9.
- Approval to use the Board Approved 1595 account – Disposition and Recovery of Regulatory Balances and sub-accounts to record the disposition and recoveries of Deferral and Variance account balances.
- Approval to continue the Smart Meter Adder at \$1.00 per month per metered customer.
- Approval of Cost Recovery of the Late Payment Charges, in the process described in Exhibit 9.
- Creation of the Embedded Distributor Rate Class.

DRAFT ISSUES LIST:

The Applicant would expect, based on previous regulatory experience and other hearings, that the following matters pertaining to the 2011 Test Year may constitute issues in this Application:

- The amount of WNH's proposed revenue requirement;
- The reasonableness of the proposed electricity distribution rates;
- The reasonableness of the 2011 Capital and OM&A Budgets; and
- The reasonableness of the 2011 Load Forecast.

PROCEDURAL ORDERS/MOTIONS/NOTICES:

On March 12, 2007, the OEB issued a Report titled "LDC Screening Methodology to Establish a Rebasing Schedule for Electricity LDCs". The purpose of that Report was "to describe the criteria to be considered in determining which electricity distributors to engage in proceedings before the Board for rebasing to establish rates for each of the years 2009, 2010 and 2010" and to establish the next steps and timelines for filing. Section 3.3 of that Report provided an opportunity for LDCs to "self-nominate" to be rebased in a particular year.

On February 15, 2007, Waterloo North Hydro filed a self-nomination request for rebasing in 2010. Subsequently, in Board File No. EB-2006-0330, the OEB issued its list of distributors that will be rebased in 2010. WNH was included on that list.

Further, on January 29, 2009, the OEB issued a letter to all electricity distributors extending the number of years for rebasing to include the 2011 rate year. On Schedule B of that letter, Waterloo North Hydro was selected for rate rebasing in 2011. The Board (EB-2009-0028) confirmed on March 5, 2009 that Waterloo North Hydro was listed as a distributor selected for 2011 rebasing.

ACCOUNTING ORDERS REQUESTED:

Waterloo North Hydro is not requesting Accounting Orders in this proceeding.

MATERIALITY THRESHOLDS:

Waterloo North Hydro has determined its materiality thresholds in accordance with the Filing Requirements which states the threshold is to be based on 0.5% of the Distribution Revenue Requirement. The materiality threshold utilized for WNH's OM&A variances is \$75,000 and Capital Asset variances is \$125,000 these variances are presented below in Table 1-6 and again in Exhibit 2 and Exhibit 4.

Table 1-6
Materiality Threshold

Service Revenue Requirement (from Revenue Deficiency Calculation)	30,036,603
Less Revenue Offsets	(1,055,963)
Base Revenue Requirement	28,980,640
Allocated to:	
Low Voltage Wheeling Costs	165,000
Directly Assigned CDM	-
Other	28,815,640
Total	28,980,640

Variance Calculation .5% of Distribution Revenue Requirement

\$ 144,903

FINANCIAL

COMPLIANCE WITH UNIFORM SYSTEM OF ACCOUNTS:

Waterloo North Hydro has followed the accounting principles and main categories of accounts as stated in the OEB's Accounting Procedures Handbook (the "APH") and the Uniform System of Accounts ("USoA") in the preparation of this Application.

BUDGET DIRECTIVES:

Waterloo North Hydro compiles budget information for the three major components of the budgeting process: revenue forecasts, operating and maintenance expense forecast, and capital budget forecast. This budget information is compiled for both the 2010 Bridge Year and the 2011 Test Year.

Revenue Forecast

WNH's revenue forecast model was used to prepare the revenues sales and throughput volume and revenue forecast at existing rates for fiscal years 2010 and 2011. Primary drivers were identified to be weather, conservation and economic conditions. To account for changes in weather, the forecast is weather normalized as outlined in Exhibit 3 and considers such factors as recent economic conditions, new customer additions, load profiles for all classes and conservation.

Operating Maintenance and Administration ("OM&A") Expense Forecast

The OM&A expenses for the 2010 Bridge Year and the 2011 Test Year have been based on an in-depth review of operating priorities and requirements and is strongly influenced by prior years' experience. Each item is reviewed account by account for each of the forecast years with indirect costs allocated to direct costs for budget presentation.

Capital Budget

All proposed capital projects are assessed within the framework of its capital budget priority according to the Corporation's asset management strategy. Indirect costs are allocated to direct costs in the capital budget.

1 **IFRS**

2 WNH has complied with the Board Report on the International Financial Reporting
3 Standards (IFRS), EB-208-0408 and has prepared this application under Generally
4 Accepted Accounting Principles (GAAP), it has not prepared this application under IFRS.
5 As stated in the Report "The Board will require electricity distributors filing for 2011 rates
6 to provide the required years, the 2010 bridge year and the 2011 forecasts in CGAAP
7 based format. An electricity distributor may choose to present modified IFRS based
8 forecasts for 2010 and 2011, if the distributor prefers to have rates set on the basis of
9 modified IFRS." WNH has chosen to provide the required years, the 2010 bridge year
10 and the 2011 forecast in CGAAP based format.

11
12 **CHANGES IN METHODOLOGY:**

13
14 Waterloo North Hydro is not requesting any changes in methodology in the current proceeding.

CHANGES TO ACCOUNTING POLICIES SINCE LAST REBASING YEAR:

2005

There were no changes to accounting policy in 2005.

2006

There were no changes to accounting policy in 2006.

2007

FINANCIAL INSTRUMENTS

Effective January 1, 2007, the Corporation adopted three new accounting standards comprising the following sections of the Canadian Institute of Chartered Accountants (CICA) Handbook: 1530 – Comprehensive Income: 3855 - Financial Instruments – Recognition and Measurement; 3861 – Financial Instruments – Disclosure and Presentation. The adoption of these new standards required changes in the accounting for financial instruments. The comparative financial statements have not been restated as required under these standards. The principal changes in the accounting for financial instruments, due to the adoption of the accounting standards are described below:

Financial Assets and liabilities

Under the new standards, all financial instruments are classified into one of the following categories – held-for-trading, available for sale, held-to-maturity, other liabilities or loans and receivables. All financial instruments are carried on the balance sheet at fair value except for loans and receivables, held-to-maturity investments and other liabilities, which are measured at amortized cost.

The Corporation has classified its financial instruments as follows:

Cash and cash equivalents	Held for trading
Accounts receivable	Loans and receivables
Unbilled energy receivable	Loans and receivables
Accounts payable and accrued liabilities	Other liabilities
Due to related party	Other liabilities
Interest payable – shareholder	Other liabilities
Customer deposits	Other liabilities
Long-term debt	Other liabilities

Derivatives and hedge accounting

The Corporation does not have derivatives and does not engage in derivative trading or speculative activities. Hedge accounting has not been used in the preparation of these financial statements.

As the Company had no adjustments to other comprehensive income during the period ending December 31, 2007, the adoption of this standard does not have an impact on the financial statements.

2008

Inventories

Effective January 1, 2008, the Company adopted Canadian Institute of Chartered Accountant's (CICA) Handbook Section 3031, *Inventories*. Under the new standard, inventories are required to be measured at the lower of cost and net realizable value and any items considered to be major future components of property, plant and equipment are to be transferred to fixed assets. This new standard also provides updated guidance on the appropriate methods of determining cost and the impact of any write-downs to net realizable value. The implementation of this standard did not have any impact on the Company's results of operations.

Inventories consist of repair parts, supplies and materials held for future capital expansion and are valued at lower of weighted average cost and net realizable value.

2009

Future Income Taxes

Effective January 1, 2009, the Company adopted the amended sections of CICA Handbook Section 1100, Generally Accepted Accounting Principles, CICA Handbook Section 3465, Income taxes and Accounting Guideline 19 – "Disclosures by Entities Subject to Rate Regulation".

The amendment to CICA Handbook Section 1100 removed the temporary exemption pertaining to the application of that section to the recognition and measurement of assets and liabilities arising from rate regulation. In response to the removal of the exemption, the Company established accounting policies for the recognition and measurement of assets and liabilities arising from rate regulation. In accordance with the Canadian GAAP hierarchy guidance framework outlined in CICA Handbook Section 1100, the Company has determined that its assets and liabilities arising from rate regulation qualify for recognition under Canadian GAAP and this recognition is consistent with U.S. Statement of

1 Financial Accounting Standards No. 71, Accounting for the Effects of Certain Types of Regulation
2 ("FAS71"). The Company concluded that its policies for assets and liabilities arising from rate
3 regulation were consistent with the primary sources of Canadian GAAP and were developed through
4 the exercise of professional judgment. As a result, there was no change in the Company's opening
5 retained earnings at January 1, 2009 or the Company's results from operations for the year ended
6 December 31, 2009.

7
8 The amendment to CICA Handbook Section 3465 states that where future income taxes may be
9 expected to be included in approved rates charged to customers in the future and to be recovered or
10 returned to future customers, the recognition of a regulatory asset or liability for the increase or
11 reduction in future revenue is required. Furthermore, the regulatory asset or liability established by
12 this requirement is a temporary difference for which an additional future income tax asset or liability is
13 recognized. This change has been applied on a retroactive basis without restatement of prior periods.
14 There was no impact on retained earnings as at January 1, 2009 or results from operations for the
15 year ended December 31, 2009 as a result of the change.

RECONCILIATION OF AUDITED AND REGULATORY FINANCIAL STATEMENTS:

Waterloo North Hydro advises that there are few differences between the audited financial statements and the regulatory financial statements filed with the Board for the period 2006 to 2009. In most cases, the differences result from the placement of the accounts within the statements since the placement within the statement for regulatory purposes is hard-coded.

WNH notes that during the preparation of this filing, transfers between accounts occurred, upon discovery of a misallocation. Only one transfer resulted in an adjustment to the 2009 Net Income and, thus, the 2009 Retained Earnings reported in WNH's 2009 2.1.7. An increase was made to USoA 5705 Amortization in the amount of \$43,149, thus, reducing the 2009 Net Income to \$4,904,900 for this filing. All other adjustments did not affect Net Income or Retained Earnings.

WNH has provided a reconciliation between Net Income and Retained Earnings in the audited financial statements and the Net Income and Retained Earnings for OEB Financial Statements in Tables 1-6A and 1-6B.

Table 1-6A
Reconciliation of Net Income between Audited Financial Statements and OEB
Financial Statements

Description	2006	2007	2008	2009
Net Income per Audited Financial Statements	(3,963,440)	(4,860,247)	(5,482,319)	(4,752,736)
Adjust for Regulatory Assets, in Regulatory, not in Financials	(224,062)	82,154	-	-
Carrying Charges in Regulatory, not in Financials	176,881	54,774	47,146	39,192
Amortization on Wholesale Meters / Computer Software in Regulatory, not in Financials			4,160	44,189
Smart Meter Amortization in Financials, not Regulatory (in Deferral Account)			(21,004)	-
Smart Meter OM&A in Financials, not Regulatory (in Deferral Account)			(3,151)	(21,196)
Adjust Expenses to Prepaid				(214,349)
Net Income per Regulatory Statements	(4,010,621)	(4,723,319)	(5,455,168)	(4,904,900)

Table 1-6B
Reconciliation of Retained Earnings between Audited Financial Statements and
OEB Financial Statements

Description	2006	2007	2008	2009
Retained Earnings per Audited Financial Statements	(21,917,347)	(26,777,591)	(31,989,910)	(36,190,646)
Adjust for Regulatory Assets, in Regulatory, not in Financials	(59,187)	120,700	89,007	178,529
Carrying Charges in Regulatory, not in Financials	176,881	54,774	47,146	39,192
Amortization on Wholesale Meters / Computer Software in Regulatory, not in Financials			4,160	48,349
Smart Meter Amortization in Financials, not Regulatory (in Deferral Account)			(21,004)	
Smart Meter OM&A in Financials, not Regulatory (in Deferral Account)			(3,151)	(21,196)
Set up Capital Wholesale Meters in Regulatory, Previous Year's Expense			(26,000)	(26,000)
Adjust Expenses to Prepaid				(214,349)
Net Income per Regulatory Statements	(21,799,653)	(26,602,117)	(31,899,752)	(36,186,121)

USoA 3045 Retained Earnings	(17,789,033)	(21,878,798)	(26,444,584)	(31,281,221)
USoA 3046 Net Income Regulatory	(4,010,620)	(4,723,319)	(5,455,168)	(4,904,900)
Total	(21,799,653)	(26,602,117)	(31,899,752)	(36,186,121)

AUDITED FINANCIAL STATEMENTS:

Waterloo North Hydro's 2008 and 2009 audited financial statements are presented as Appendix A and B. A copy of WNH's 2009 Annual Report is included as Appendix C.

PRO FORMA STATEMENTS:

Waterloo North Hydro's 2010 Pro Forma Balance Sheet is presented in Table 1-7, Pro Forma Income Statement presented in Table 1-8.

Waterloo North Hydro's 2011 Pro Forma Balance Sheet is presented in Table 1-9, Pro Forma Income Statement presented in Table 1-10.

Table 1-7
Waterloo North Hydro Inc.
2010 Pro Forma Balance Sheet

Account Description	Total
1050-Current Assets	
1005-Cash	359,675
1010-Cash Advances and Working Funds	5,325
1020-Interest Special Deposits	0
1030-Dividend Special Deposits	0
1040-Other Special Deposits	0
1060-Term Deposits	0
1070-Current Investments	0
1100-Customer Accounts Receivable	10,700,000
1102-Accounts Receivable - Services	0
1104-Accounts Receivable - Recoverable Work	400,000
1105-Accounts Receivable - Merchandise, Jobbing, etc.	0
1110-Other Accounts Receivable	0
1120-Accrued Utility Revenues	13,800,000
1130-Accumulated Provision for Uncollectable Accounts -- Credit	(100,000)
1140-Interest and Dividends Receivable	0
1150-Rents Receivable	3,200
1170-Notes Receivable	0
1180-Prepayments	345,000
1190-Miscellaneous Current and Accrued Assets	32,800
1200-Accounts Receivable from Associated Companies	18,000
1210-Notes Receivable from Associated Companies	0
1050-Current Assets Total	25,564,000
1100-Inventory	
1305-Fuel Stock	0
1330-Plant Materials and Operating Supplies	2,724,000
1340-Merchandise	0
1350-Other Material and Supplies	0
1100-Inventory Total	2,724,000
1150-Non-Current Assets	
1405-Long Term Investments in Non-Associated Companies	0
1408-Long Term Receivable - Street Lighting Transfer	0
1410-Other Special or Collateral Funds	0
1415-Sinking Funds	0
1425-Unamortized Debt Expense	0
1445-Unamortized Discount on Long-Term Debt--Debit	0
1455-Unamortized Deferred Foreign Currency Translation Gains and Losses	0
1460-Other Non-Current Assets	51,000
1465-O.M.E.R.S. Past Service Costs	0
1470-Past Service Costs - Employee Future Benefits	0
1475-Past Service Costs -Other Pension Plans	0
1480-Portfolio Investments - Associated Companies	0
1485-Investment In Subsidiary Companies - Significant Influence	0
1490-Investment in Subsidiary Companies	0
1150-Non-Current Assets Total	51,000

Table 1-7
Waterloo North Hydro Inc.
2010 Pro Forma Balance Sheet

Account Description	Total
1200-Other Assets and Deferred Charges	
1505-Unrecovered Plant and Regulatory Study Costs	0
1508-Other Regulatory Assets	1,137,592
1510-Preliminary Survey and Investigation Charges	0
1515-Emission Allowance Inventory	0
1516-Emission Allowance Withheld	0
1518-RCVA Retail	(274,158)
1525-Miscellaneous Deferred Debits	4,018
1530-Deferred Losses from Disposition of Utility Plant	0
1540-Deferred Losses from Disposition of Utility Plant	0
1545-Development Charge Deposits/ Receivables	0
1548-RCVA - Service Transaction Request (STR)	(14,561)
1550-LV Charges - Variance	5,463
1555-Smart Meters Recovery	9,104,398
1556-Smart Meters OM & A	350,000
1562-Deferred PILs	(1,355,850)
1563-Deferred PILs - Contra	0
1565-C & DM Costs	159
1566-C & DM Costs Contra	(159)
1570-Qualifying Transition Costs	0
1571-Pre Market CofP Variance	0
1572-Extraordinary Event Losses	0
1574-Deferred Rate Impact Amounts	0
1580-RSVA - Wholesale Market Services	(451,199)
1582-RSVA - One-Time	81,739
1584-RSVA - Network Charges	291,483
1586-RSVA - Connection Charges	(6,273)
1588-RSVA - Commodity (Power)	633,707
1590-Recovery of Regulatory Assets (25% of 2002 bal.)	0
1592-PILs and Tax Variance for 2006 & Subsequent Years	(95,128)
1595-Recovery of Regulatory Assets	(11,405,000)
1200-Other Assets and Deferred Charges Total	(1,993,769)
1450-Distribution Plant	
1805-Land	1,818,186
1806-Land Rights	391,687
1808-Buildings and Fixtures	10,280,299
1810-Leasehold Improvements	0
1815-Transformer Station Equipment - Normally Primary above 50 kV	27,719,936
1820-Distribution Station Equipment - Normally Primary below 50 kV	4,556,297
1825-Storage Battery Equipment	0
1830-Poles, Towers and Fixtures	45,671,751
1835-Overhead Conductors and Devices	20,903,773
1840-Underground Conduit	13,119,884
1845-Underground Conductors and Devices	31,727,875
1850-Line Transformers	40,534,349
1855-Services	21,028,007
1860-Meters	9,488,506
1865-Other Installations on Customer's Premises	0
1450-Distribution Plant Total	227,240,552

Table 1-7
Waterloo North Hydro Inc.
2010 Pro Forma Balance Sheet

Account Description	Total
1500-General Plant	
1905-Land	0
1906-Land Rights	0
1908-Buildings and Fixtures	0
1910-Leasehold Improvements	0
1915-Office Furniture and Equipment	803,983
1920-Computer Equipment - Hardware	3,069,720
1925-Computer Software	4,341,836
1930-Transportation Equipment	7,221,619
1935-Stores Equipment	177,703
1940-Tools, Shop and Garage Equipment	891,069
1945-Measurement and Testing Equipment	675,066
1950-Power Operated Equipment	0
1955-Communication Equipment	439,754
1960-Miscellaneous Equipment	593,867
1970-Load Management Controls - Customer Premises	0
1975-Load Management Controls - Utility Premises	0
1980-System Supervisory Equipment	2,786,720
1985-Sentinel Lighting Rentals	0
1990-Other Tangible Property	0
1995-Contributions and Grants	(24,287,247)
1500-General Plant Total	(3,285,910)
1550-Other Capital Assets	
2005-Property Under Capital Leases	0
2010-Electric Plant Purchased or Sold	0
2020-Experimental Electric Plant Unclassified	0
2030-Electric Plant and Equipment Leased to Others	0
2040-Electric Plant Held for Future Use	0
2050-Completed Construction Not Classified--Electric	0
2055-Construction Work in Progress--Electric	13,661,662
2060-Electric Plant Acquisition Adjustment	0
2065-Other Electric Plant Adjustment	0
2070-Other Utility Plant	0
2075-Non-Utility Property Owned or Under Capital Lease	0
1550-Other Capital Assets Total	13,661,662
1600-Accumulated Amortization	
2105-Accumulated Amortization of Electric Utility Plant - Property, Plant and Equipment	(105,748,291)
2120-Accumulated Amortization of Electric Utility Plant - Intangibles	0
2140-Accumulated Amortization of Electric Plant Acquisition Adjustment	0
2160-Accumulated Amortization of Other Utility Plant	0
2180-Accumulated Amortization of Non-Utility Property	0
1600-Accumulated Amortization Total	(105,748,291)
Total Assets	158,213,244

Table 1-7
Waterloo North Hydro Inc.
2010 Pro Forma Balance Sheet

Account Description	Total
1650-Current Liabilities	
2205-Accounts Payable	20,926,309
2208-Customer Credit Balances	800,000
2210-Current Portion of Customer Deposits	1,002,000
2215-Dividends Declared	0
2220-Miscellaneous Current and Accrued Liabilities	400,000
2225-Notes and Loans Payable	25,618,000
2240-Accounts Payable to Associated Companies	0
2242-Notes Payable to Associated Companies	0
2250-Debt Retirement Charges (DRC) Payable	750,000
2252-Transmission Charges Payable	0
2254-Electric Safety Authority Fees Payable	0
2256-Independent Market Operator Fees and Penalties Payable	0
2260-Current Portion of Long Term Debt	0
2262-Ontario Hydro Debt - Current Portion	0
2264-Pensions and Employee Benefits - Current Portion	0
2268-Accrued Interest on Long Term Debt	1,361,000
2270-Matured Long Term Debt	0
2272-Matured Interest on Long Term Debt	0
2285-Obligations Under Capital Leases--Current	0
2290-Commodity Taxes	500,000
2292-Payroll Deductions / Expenses Payable	350,000
2294-Accrual for Taxes, "Payments in Lieu" of Taxes, Etc.	0
2296-Future Income Taxes - Current	0
1650-Current Liabilities Total	51,707,309
1700-Non-Current Liabilities	
2305-Accumulated Provision for Injuries and Damages	0
2306-Employee Future Benefits	3,891,000
2308-Other Pensions - Past Service Liability	0
2310-Vested Sick Leave Liability	0
2315-Accumulated Provision for Rate Refunds	0
2320-Other Miscellaneous Non-Current Liabilities	0
2325-Obligations Under Capital Lease--Non-Current	0
2330-Devolpment Charge Fund	0
2335-Long Term Customer Deposits	2,096,000
2340-Collateral Funds Liability	0
2345-Unamortized Premium on Long Term Debt	0
2348-O.M.E.R.S. - Past Service Liability - Long Term Portion	0
2350-Future Income Tax - Non-Current	0
2405-Other Regulatory Liabilities	0
2410-Deferred Gains From Disposition of Utility Plant	0
2415-Unamortized Gain on Reacquired Debt	0
2425-Other Deferred Credits	0
2435-Accrued Rate-Payer Benefit	0
1700-Non-Current Liabilities Total	5,987,000

Table 1-7
Waterloo North Hydro Inc.
2010 Pro Forma Balance Sheet

Account Description	Total
1800-Long-Term Debt	
2505-Debentures Outstanding - Long Term Portion	33,513,211
2510-Debenture Advances	0
2515-Required Bonds	0
2520-Other Long Term Debt	0
2525-Term Bank Loans - Long Term Portion	0
2530-Ontario Hydro Debt Outstanding - Long Term Portion	0
2550-Advances from Associated Companies	0
1800-Long-Term Debt Total	33,513,211
1850-Shareholders' Equity	
3005-Common Shares Issued	26,887,104
3008-Preference Shares Issued	0
3010-Contributed Surplus	0
3020-Donations Received	0
3022-Development Charges Transferred to Equity	0
3026-Capital Stock Held in Treasury	0
3030-Miscellaneous Paid-In Capital	0
3035-Installments Received on Capital Stock	0
3040-Appropriated Retained Earnings	0
3045-Unappropriated Retained Earnings	36,186,121
3046-Balance Transferred From Income	3,932,499
3047-Appropriations of Retained Earnings - Current Period	0
3048-Dividends Payable-Preference Shares	0
3049-Dividends Payable-Common Shares	0
3055-Adjustment to Retained Earnings	0
3065-Unappropriated Undistributed Subsidiary Earnings	0
1850-Shareholders' Equity Total	67,005,724
Total Liabilities & Shareholder's Equity	158,213,244
Balance Sheet Total	(0)

Table 1-8
Waterloo North Hydro Inc.
2010 Pro Forma Income Statement

Account Description	Total
3000-Sales of Electricity	
4006-Residential Energy Sales	(21,157,526)
4010-Commercial Energy Sales	0
4015-Industrial Energy Sales	0
4020-Energy Sales to Large Users	(4,063,427)
4025-Street Lighting Energy Sales	(389,511)
4030-Sentinel Energy Sales	0
4035-General Energy Sales	(72,146,128)
4040-Other Energy Sales to Public Authorities	0
4045-Energy Sales to Railroads and Railways	0
4050-Revenue Adjustment	0
4055-Energy Sales for Resale	0
4060-Interdepartmental Energy Sales	0
4062-WMS	(9,331,888)
4064-Billed WMS-One Time	0
4066-NS	(7,343,286)
4068-CS	(2,449,480)
4075-LV Charges	(153,000)
3000-Sales of Electricity Total	(117,034,246)
3050-Revenues From Services - Distribution	
4080-Distribution Services Revenue	(24,407,409)
4082-RS Rev	(25,000)
4084-Serv Tx Requests	0
4090-Electric Services Incidental to Energy Sales	0
3050-Revenues From Services - Distribution Total	(24,432,409)
3100-Other Operating Revenues	
4205-Interdepartmental Rents	0
4210-Rent from Electric Property	(243,719)
4215-Other Utility Operating Income	0
4220-Other Electric Revenues	(9,000)
4225-Late Payment Charges	(180,000)
4230-Sales of Water and Water Power	0
4235-Miscellaneous Service Revenues	(244,155)
4240-Provision for Rate Refunds	0
4245-Government Assistance Directly Credited to Income	0
3100-Other Operating Revenues Total	(676,874)

Table 1-8
Waterloo North Hydro Inc.
2010 Pro Forma Income Statement

Account Description	Total
3150-Other Income & Deductions	
4305-Regulatory Debits	0
4310-Regulatory Credits	0
4315-Revenues from Electric Plant Leased to Others	0
4320-Expenses of Electric Plant Leased to Others	0
4325-Revenues from Merchandise, Jobbing, Etc.	0
4330-Costs and Expenses of Merchandising, Jobbing, Etc	0
4335-Profits and Losses from Financial Instrument Hedges	0
4340-Profits and Losses from Financial Instrument Investments	0
4345-Gains from Disposition of Future Use Utility Plant	0
4350-Losses from Disposition of Future Use Utility Plant	0
4355-Gain on Disposition of Utility and Other Property	(65,000)
4360-Loss on Disposition of Utility and Other Property	20,000
4365-Gains from Disposition of Allowances for Emission	0
4370-Losses from Disposition of Allowances for Emission	0
4375-Revenues from Non-Utility Operations	(2,024,211)
4380-Expenses of Non-Utility Operations	1,831,211
4385-Expenses of Non-Utility Operations	0
4390-Miscellaneous Non-Operating Income	(70,000)
4395-Rate-Payer Benefit Including Interest	0
4398-Foreign Exchange Gains and Losses, Including Amortization	0
3150-Other Income & Deductions Total	(308,000)
3200-Investment Income	
4405-Interest and Dividend Income	(88,770)
4415-Equity in Earnings of Subsidiary Companies	0
3200-Investment Income Total	(88,770)
3350-Power Supply Expenses	
4705-Power Purchased	97,756,591
4708-WMS	9,331,888
4710-Cost of Power Adjustments	0
4712-0	0
4714-NW	7,343,286
4715-System Control and Load Dispatching	0
4716-NCN	2,449,480
4720-Other Expenses	0
4725-Competition Transition Expense	0
4730-Rural Rate Assistance Expense	0
4750-LV Charges	153,000
3350-Power Supply Expenses Total	117,034,245

Table 1-8
Waterloo North Hydro Inc.
2010 Pro Forma Income Statement

Account Description	Total
3500-Distribution Expenses - Operation	
5005-Operation Supervision and Engineering	0
5010-Load Dispatching	1,133,603
5012-Station Buildings and Fixtures Expense	424,108
5014-Transformer Station Equipment - Operation Labour	76,279
5015-Transformer Station Equipment - Operation Supplies and Expenses	70,668
5016-Distribution Station Equipment - Operation Labour	112,153
5017-Distribution Station Equipment - Operation Supplies and Expenses	80,591
5020-Overhead Distribution Lines and Feeders - Operation Labour	562,569
5025-Overhead Distribution Lines and Feeders - Operation Supplies and Expenses	396,692
5030-Overhead Subtransmission Feeders - Operation	0
5035-Overhead Distribution Transformers - Operation	5,159
5040-Underground Distribution Lines and Feeders - Operation Labour	63,775
5045-Underground Distribution Lines and Feeders - Operation Supplies and Expenses	25,820
5050-Underground Subtransmission Feeders - Operation	0
5055-Underground Distribution Transformers - Operation	11,028
5060-Street Lighting and Signal System Expense	0
5065-Meter Expense	213,174
5070-Customer Premises - Operation Labour	0
5075-Customer Premises - Materials and Expenses	0
5085-Miscellaneous Distribution Expense	304,452
5090-Underground Distribution Lines and Feeders - Rental Paid	0
5095-Overhead Distribution Lines and Feeders - Rental Paid	0
5096-Other Rent	0
3500-Distribution Expenses - Operation Total	3,480,071
3550-Distribution Expenses - Maintenance	
5105-Maintenance Supervision and Engineering	0
5110-Maintenance of Structures	65,692
5112-Maintenance of Transformer Station Equipment	78,988
5114-Maint Dist Stn Equip	88,340
5120-Maintenance of Poles, Towers and Fixtures	198,155
5125-Maintenance of Overhead Conductors and Devices	312,160
5130-Maintenance of Overhead Services	35,031
5135-Overhead Distribution Lines and Feeders - Right of Way	440,562
5145-Maintenance of Underground Conduit	0
5150-Maintenance of Underground Conductors and Devices	13,964
5155-Maintenance of Underground Services	174,484
5160-Maintenance of Line Transformers	146,324
5165-Maintenance of Street Lighting and Signal Systems	0
5170-Sentinel Lights - Labour	0
5172-Sentinel Lights - Materials and Expenses	0
5175-Maintenance of Meters	10,556
5178-Customer Installations Expenses - Leased Property	0
5195-Maintenance of Other Installations on Customer Premises	0
3550-Distribution Expenses - Maintenance Total	1,564,256

Table 1-8
Waterloo North Hydro Inc.
2010 Pro Forma Income Statement

Account Description	Total
3650-Billing and Collecting	
5305-Supervision	111,069
5310-Meter Reading Expense	289,676
5315-Customer Billing	1,155,109
5320-Collecting	601,141
5325-Collecting - Cash Over and Short	0
5330-Collection Charges	(77,500)
5335-Bad Debt Expense	100,000
5340-Miscellaneous Customer Accounts Expenses	0
3650-Billing and Collecting Total	2,179,495
3700-Community Relations	
5405-Supervision	0
5410-Community Relations - Sundry	138,071
5415-Energy Conservation	50,000
5420-Community Safety Program	33,089
5425-Miscellaneous Customer Service and Informational Expenses	0
3700-Community Relations Total	221,160
3800-Administrative and General Expenses	
5605-Executive Salaries and Expenses	460,707
5610-Management Salaries and Expenses	0
5615-General Administrative Salaries and Expenses	1,431,285
5620-Office Supplies and Expenses	0
5625-Administrative Expense Transferred-Credit	(384,784)
5630-Outside Services Employed	90,300
5635-Property Insurance	0
5640-Injuries and Damages	113,850
5645-Employee Pensions and Benefits	0
5650-Franchise Requirements	0
5655-Regulatory Expenses	431,430
5660-General Advertising Expenses	0
5665-Miscellaneous Expenses	220,313
5670-Rent	0
5675-Maintenance of General Plant	0
5680-Electrical Safety Authority Fees	0
5685-Independent Market Operator Fees and Penalties	0
5695-OM&A Contra Account	0
3800-Administrative and General Expenses Total	2,363,101

Table 1-8
Waterloo North Hydro Inc.
2010 Pro Forma Income Statement

Account Description	Total
3850-Amortization Expense	
5705-Amortization Expense - Property, Plant and Equipment	7,464,713
5710-Amortization of Limited Term Electric Plant	0
5715-Amortization of Intangibles and Other Electric Plant	0
5720-Amortization of Electric Plant Acquisition Adjustments	0
5725-Miscellaneous Amortization	0
5730-Amortization of Unrecovered Plant and Regulatory Study Costs	0
5735-Amortization of Deferred Development Costs	0
5740-Amortization of Deferred Charges	0
3850-Amortization Expense Total	7,464,713
3900-Interest Expense	
6005-Interest on Long Term Debt	2,970,390
6010-Amortization of Debt Discount and Expense	0
6015-Amortization of Premium on Debt-Credit	0
6020-Amortization of Loss on Reacquired Debt	0
6025-Amortization of Gain on Reacquired Debt-Credit	0
6030-Interest on Debt to Associated Companies	0
6035-Other Interest Expense	208,915
6040-Allowance for Borrowed Funds Used During Construction-Credit	0
6042-Allowance for Other Funds Used During Construction	0
6045-Interest Expense on Capital Lease Obligations	0
3900-Interest Expense Total	3,179,305
3950-Taxes Other Than Income Taxes	
6105-Taxes Other Than Income Taxes	86,367
3950-Taxes Other Than Income Taxes Total	86,367
4000-Income Taxes	
6110-Income Taxes	1,035,086
6115-Provision for Future Income Taxes	0
4000-Income Taxes Total	1,035,086
4100-Extraordinary & Other Items	
6205-Donations	0
6210-Life Insurance	0
6215-Penalties	0
6225-Other Deductions	0
4100-Extraordinary & Other Items Total	0
Net Income - (Gain)/Loss	(3,932,499)

Table 1-9
Waterloo North Hydro Inc.
2011 Pro Forma Balance Sheet

Account Description	Total
1050-Current Assets	
1005-Cash	357,675
1010-Cash Advances and Working Funds	5,325
1020-Interest Special Deposits	0
1030-Dividend Special Deposits	0
1040-Other Special Deposits	0
1060-Term Deposits	0
1070-Current Investments	0
1100-Customer Accounts Receivable	11,004,000
1102-Accounts Receivable - Services	0
1104-Accounts Receivable - Recoverable Work	400,000
1105-Accounts Receivable - Merchandise, Jobbing, etc.	0
1110-Other Accounts Receivable	0
1120-Accrued Utility Revenues	14,000,000
1130-Accumulated Provision for Uncollectable Accounts -- Credit	(100,000)
1140-Interest and Dividends Receivable	0
1150-Rents Receivable	3,200
1170-Notes Receivable	0
1180-Prepayments	345,000
1190-Miscellaneous Current and Accrued Assets	32,800
1200-Accounts Receivable from Associated Companies	18,000
1210-Notes Receivable from Associated Companies	0
1050-Current Assets Total	26,066,000
1100-Inventory	
1305-Fuel Stock	0
1330-Plant Materials and Operating Supplies	2,669,000
1340-Merchandise	0
1350-Other Material and Supplies	0
1100-Inventory Total	2,669,000
1150-Non-Current Assets	
1405-Long Term Investments in Non-Associated Companies	0
1408-Long Term Receivable - Street Lighting Transfer	0
1410-Other Special or Collateral Funds	0
1415-Sinking Funds	0
1425-Unamortized Debt Expense	0
1445-Unamortized Discount on Long-Term Debt--Debit	0
1455-Unamortized Deferred Foreign Currency Translation Gains and Losses	0
1460-Other Non-Current Assets	51,000
1465-O.M.E.R.S. Past Service Costs	0
1470-Past Service Costs - Employee Future Benefits	0
1475-Past Service Costs -Other Pension Plans	0
1480-Portfolio Investments - Associated Companies	0
1485-Investment In Subsidiary Companies - Significant Influence	0
1490-Investment in Subsidiary Companies	0
1150-Non-Current Assets Total	51,000

Table 1-9
Waterloo North Hydro Inc.
2011 Pro Forma Balance Sheet

Account Description	Total
1200-Other Assets and Deferred Charges	
1505-Unrecovered Plant and Regulatory Study Costs	0
1508-Other Regulatory Assets	44,331
1510-Preliminary Survey and Investigation Charges	0
1515-Emission Allowance Inventory	0
1516-Emission Allowance Withheld	0
1518-RCVA Retail	0
1525-Miscellaneous Deferred Debits	0
1530-Deferred Losses from Disposition of Utility Plant	0
1540-Deferred Losses from Disposition of Utility Plant	0
1545-Development Charge Deposits/ Receivables	0
1548-RCVA - Service Transaction Request (STR)	0
1550-LV Charges - Variance	0
1555-Smart Meters Recovery	9,429,398
1556-Smart Meters OM & A	450,000
1562-Deferred PILs	(1,355,850)
1563-Deferred PILs - Contra	0
1565-C & DM Costs	0
1566-C & DM Costs Contra	0
1570-Qualifying Transition Costs	0
1571-Pre Market CofP Variance	0
1572-Extraordinary Event Losses	0
1574-Deferred Rate Impact Amounts	0
1580-RSVA - Wholesale Market Services	0
1582-RSVA - One-Time	0
1584-RSVA - Network Charges	0
1586-RSVA - Connection Charges	0
1588-RSVA - Commodity (Power)	0
1590-Recovery of Regulatory Assets (25% of 2002 bal.)	0
1592-PILs and Tax Variance for 2006 & Subsequent Years	(95,128)
1595-Recovery of Regulatory Assets	(6,621,000)
1200-Other Assets and Deferred Charges Total	1,851,751
1450-Distribution Plant	
1805-Land	3,101,792
1806-Land Rights	408,037
1808-Buildings and Fixtures	28,403,953
1810-Leasehold Improvements	0
1815-Transformer Station Equipment - Normally Primary above 50 kV	27,985,807
1820-Distribution Station Equipment - Normally Primary below 50 kV	4,571,468
1825-Storage Battery Equipment	0
1830-Poles, Towers and Fixtures	49,950,252
1835-Overhead Conductors and Devices	23,857,060
1840-Underground Conduit	13,939,947
1845-Underground Conductors and Devices	34,476,238
1850-Line Transformers	44,788,016
1855-Services	21,704,811
1860-Meters	9,803,756
1865-Other Installations on Customer's Premises	0
1450-Distribution Plant Total	262,991,135

Table 1-9
Waterloo North Hydro Inc.
2011 Pro Forma Balance Sheet

Account Description	Total
1500-General Plant	
1905-Land	0
1906-Land Rights	0
1908-Buildings and Fixtures	0
1910-Leasehold Improvements	0
1915-Office Furniture and Equipment	2,514,187
1920-Computer Equipment - Hardware	3,419,264
1925-Computer Software	4,989,451
1930-Transportation Equipment	7,792,087
1935-Stores Equipment	231,203
1940-Tools, Shop and Garage Equipment	1,053,106
1945-Measurement and Testing Equipment	790,344
1950-Power Operated Equipment	0
1955-Communication Equipment	439,754
1960-Miscellaneous Equipment	593,867
1970-Load Management Controls - Customer Premises	0
1975-Load Management Controls - Utility Premises	0
1980-System Supervisory Equipment	3,835,152
1985-Sentinel Lighting Rentals	0
1990-Other Tangible Property	0
1995-Contributions and Grants	(26,429,856)
1500-General Plant Total	(771,441)
1550-Other Capital Assets	
2005-Property Under Capital Leases	0
2010-Electric Plant Purchased or Sold	0
2020-Experimental Electric Plant Unclassified	0
2030-Electric Plant and Equipment Leased to Others	0
2040-Electric Plant Held for Future Use	0
2050-Completed Construction Not Classified--Electric	0
2055-Construction Work in Progress--Electric	1,229,132
2060-Electric Plant Acquisition Adjustment	0
2065-Other Electric Plant Adjustment	0
2070-Other Utility Plant	0
2075-Non-Utility Property Owned or Under Capital Lease	0
1550-Other Capital Assets Total	1,229,132
1600-Accumulated Amortization	
2105-Accumulated Amortization of Electric Utility Plant - Property, Plant and Equipment	(112,488,866)
2120-Accumulated Amortization of Electric Utility Plant - Intangibles	0
2140-Accumulated Amortization of Electric Plant Acquisition Adjustment	0
2160-Accumulated Amortization of Other Utility Plant	0
2180-Accumulated Amortization of Non-Utility Property	0
1600-Accumulated Amortization Total	(112,488,866)
Total Assets	181,597,711

Table 1-9
Waterloo North Hydro Inc.
2011 Pro Forma Balance Sheet

Account Description	Total
1650-Current Liabilities	
2205-Accounts Payable	18,295,231
2208-Customer Credit Balances	800,000
2210-Current Portion of Customer Deposits	1,032,000
2215-Dividends Declared	0
2220-Miscellaneous Current and Accrued Liabilities	400,000
2225-Notes and Loans Payable	21,812,000
2240-Accounts Payable to Associated Companies	0
2242-Notes Payable to Associated Companies	0
2250-Debt Retirement Charges (DRC) Payable	750,000
2252-Transmission Charges Payable	0
2254-Electric Safety Authority Fees Payable	0
2256-Independent Market Operator Fees and Penalties Payable	0
2260-Current Portion of Long Term Debt	0
2262-Ontario Hydro Debt - Current Portion	0
2264-Pensions and Employee Benefits - Current Portion	0
2268-Accrued Interest on Long Term Debt	1,360,000
2270-Matured Long Term Debt	0
2272-Matured Interest on Long Term Debt	0
2285-Obligations Under Capital Leases--Current	0
2290-Commodity Taxes	500,000
2292-Payroll Deductions / Expenses Payable	350,000
2294-Accrual for Taxes, "Payments in Lieu" of Taxes, Etc.	0
2296-Future Income Taxes - Current	0
1650-Current Liabilities Total	45,299,231
1700-Non-Current Liabilities	
2305-Accumulated Provision for Injuries and Damages	0
2306-Employee Future Benefits	4,008,000
2308-Other Pensions - Past Service Liability	0
2310-Vested Sick Leave Liability	0
2315-Accumulated Provision for Rate Refunds	0
2320-Other Miscellaneous Non-Current Liabilities	0
2325-Obligations Under Capital Lease--Non-Current	0
2330-Devolpment Charge Fund	0
2335-Long Term Customer Deposits	2,138,000
2340-Collateral Funds Liability	0
2345-Unamortized Premium on Long Term Debt	0
2348-O.M.E.R.S. - Past Service Liability - Long Term Portion	0
2350-Future Income Tax - Non-Current	0
2405-Other Regulatory Liabilities	0
2410-Deferred Gains From Disposition of Utility Plant	0
2415-Unamortized Gain on Reacquired Debt	0
2425-Other Deferred Credits	0
2435-Accrued Rate-Payer Benefit	0
1700-Non-Current Liabilities Total	6,146,000

Table 1-9
Waterloo North Hydro Inc.
2011 Pro Forma Balance Sheet

Account Description	Total
1800-Long-Term Debt	
2505-Debentures Outstanding - Long Term Portion	33,513,211
2510-Debenture Advances	0
2515-Required Bonds	0
2520-Other Long Term Debt	23,600,000
2525-Term Bank Loans - Long Term Portion	0
2530-Ontario Hydro Debt Outstanding - Long Term Portion	0
2550-Advances from Associated Companies	0
1800-Long-Term Debt Total	57,113,211
1850-Shareholders' Equity	
3005-Common Shares Issued	26,887,104
3008-Preference Shares Issued	0
3010-Contributed Surplus	0
3020-Donations Received	0
3022-Development Charges Transferred to Equity	0
3026-Capital Stock Held in Treasury	0
3030-Miscellaneous Paid-In Capital	0
3035-Installments Received on Capital Stock	0
3040-Appropriated Retained Earnings	0
3045-Unappropriated Retained Earnings	40,118,620
3046-Balance Transferred From Income	6,033,545
3047-Appropriations of Retained Earnings - Current Period	0
3048-Dividends Payable-Preference Shares	0
3049-Dividends Payable-Common Shares	0
3055-Adjustment to Retained Earnings	0
3065-Unappropriated Undistributed Subsidiary Earnings	0
1850-Shareholders' Equity Total	73,039,269
Total Liabilities & Shareholder's Equity	181,597,711
Balance Sheet Total	(0)

Table 1-10
Waterloo North Hydro Inc.
2011 Pro Forma Income Statement

Account Description	Total
3000-Sales of Electricity	
4006-Residential Energy Sales	(21,157,526)
4010-Commercial Energy Sales	0
4015-Industrial Energy Sales	0
4020-Energy Sales to Large Users	(4,063,427)
4025-Street Lighting Energy Sales	(389,511)
4030-Sentinel Energy Sales	0
4035-General Energy Sales	(70,633,265)
4040-Other Energy Sales to Public Authorities	0
4045-Energy Sales to Railroads and Railways	0
4050-Revenue Adjustment	0
4055-Energy Sales for Resale	0
4060-Interdepartmental Energy Sales	0
4062-WMS	(9,289,687)
4064-Billed WMS-One Time	0
4066-NS	(7,285,670)
4068-CS	(2,430,261)
4075-LV Charges	(165,000)
3000-Sales of Electricity Total	(115,414,347)
3050-Revenues From Services - Distribution	
4080-Distribution Services Revenue	(27,411,230)
4082-RS Rev	(26,000)
4084-Serv Tx Requests	0
4090-Electric Services Incidental to Energy Sales	0
3050-Revenues From Services - Distribution Total	(27,437,230)
3100-Other Operating Revenues	
4205-Interdepartmental Rents	0
4210-Rent from Electric Property	(243,819)
4215-Other Utility Operating Income	0
4220-Other Electric Revenues	(9,000)
4225-Late Payment Charges	(180,000)
4230-Sales of Water and Water Power	0
4235-Miscellaneous Service Revenues	(245,845)
4240-Provision for Rate Refunds	0
4245-Government Assistance Directly Credited to Income	0
3100-Other Operating Revenues Total	(678,664)

Table 1-10
Waterloo North Hydro Inc.
2011 Pro Forma Income Statement

Account Description	Total
3150-Other Income & Deductions	
4305-Regulatory Debits	0
4310-Regulatory Credits	0
4315-Revenues from Electric Plant Leased to Others	0
4320-Expenses of Electric Plant Leased to Others	0
4325-Revenues from Merchandise, Jobbing, Etc.	0
4330-Costs and Expenses of Merchandising, Jobbing, Etc	0
4335-Profits and Losses from Financial Instrument Hedges	0
4340-Profits and Losses from Financial Instrument Investments	0
4345-Gains from Disposition of Future Use Utility Plant	0
4350-Losses from Disposition of Future Use Utility Plant	0
4355-Gain on Disposition of Utility and Other Property	(22,000)
4360-Loss on Disposition of Utility and Other Property	0
4365-Gains from Disposition of Allowances for Emission	0
4370-Losses from Disposition of Allowances for Emission	0
4375-Revenues from Non-Utility Operations	(2,078,894)
4380-Expenses of Non-Utility Operations	1,884,598
4385-Expenses of Non-Utility Operations	0
4390-Miscellaneous Non-Operating Income	(85,720)
4395-Rate-Payer Benefit Including Interest	0
4398-Foreign Exchange Gains and Losses, Including Amortization	0
3150-Other Income & Deductions Total	(302,016)
3200-Investment Income	
4405-Interest and Dividend Income	(88,770)
4415-Equity in Earnings of Subsidiary Companies	0
3200-Investment Income Total	(88,770)
3350-Power Supply Expenses	
4705-Power Purchased	96,243,729
4708-WMS	9,289,687
4710-Cost of Power Adjustments	0
4712-0	0
4714-NW	7,285,670
4715-System Control and Load Dispatching	0
4716-NCN	2,430,261
4720-Other Expenses	0
4725-Competition Transition Expense	0
4730-Rural Rate Assistance Expense	0
4750-LV Charges	165,000
3350-Power Supply Expenses Total	115,414,347

Table 1-10
Waterloo North Hydro Inc.
2011 Pro Forma Income Statement

Account Description	Total
3500-Distribution Expenses - Operation	
5005-Operation Supervision and Engineering	0
5010-Load Dispatching	1,252,456
5012-Station Buildings and Fixtures Expense	434,630
5014-Transformer Station Equipment - Operation Labour	122,155
5015-Transformer Station Equipment - Operation Supplies and Expenses	78,613
5016-Distribution Station Equipment - Operation Labour	123,042
5017-Distribution Station Equipment - Operation Supplies and Expenses	81,766
5020-Overhead Distribution Lines and Feeders - Operation Labour	574,591
5025-Overhead Distribution Lines and Feeders - Operation Supplies and Expenses	392,386
5030-Overhead Subtransmission Feeders - Operation	0
5035-Overhead Distribution Transformers - Operation	5,014
5040-Underground Distribution Lines and Feeders - Operation Labour	65,092
5045-Underground Distribution Lines and Feeders - Operation Supplies and Expenses	25,005
5050-Underground Subtransmission Feeders - Operation	0
5055-Underground Distribution Transformers - Operation	10,796
5060-Street Lighting and Signal System Expense	0
5065-Meter Expense	405,255
5070-Customer Premises - Operation Labour	0
5075-Customer Premises - Materials and Expenses	0
5085-Miscellaneous Distribution Expense	306,733
5090-Underground Distribution Lines and Feeders - Rental Paid	0
5095-Overhead Distribution Lines and Feeders - Rental Paid	0
5096-Other Rent	0
3500-Distribution Expenses - Operation Total	3,877,534
3550-Distribution Expenses - Maintenance	
5105-Maintenance Supervision and Engineering	0
5110-Maintenance of Structures	55,468
5112-Maintenance of Transformer Station Equipment	36,473
5114-Maintenance of Distribution Station Equipment	77,262
5120-Maintenance of Poles, Towers and Fixtures	225,985
5125-Maintenance of Overhead Conductors and Devices	322,983
5130-Maintenance of Overhead Services	35,204
5135-Overhead Distribution Lines and Feeders - Right of Way	445,716
5145-Maintenance of Underground Conduit	0
5150-Maintenance of Underground Conductors and Devices	14,012
5155-Maintenance of Underground Services	174,972
5160-Maintenance of Line Transformers	160,395
5165-Maintenance of Street Lighting and Signal Systems	0
5170-Sentinel Lights - Labour	0
5172-Sentinel Lights - Materials and Expenses	0
5175-Maintenance of Meters	10,711
5178-Customer Installations Expenses - Leased Property	0
5195-Maintenance of Other Installations on Customer Premises	0
3550-Distribution Expenses - Maintenance Total	1,559,180

Table 1-10
Waterloo North Hydro Inc.
2011 Pro Forma Income Statement

Account Description	Total
3650-Billing and Collecting	
5305-Supervision	117,462
5310-Meter Reading Expense	260,318
5315-Customer Billing	1,207,472
5320-Collecting	581,187
5325-Collecting - Cash Over and Short	0
5330-Collection Charges	(77,500)
5335-Bad Debt Expense	100,000
5340-Miscellaneous Customer Accounts Expenses	0
3650-Billing and Collecting Total	2,188,939
3700-Community Relations	
5405-Supervision	0
5410-Community Relations - Sundry	163,663
5415-Energy Conservation	50,000
5420-Community Safety Program	33,114
5425-Miscellaneous Customer Service and Informational Expenses	0
3700-Community Relations Total	246,777
3800-Administrative and General Expenses	
5605-Executive Salaries and Expenses	464,036
5610-Management Salaries and Expenses	0
5615-General Administrative Salaries and Expenses	1,453,695
5620-Office Supplies and Expenses	0
5625-Administrative Expense Transferred-Credit	(499,705)
5630-Outside Services Employed	90,300
5635-Property Insurance	0
5640-Injuries and Damages	115,300
5645-Employee Pensions and Benefits	0
5650-Franchise Requirements	0
5655-Regulatory Expenses	471,686
5660-General Advertising Expenses	0
5665-Miscellaneous Expenses	216,095
5670-Rent	0
5675-Maintenance of General Plant	0
5680-Electrical Safety Authority Fees	0
5685-Independent Market Operator Fees and Penalties	0
5695-OM&A Contra Account	0
3800-Administrative and General Expenses Total	2,311,407

Table 1-10
Waterloo North Hydro Inc.
2011 Pro Forma Income Statement

Account Description	Total
3850-Amortization Expense	
5705-Amortization Expense - Property, Plant and Equipment	7,816,331
5710-Amortization of Limited Term Electric Plant	0
5715-Amortization of Intangibles and Other Electric Plant	0
5720-Amortization of Electric Plant Acquisition Adjustments	0
5725-Miscellaneous Amortization	0
5730-Amortization of Unrecovered Plant and Regulatory Study Costs	0
5735-Amortization of Deferred Development Costs	0
5740-Amortization of Deferred Charges	0
3850-Amortization Expense Total	7,816,331
3900-Interest Expense	
6005-Interest on Long Term Debt	2,396,657
6010-Amortization of Debt Discount and Expense	0
6015-Amortization of Premium on Debt-Credit	0
6020-Amortization of Loss on Reacquired Debt	0
6025-Amortization of Gain on Reacquired Debt-Credit	0
6030-Interest on Debt to Associated Companies	0
6035-Other Interest Expense	1,454,915
6040-Allowance for Borrowed Funds Used During Construction-Credit	(264,961)
6042-Allowance for Other Funds Used During Construction	0
6045-Interest Expense on Capital Lease Obligations	0
3900-Interest Expense Total	3,586,611
3950-Taxes Other Than Income Taxes	
6105-Taxes Other Than Income Taxes	0
3950-Taxes Other Than Income Taxes Total	0
4000-Income Taxes	
6110-Income Taxes	886,355
6115-Provision for Future Income Taxes	0
4000-Income Taxes Total	886,355
4100-Extraordinary & Other Items	
6205-Donations	0
6210-Life Insurance	0
6215-Penalties	0
6225-Other Deductions	0
4100-Extraordinary & Other Items Total	0
Net Income - (Gain)/Loss	(6,033,545)

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5 **APPENDIX A**
6 **2008 AUDITED**
7 **FINANCIAL STATEMENTS**
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Financial Statements

WATERLOO NORTH HYDRO INC.

December 31, 2008



KPMG LLP
Chartered Accountants
115 King Street South
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AUDITORS' REPORT TO THE SHAREHOLDER

We have audited the balance sheet of Waterloo North Hydro Inc. as at December 31, 2008 and the statements of retained earnings, operations and cash flows for the year then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 2008 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

KPMG LLP

Chartered Accountants, Licensed Public Accountants

Waterloo, Canada
February 26, 2009

Waterloo North Hydro Inc.

BALANCE SHEET

As at December 31

	2008 \$	2007 \$
ASSETS		
Current		
Cash and cash equivalents	15,382,396	14,338,744
Accounts receivable	10,070,162	10,458,565
Unbilled energy receivable	13,504,247	13,132,746
Inventories	2,182,150	2,406,040
Prepaid expenses	335,334	306,345
Total current assets	41,474,289	40,642,440
Capital assets - net of accumulated amortization [note 6]	98,682,279	93,250,959
Other	50,779	50,779
Total assets	140,207,347	133,944,178
LIABILITIES AND SHAREHOLDER'S EQUITY		
Current		
Accounts payable and accrued liabilities	14,839,697	15,572,720
Due to related party [note 8]	2,423,183	1,858,297
Interest payable – shareholder	1,364,412	2,721,368
Customer deposits	1,358,579	1,214,650
Total current liabilities	19,985,871	21,367,035
Long-term		
Long-term debt [note 9]	40,402,432	40,402,432
Customer deposits	2,285,692	1,750,378
Net Regulatory liabilities [note 7]	15,351,687	13,381,460
Post employment benefits [note 11]	3,304,651	3,378,178
Total long-term liabilities	61,344,462	58,912,448
Shareholder's equity		
Share capital [note 12]	26,887,104	26,887,104
Retained earnings	31,989,910	26,777,591
Total shareholder's equity	58,877,014	53,664,695
Total liabilities and shareholder's equity	140,207,347	133,944,178

See accompanying notes

On behalf of the Board:

Waterloo North Hydro Inc.

STATEMENT OF RETAINED EARNINGS

Year ended December 31

	2008	2007
	\$	\$
Retained earnings, beginning of year	26,777,591	21,917,344
Dividends paid	(270,000)	-
Net income	5,482,319	4,860,247
Retained earnings, end of year	31,989,910	26,777,591

See accompanying notes

Waterloo North Hydro Inc.

STATEMENT OF OPERATIONS

Year ended December 31

	2008 \$	2007 \$
REVENUES		
Sales of electricity	92,877,433	93,714,317
Distribution services revenue	24,848,247	24,679,626
	117,725,680	118,393,943
Power purchased	92,877,433	93,714,317
Operating Revenue	24,848,247	24,679,626
Other revenues		
Rental revenue	245,771	243,265
Billing services	721,052	681,715
Late payment charges	214,685	221,413
Gain on disposal of capital assets	37,654	41,927
Miscellaneous	508,507	426,639
	1,727,669	1,614,959
	26,575,916	26,294,585
EXPENSES		
Distribution	5,285,628	4,833,129
Billing and collecting	2,340,954	2,178,703
General administration	1,857,875	1,993,819
Amortization	6,353,972	5,998,961
Community relations	119,696	135,024
Provincial capital taxes	340,000	335,000
	16,298,125	15,474,636
Income before under noted items	10,277,791	10,819,949
Interest – net [note 13]	(3,018,676)	(2,966,924)
Income before provision for payments in lieu of corporate income taxes	7,259,115	7,853,025
Provision for payments in lieu of corporate income taxes [note 14]	(1,776,796)	(2,992,778)
Net income	5,482,319	4,860,247

See accompanying notes

Waterloo North Hydro Inc.

STATEMENT OF CASH FLOWS

Year ended December 31

	2008 \$	2007 \$
OPERATING ACTIVITIES		
Net income	5,482,319	4,860,247
Add (deduct) charges to operations not requiring a current cash payment:		
Amortization	6,697,714	6,407,748
(Gain) on disposal of capital assets	(37,654)	(41,927)
Increase in regulatory liabilities	1,970,227	2,075,806
Increase in post employment benefits liability	(73,527)	177,667
Net change in non-cash operating working capital	(1,313,290)	2,947,328
Cash provided by operating activities	12,725,789	16,426,870
INVESTING ACTIVITIES		
Additions to capital assets	(14,139,210)	(11,582,277)
Proceeds on disposal of capital assets	54,696	41,927
Cash applied to investing activities	(14,084,514)	(11,540,350)
FINANCING ACTIVITIES		
Increase in customer deposits	679,243	41,246
Decrease in bank debt	-	(8,966,667)
Increase in contributed capital	1,993,134	1,682,172
Increase in dividends paid	(270,000)	-
Cash provided by (applied to) financing activities	2,402,377	(7,243,249)
Net cash applied during year	1,043,652	(2,356,729)
Cash and cash equivalents, beginning of year	14,338,744	16,695,473
Cash and cash equivalents, end of year	15,382,396	14,338,744
Supplementary information:		
Interest paid	3,016,686	3,138,787
Interest received	498,680	683,516
Payments in lieu of corporate income taxes	2,308,585	2,115,787

See accompanying notes

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2008

1. INCORPORATION

Waterloo North Hydro Inc. [the Company] is a regulated electricity distribution company incorporated under the Business Corporations Act [Ontario] on May 1, 2000. The incorporation was required in accordance with the provincial government's Electricity Competition Act [Bill 35]. The Company is wholly-owned by Waterloo North Hydro Holding Corporation whose shareholders are the City of Waterloo, the Township of Wellesley and the Township of Woolwich.

Under a municipal by-law, the former Hydro-Electric Commission of Waterloo, Wellesley and Woolwich and the City of Waterloo and the Townships of Wellesley and Woolwich transferred the net book value of the assets, liabilities, and the employees, associated with the distribution of electricity and associated business activities, to the new corporations.

Effective October 1, 2001, all electric utility companies in Ontario are subject to a number of taxes, which will be used to repay the stranded debt incurred by the former Ontario Hydro prior to the introduction of Bill 35. Details of these taxes are included in note 14.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of accounting

The financial statements have been prepared in accordance with Canadian generally accepted accounting principles [GAAP], as well as guidance prescribed by the Ontario Energy Board [the OEB] in the handbook "*Accounting Procedures Handbook for Electric Distribution Utilities*" and reflect the significant accounting policies summarized below.

Cash and cash equivalents

Cash equivalents are readily convertible investments with maturities of three months or less from their date of acquisition. Investments are carried at cost, which approximates market value.

Inventories

Effective January 1, 2008, the Company adopted Canadian Institute of Chartered Accountant's (CICA) Handbook Section 3031, *Inventories*. Under the new standard, inventories are required to be measured at the lower of weighted average cost and net realizable value, and any items considered to be major future components of property, plant and equipment are to be transferred to fixed assets. This new standard also provides updated guidance on the appropriate methods of determining cost and the impact of any write-downs to net realizable value. The implementation of this standard did not have any impact on the Company's results of operations.

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2008

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES cont'd

Inventories cont'd

Inventories consist of repair parts, supplies and materials held for future capital expansion and are valued at lower of weighted average cost and net realizable value.

Capital assets and amortization

Capital assets are stated at cost, including material and labour and are removed from the accounts at the end of their estimated average service lives, except in those instances where specific identification allows their removal at retirement or disposition. Gains or losses at retirement or disposition of such assets are credited or charged to other revenue.

Amortization is provided on a straight-line basis for capital assets available for use over their estimated service lives, at the following annual rates:

Buildings	2%
Transformer and substation equipment	2.5 – 3.3%
SCADA equipment	6.7%
Distribution system	4%
Meters	4%
General equipment	5 - 30%

Amortization on general equipment directly used in the installation of other capital assets, is capitalized to the new assets based on a pro-ratio of time during the year they are used for such purposes.

Full amortization is recorded in the year of acquisition and none in the year of disposal. Construction in process is not amortized until the assets are put in use.

Pension plan

Waterloo North Hydro Inc. provides a pension plan for its employees through the Ontario Municipal Employees Retirement System [OMERS]. OMERS is a multi-employer pension plan which operates as the Ontario Municipal Employees Retirement Fund [the "Fund"] and provides pensions for employees of Ontario municipalities, local boards, public utilities and school boards.

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2008

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES cont'd

Pension plan cont'd

The Fund is a contributory defined benefit pension plan, which is financed by equal contributions from participating employers and employees and by the investment earnings of the Fund [note 10]. The Company recognizes the expense related to this plan as contributions are made.

Post-employment benefits

Post-employment benefits provided by WNHl include health, dental and life insurance benefits and accumulated sick leave credits. These plans provide benefits to certain employees when they are no longer providing active service. Post-employment benefit expense is recognized in the period in which the employees render the services.

Post-employment benefits are recorded on an accrual basis. The accrued benefit obligations and current service cost are calculated using the projected benefits method pro-rated on service and based on assumptions that reflect management's best estimate. The current service cost for a period is equal to the actuarial present value of benefits attributed to employees' services rendered in the period. Past service costs from plan amendments are amortized on a straight-line basis over the average remaining service period of employees that are active at the date of amendment. Actuarial gains [losses] are amortized into expense over the average remaining service period of active employees to full eligibility.

Contributed capital

Effective May 1, 2000, the Company prospectively adopted the change in accounting policy for contributions received in aid of construction [contributed capital], as prescribed by the OEB "Accounting Procedures Handbook for Electric Distribution Utilities". Capital contributions received from outside sources are used to finance additions to capital assets. Capital contributions received are treated as a "credit" contra account included in the determination of capital assets. The amount is subsequently amortized by a charge to accumulated amortization and a credit to amortization expense, at an equivalent rate to that used for the amortization of the related capital assets.

Revenue recognition

Revenue is recorded on the basis of regular meter readings. Estimates of customer usage since the last meter reading date to the end of the year are recorded as unbilled revenue.

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2008

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES cont'd

Customer deposits

Customer deposits are cash collections from customers to guarantee the payment of energy bills. Deposits expected to be refunded to customers within the next fiscal year are classified as a current liability.

Use of estimates

The preparation of financial statements in conformance with Canadian generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses for the year. Actual results could differ from estimates.

Corporate income taxes and capital taxes

The current tax-exempt status of the Company under the Income Tax Act [Canada] and the Corporations Tax Act [Ontario] reflects the fact that the Company is wholly owned by municipalities. This tax-exempt status might be lost in a number of circumstances, including if the municipality ceases to own 90% or more of the shares or capital of the Company, or if a non-government entity has rights immediately or in the future, either absolutely or contingently, to acquire more than 10% of the shares of the Company.

Commencing October 1, 2001, the Company is required, under the Electricity Act, 1998, to make payments in lieu of corporate taxes to Ontario Electricity Financial Corporation. These payments are calculated in accordance with the rules for computing income and capital tax and other relevant amounts contained in the Income Tax Act [Canada] and the Corporations Tax Act [Ontario] as modified by the Electricity Act, 1998 and related regulations.

As a result of becoming subject to payments in lieu of corporate income taxes [PILs], the Company's taxation year was deemed to have ended immediately beforehand and a new taxation year was deemed to have commenced immediately thereafter. The Company was therefore deemed to have disposed of each of its assets at its then fair market value and to have reacquired such assets at that same amount for purposes of computing its future income subject to PILs. For purposes of certain provisions, the Company was deemed to be a new company and, as a result, tax

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2008

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES cont'd

Corporate income taxes and capital taxes cont'd

credits or tax losses not previously utilized by the Company would not be available to it after the change in tax status. Essentially, the Company was taxed as though it had a “fresh start” at the time of its change in tax status.

The Company provides for PILs relating to its regulated business using the taxes payable method as allowed by the OEB. Under the taxes payable method, no provisions are booked for temporary differences between the tax basis of assets and liabilities and their carrying amounts for accounting purposes. When unrecorded future income taxes as a result of temporary differences between tax basis and accounting purposes become payable, they will be charged to the statement of operations at that time.

Financial instruments

All financial instruments are classified into one of the following categories – held-for-trading, available for sale, held-to-maturity, other liabilities or loans and receivables. All financial instruments are carried on the balance sheet at fair value except for loans and receivables, held-to-maturity investments and other liabilities, which are measured at amortized cost. The Company has chosen to apply Handbook Section 3861 Financial Instruments - Disclosure and Presentation.

The Company has classified its financial instruments as follows:

Cash and cash equivalents	Held for trading
Accounts receivable	Loans and receivables
Unbilled energy receivable	Loans and receivables
Accounts payable and accrued liabilities	Other liabilities
Due to related party	Other liabilities
Interest payable – shareholder	Other liabilities
Customer deposits	Other liabilities
Long-term debt	Other liabilities

Derivatives and hedge accounting

The Company does not have derivatives and does not engage in derivative trading or speculative activities. Hedge accounting has not been used in the preparation of these financial statements.

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2008

3. ELECTRIC INDUSTRY RESTRUCTURING AND REGULATION

The Company is regulated by the Ontario Energy Board, under the authority granted by the Ontario Energy Board Act (1998). The OEB has the power and responsibility to approve or fix rates for the transmission and distribution of electricity, providing continued rate protection for rural and remote electricity consumers, and ensuring that distribution companies fulfill obligations to connect and service customers. The OEB may also prescribe license requirements and conditions of service to electricity distributors which may include, among other things, record keeping, regulatory accounting principles, separation of accounts for distinct businesses, and filing and process requirements for rate setting purposes. In its capacity to approve or set rates, the OEB has the authority to specify regulatory accounting treatments that may differ from Canadian generally accepted accounting principles for enterprises operating in a non-rate regulated environment.

In 2006 the Company filed a rate application to adjust its distribution charges under the Performance Based Rate methodology. Under this methodology, the Company was allowed a rate of return on Company debt and equity of 6.0% and 9.0% respectively. The application also included the provision to recover regulatory assets previously incurred by the Company.

In 2007 and 2008, the Company filed a rate application under the Incentive Regulation Mechanism (IRM) to decrease its distribution charges based on province wide net efficiency factor of 1.0%. These rates were approved by the OEB and were effective May 1, 2008. The provision to dispose of regulatory liabilities previously incurred by the Company and approved in the 2006 rate application was removed from rates effective April 30, 2008.

Smart Meters

The Province of Ontario has committed to have "Smart Meter" electricity meters installed in 800,000 homes and small businesses by the end of 2007 and throughout Ontario by the end of 2010. Smart Meters permit consumption to be recorded within specific time intervals and specific tariffs to be levied within such intervals. *Bill 21, Energy Conservation and Responsibility Act*, provides the legislative framework and regulations to support this initiative.

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2008

3. ELECTRIC INDUSTRY RESTRUCTURING & REGULATION cont'd

Included in distribution rates effective May 1, 2008 is a charge for smart meters of \$0.26 per metered customer per month. Consistent with the OEB's direction and pending further guidance, all smart meter related expenditures and recoveries are currently being deferred in regulatory accounts.

4. INVENTORIES

The amount of inventories consumed by the Company and recognized as an expense during 2008 was \$822,282 (2007 - \$673,840).

5. BANK INDEBTEDNESS

Waterloo North Hydro Inc. has a line of credit available to it in the amount of \$10,000,000, which was not utilized at December 31, 2008 [2007 - nil]. The line is unsecured and bears interest at the bank prime rate less 0.65%. At December 31, 2008, bank prime was 3.50 % [2007 - 6.00%].

6. CAPITAL ASSETS

	2008		2007	
	Cost	Accumulated amortization	Cost	Accumulated amortization
	\$	\$	\$	\$
Land and easements	2,189,621	-	1,905,562	-
Buildings	8,547,585	2,260,726	8,422,921	2,154,736
Transformer and substation equipment	25,913,904	9,823,148	25,202,491	9,241,489
SCADA equipment	2,301,961	1,719,509	2,204,564	1,608,986
Distribution system	146,076,845	63,669,595	134,348,769	58,183,445
Meters	9,444,773	5,043,073	9,067,854	4,726,923
General equipment	15,526,121	12,110,698	14,726,482	11,185,859
Contributed capital	(20,689,911)	(3,998,129)	(18,696,778)	(3,170,532)
	189,310,899	90,628,620	177,181,865	83,930,906
Less accumulated amortization	90,628,620		83,930,906	
Net book value	98,682,279		93,250,959	

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2008

7. NET REGULATORY ASSETS/LIABILITIES

Net regulatory assets (liabilities) represent costs incurred by the Company in excess of amounts billed to the customer (amounts billed to the customer in excess of costs incurred by the company) at OEB approved rates less recoveries. These amounts have been accumulated pursuant to the Electricity Act and deferred in anticipation of their future recovery in electricity distribution rates. Management assesses the future uncertainty with respect to the final regulatory disposition of those amounts, and to the extent required, makes accounting provisions to reduce the deferred balances accumulated or to increase the recorded liabilities. Upon rendering of the final regulatory decision adjusting distribution rates, the provisions are adjusted to reflect the final impact of that decision, and such adjustment is reflected in net earnings for the period.

Regulatory assets and liabilities attract interest at OEB prescribed rates. In 2008 the rates ranged from 3.35 % to 5.14%

The Company filed for final recovery of the net regulatory asset/liability balances as of December 31, 2004. This application was approved by the OEB for inclusion in rates until April 30, 2008.

The continuing restructuring of Ontario's electricity industry and other regulatory developments, including current and possible future consultations between the OEB and interested stakeholders, may affect the distribution rates that the Company may charge and the costs that the Company may recover, including the balance of its regulatory assets.

Post-market opening variances - represent amounts that have accumulated since Market Opening and comprise:

- a) variances between amounts charged by the Independent Electricity System Operator ("IESO") for the operation of the wholesale electricity market and grid, various wholesale market settlement charges and transmission charges, and the amounts billed to customers by the Company based on the OEB approved wholesale market service rate; and,
- b) variances between the amounts charged by the IESO for energy commodity costs and the amounts billed to customers by the Company based on OEB approved rates.

In the absence of rate regulation, generally accepted accounting principles would require the Company to record the costs and recoveries described above in the operating results of the year in which they are incurred and reported earnings before income taxes would be \$1,970,227 higher in 2008 and \$2,075,806 higher in 2007 than reported.

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2008

7. NET REGULATORY ASSETS/LIABILITIES cont'd

Net regulatory assets and liabilities consist of the following:

	2008 \$	2007 \$
Post market opening variances	(15,372,991)	(12,471,761)
Conservation and demand management	(509)	(159,256)
Smart meter expenditures (recoveries)	205,419	(261,060)
Recovery of regulatory assets	(183,606)	(489,383)
Net regulatory assets and liabilities	(15,351,687)	(13,381,460)

8. RELATED PARTY TRANSACTIONS

The Company conducted transactions with related parties during the year ended December 31, 2008. These transactions are in the normal course of operations and are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

During the year, the company provided street lighting energy and street lighting maintenance services to the City of Waterloo in the amounts of \$518,639 and \$194,978 respectively [2007 - \$479,545 and \$190,537 respectively]. In addition, the Company performs regular billing and collections services on behalf of the City of Waterloo for municipal water and sewer charges. In 2008, the Company collected \$26,064,565 [2007 - \$23,345,568] on behalf of the City of Waterloo relating to these charges. The Company charged administrative fees in the amount of \$721,052 [2007 - \$681,515] to the City of Waterloo for this service. The City of Waterloo is the majority shareholder of Waterloo North Hydro Holding Corporation.

At year-end, the Company owed the City of Waterloo \$2,423,183 [2007 - \$1,915,224] in unremitted collections.

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2008

9. LONG-TERM DEBT

	2008 \$	2007 \$
Senior long-term note payable [a]	24,155,492	24,155,492
Junior long-term note payable [b]	16,246,940	16,246,940
	40,402,432	40,402,432

[a] The senior long-term note payable is due to Waterloo North Hydro Holding Corporation, the Company's parent, bears interest at a rate of 6.0% per annum, has no set principal repayment terms and is due on demand.

Waterloo North Hydro Holding Corporation has waived the right to demand repayment of any portion of the note during the next fiscal year.

[b] The junior long-term note payable is due to Waterloo North Hydro Holding Corporation, bears interest at a rate of 1 1/8% per annum above the interest rate on debt which the Ontario Energy Board permits the Company to pay for rate making purposes in the establishment of distribution rates, has no set principal repayment terms and is due on demand.

Waterloo North Hydro Holding Corporation has waived the right to demand repayment of any portion of the note during the next fiscal year.

10. PENSION PLAN

The Company makes contributions to the Ontario Municipal Employees Retirement Fund (OMERS), which is a multi-employer plan, on behalf of its staff. The plan is a defined benefit plan which specifies the amount of the retirement benefit to be received by the employees based on the length of service and the best 60 consecutive months average earnings.

Contributions by the Company were at a rate of 6.5% for employee earnings below the year's maximum pensionable earnings and 9.6% thereafter.

The amount contributed to OMERS for 2008 was \$534,853 [2007 - \$ 516,654] for current service.

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2008

11. POST EMPLOYMENT BENEFITS

The Company has a number of unfunded defined benefit plans providing post-employment benefits resulting from retirement to most of its employees. These plans include life insurance, health and dental benefits and accumulated sick leave. The last actuarial valuation was done as at December 31, 2008.

Information about these defined benefit plans are as follows:

	2008 \$	2007 \$
Accrued benefit obligation		
Balance, beginning of year	3,628,086	3,157,281
Current service cost	134,810	139,615
Interest cost	195,285	191,668
Actuarial (gain)/loss	(512,879)	287,464
Benefits Paid	(75,932)	(147,942)
Balance, end of year	3,369,370	3,628,086
Unamortized actuarial gain (loss)	(64,719)	(249,908)
Liability, end of year	3,304,651	3,378,178

The significant actuarial assumptions adopted in measuring the accrued benefit obligations are as follows:

	%
Discount rate	7.0
Future general salary and wage levels increase	4.0
Dental costs increase	4.0
Medical costs increase	10.0 reducing to 5.0% after 10 years

The approximate effect on the accrued benefit obligation and the estimated net benefit expense if the health care trend rate assumption was increased or decreased by 1% is as follows:

1% increase in health care trend rate	\$200,923
1% decrease in health care	(\$180,306)

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2008

12. SHARE CAPITAL

		2008 \$	2007 \$
Authorized			
Unlimited common shares			
Unlimited Class A special shares			
Issued			
1,000 common shares		24,370,424	24,370,424
251,668 Class A special shares - \$10 Par value			
Non-voting, non cumulative		2,516,680	2,516,680
		26,887,104	26,887,104

13. INTEREST (EXPENSE) INCOME

The Company has interest [expense] income relating to the following:

	2008 \$	2007 \$
Interest on debt with Waterloo North Hydro Holding Corporation		
Senior long-term note payable	(1,453,300)	(1,449,331)
Junior long-term note payable	(1,364,412)	(1,362,220)
Other debt	(198,974)	(328,772)
Regulatory carrying charges	(532,949)	(510,113)
Interest income	530,959	683,512
Net interest expense		
	(3,018,676)	(2,966,924)

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2008

14. CORPORATE INCOME AND CAPITAL TAXES

The provision for PILs differs from the amount that would have been recorded using the combined Canadian Federal and Ontario statutory income tax rate. Reconciliation between the statutory and effective tax rates is provided as follows:

Statement of operations

	2008 \$	2007 \$
Rate reconciliation		
Income from continuing operations before income taxes	7,259,115	7,853,025
Statutory Canadian federal and provincial income tax rate	33.5%	36.12%
Expected taxes on income	2,431,804	2,836,513
Increase in income taxes resulting from:		
Permanent differences	(655,008)	6,014
Other temporary differences not benefited	-	150,251
Income tax expense	1,776,796	2,992,778
 Effective tax rate	 24.48%	 38.11%

Balance sheet

Future income taxes relating to the regulated businesses have not been recorded in the accounts. As at December 31, 2008, future income tax assets of \$6,093,000 [2007 - \$6,500,000] based on substantively enacted income tax rates, have not been recorded.

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2008

15. PRUDENTIAL SUPPORT OBLIGATION

Waterloo North Hydro Inc. purchases power from the IESO on behalf of its customers and retailers. The IESO is responsible for ensuring that prudential support is posted by all market participants to mitigate the impact of an event of default by a market participant on the rest of the market. In this regard Waterloo North Hydro Inc. posted an irrevocable standby letter of credit in the amount of \$18,534,708 underwritten by the Company's principal bank. This instrument expires April 15, 2009.

16. FINANCIAL INSTRUMENTS

The carrying values of cash and cash equivalents, accounts receivable, unbilled energy receivable, accounts payable and accrued liabilities, and amounts due to related party approximate fair values because of the short maturity of these instruments. No fair value is available for the long-term note payable since there are no specified repayment terms.

Financial assets held by the Company, such as accounts receivable, expose it to credit risk.

The Company earns its revenue from a broad base of customers located in the City of Waterloo and the Townships of Wellesley and Woolwich. No one customer accounts for more than 5 % of revenue.

17. CONTINGENT LIABILITY

Griffith et al. v. Toronto Hydro-Electric Commission et al.

This action has been brought under the Class Proceedings Act, 1992. The plaintiff class seeks \$500 million in restitution for amounts paid to Toronto Hydro and to other Ontario municipal electric utilities ("LDCs") who received late payment penalties which constitute interest at an effective rate in excess of 60% per year, contrary to section 347 of the Criminal Code. Pleadings have closed in this action. The action has not yet been certified as a class action and no discoveries have been held, as the parties were awaiting the outcome of a similar proceeding brought against Enbridge Gas Distribution Inc. (formerly Consumers Gas).

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2008

17. CONTINGENT LIABILITY cont'd

On April 22, 2004, the Supreme Court of Canada released a decision in the Consumers Gas case rejecting all of the defences which had been raised by Enbridge, although the Court did not permit the Plaintiff class to recover damages for any period prior to the issuance of the Statement of Claim in 1994 challenging the validity of late payment penalties. The Supreme Court remitted the matter back to the Ontario Superior Court of Justice for determination of the damages. At the end of 2006, a mediation process resulted in the settlement of the damages payable by Enbridge and that settlement was approved by the Ontario Superior Court.

In 2007, Enbridge filed an application to the Ontario Energy Board ("OEB") to recover the Court-approved amount and related amounts from ratepayers. On February 4, 2008 the OEB approved recovery of the said amounts from ratepayers over a five year period.

After the release by the Supreme Court of Canada of its 2004 decision in the Consumers Gas case, the plaintiffs in the LDC late payment penalties class action indicated their intention to proceed with their litigation against the LDCs. To date, no formal steps have been taken to move the action forward. The electric utilities intend to respond to the action if and when it proceeds on the basis that the LDCs' situation may be distinguishable from that of Consumers Gas.

18. GENERAL LIABILITY INSURANCE

The Company is a member of the Municipal Electric Association Reciprocal Insurance Exchange [MEARIE] which is a pooling of general liability insurance risks. Members of MEARIE would be assessed on a pro-rata basis should losses be experienced by MEARIE, for the years in which the Company was a member.

To December 31, 2008, the Company has not been made aware of any additional assessments. Participation in MEARIE expires December 31, 2009. Notice to withdraw from MEARIE must be given six months prior to the commencement of the next underwriting term.

19. CAPITAL DISCLOSURES

The main objectives of the Company when managing capital are to ensure ongoing access to funding to maintain and improve the electricity distribution system, prudent management of its capital structure with regard to recoveries of financing charges permitted by the OEB on its regulated electricity distribution business, and to deliver the appropriate financial returns.

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2008

The Company's definition of capital includes shareholder's equity and long-term debt. As at December 31, 2008, shareholder's equity amounts to \$58,877,014 (2007 - \$53,664,695) and long-term debt amounts to \$40,402,432 (2007 - \$40,402,432).

The OEB regulates the amount of interest on debt and the rate of return that may be recovered by the Company, through its electricity distribution rates, in respect of its regulated electricity distribution business. The OEB permits such recoveries on the basis of a deemed capital structure represented by 53.3% debt and 46.7% equity. The actual capital structure for the Company may differ from the OEB's deemed structure.

20. EMERGING ACCOUNTING CHANGES

Rate regulated entities

In August 2007, the Canadian Accounting Standards Board (AcSB) issued a decision, effective January 1, 2009, to withdraw the temporary exemption in CICA Handbook Section 1100, Generally Accepted Accounting Principles, which permits the recognition and measurement of assets and liabilities arising from rate regulation. Further, CICA Handbook Section 3465, *Income Taxes*, was amended to require the recognition of future income tax liabilities and assets for regulated enterprises that were previously not subject these provisions. Consequently, the Company will be required to reflect on its Consolidated Balance Sheet, the effect of applying the liability method when accounting for payments in lieu of corporate income taxes and a corresponding regulatory asset. The Company is currently assessing the impact of the AcSB's decision on its Consolidated Balance Sheet.

International Financial Reporting Standards (IFRS)

On February 13, 2008, the AcSB announced that publicly accountable enterprises will be required to change over to IFRS effective January 1, 2011. Some of the converged standards will be implemented in Canada during the transition period with the remaining standards adopted at the change over date. The Company has launched an internal initiative to govern the conversion process and is currently in the process of evaluating the potential impact of the conversion to IFRS on its financial statements.

APPENDIX B

2009 AUDITED FINANCIAL STATEMENTS

Financial Statements

WATERLOO NORTH HYDRO INC.

December 31, 2009



KPMG LLP
Chartered Accountants
115 King Street South
2nd Floor
Waterloo ON N2J 5A3

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AUDITORS' REPORT TO THE SHAREHOLDER

We have audited the balance sheet of Waterloo North Hydro Inc. as at December 31, 2009 and the statements of retained earnings, operations and cash flows for the year then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 2009 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

A handwritten signature in black ink that reads 'KPMG LLP' with a horizontal line underneath.

Chartered Accountants, Licensed Public Accountants

Waterloo, Canada
February 26, 2010

Waterloo North Hydro Inc.

BALANCE SHEET

As at December 31

	2009 \$	2008 \$
ASSETS		
Current		
Cash and cash equivalents	226,635	15,382,396
Accounts receivable	11,944,598	10,070,162
Unbilled energy receivable	12,520,720	13,504,247
Inventories	2,410,081	2,182,150
Prepaid expenses	369,356	335,334
Total current assets	27,471,390	41,474,289
Capital assets - net of accumulated amortization <i>[note 5]</i>	109,980,991	98,682,279
Future Tax	6,695,828	-
Other	50,779	50,779
Total assets	144,198,988	140,207,347
LIABILITIES AND SHAREHOLDER'S EQUITY		
Current		
Accounts payable and accrued liabilities	17,179,533	14,839,697
Due to related party <i>[note 7]</i>	674,879	2,423,183
Interest payable – shareholder	1,360,684	1,364,412
Customer deposits	983,443	1,358,579
Bank indebtedness <i>[note 4]</i>	3,092,097	-
Total current liabilities	23,290,636	19,985,871
Long-term		
Long-term debt <i>[note 8]</i>	33,513,211	40,402,432
Customer deposits	2,054,738	2,285,692
Net regulatory liabilities <i>[note 6]</i>	18,484,689	15,351,687
Post employment benefits <i>[note 10]</i>	3,777,964	3,304,651
Total long-term liabilities	57,830,602	61,344,462
Shareholder's equity		
Share capital <i>[note 11]</i>	26,887,104	26,887,104
Retained earnings	36,190,646	31,989,910
Total shareholder's equity	63,077,750	58,877,014
Total liabilities and shareholder's equity	144,198,988	140,207,347

See accompanying notes

On behalf of the Board:

Waterloo North Hydro Inc.

STATEMENT OF RETAINED EARNINGS

Year ended December 31

	2009 \$	2008 \$
Retained earnings, beginning of year	31,989,910	26,777,591
Dividends paid	(552,000)	(270,000)
Net income	4,752,736	5,482,319
Retained earnings, end of year	36,190,646	31,989,910

See accompanying notes

Waterloo North Hydro Inc.

STATEMENT OF OPERATIONS

Year ended December 31

	2009 \$	2008 \$
REVENUES		
Sales of electricity	79,864,565	92,877,433
Distribution services revenue	24,999,515	24,848,247
	104,864,080	117,725,680
Power purchased	79,864,565	92,877,433
Operating Revenue	24,999,515	24,848,247
Other revenues		
Rental revenue	246,620	245,771
Billing services	690,851	721,052
Late payment charges	213,527	214,685
Gain (loss) on disposal of capital assets	(35,696)	37,654
Miscellaneous	582,385	508,507
	1,697,687	1,727,669
	26,697,202	26,575,916
EXPENSES		
Distribution	4,849,941	5,285,628
Billing and collecting	2,348,006	2,340,954
General administration	2,234,435	1,857,875
Amortization	6,832,754	6,353,972
Community relations	149,716	119,696
Late payment charge settlement [note 16]	200,000	-
Provincial capital taxes	207,258	340,000
	16,822,110	16,298,125
Income before under noted items	9,875,092	10,277,791
Interest – net [note 12]	(3,075,416)	(3,018,676)
Income before provision for payments in lieu of corporate income taxes	6,799,676	7,259,115
Provision for payments in lieu of corporate income taxes [note 13]	(2,046,940)	(1,776,796)
Net income	4,752,736	5,482,319

See accompanying notes

Waterloo North Hydro Inc.

STATEMENT OF CASH FLOWS

Year ended December 31

	2009 \$	2008 \$
OPERATING ACTIVITIES		
Net income	4,752,736	5,482,319
Add (deduct) charges to operations not requiring a current cash payment:		
Amortization	7,288,795	6,697,714
(Gain) on disposal of capital assets	35,696	(37,654)
Increase (decrease) in regulatory liabilities	(3,562,826)	1,970,227
Increase in post employment benefits liability	473,313	(73,527)
Net change in non-cash operating working capital	(565,057)	(1,313,290)
Cash provided by operating activities	8,422,657	12,725,789
INVESTING ACTIVITIES		
Additions to capital assets	(20,440,168)	(14,139,210)
Proceeds on disposal of capital assets	37,928	54,696
Cash applied to investing activities	(20,402,240)	(14,084,514)
FINANCING ACTIVITIES		
Increase (decrease) in customer deposits	(606,090)	679,243
Increase (decrease) in bank debt [note 4]	3,092,097	-
Repayment of long term debt [note 8]	(6,889,221)	-
Increase in contributed capital	1,779,036	1,993,134
Dividends paid	(552,000)	(270,000)
Cash provided by (applied to) financing activities	(3,176,178)	2,402,377
Net cash applied during year	(15,155,761)	1,043,652
Cash and cash equivalents, beginning of year	15,382,396	14,338,744
Cash and cash equivalents, end of year	226,635	15,382,396
Supplementary information:		
Interest paid	2,755,247	3,016,686
Interest received	81,704	498,680
Payments in lieu of corporate income taxes	2,144,200	2,308,585

See accompanying notes

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

1. INCORPORATION

Waterloo North Hydro Inc. [the Company] is a regulated electricity distribution company incorporated under the Business Corporations Act [Ontario] on May 1, 2000. The incorporation was required in accordance with the provincial government's Electricity Competition Act [Bill 35]. The Company is wholly-owned by Waterloo North Hydro Holding Corporation whose shareholders are the City of Waterloo and the Townships of Wellesley and Woolwich.

Under a municipal by-law, the former Hydro-Electric Commission of Waterloo, Wellesley and Woolwich and the City of Waterloo and the Townships of Wellesley and Woolwich transferred the net book value of the assets, liabilities, and the employees, associated with the distribution of electricity and associated business activities, to the new corporations.

Effective October 1, 2001, all electric utility companies in Ontario are subject to a number of taxes, which will be used to repay the stranded debt incurred by the former Ontario Hydro prior to the introduction of Bill 35. Details of these taxes are included in note 13.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of accounting

Change in accounting policies

Effective January 1, 2009, the Company adopted the amended sections of CICA Handbook Section 1100, Generally Accepted Accounting Principles, CICA Handbook Section 3465, Income taxes and Accounting Guideline 19 – "Disclosures by Entities Subject to Rate Regulation".

The amendment to CICA Handbook Section 1100 removed the temporary exemption pertaining to the application of that section to the recognition and measurement of assets and liabilities arising from rate regulation. In response to the removal of the exemption, the Company established accounting policies for the recognition and measurement of assets and liabilities arising from rate regulation. In accordance with the Canadian GAAP hierarchy guidance framework outlined in CICA Handbook Section 1100, the Company has determined that its assets and liabilities arising from rate regulation qualify for recognition under Canadian GAAP and this recognition is consistent with U.S. Statement of Financial Accounting Standards No. 71, Accounting for the Effects of Certain Types of Regulation ("FAS71"). The Company concluded that its policies for assets and liabilities arising from rate regulation were consistent with the primary sources of Canadian GAAP and were developed through the exercise of professional judgment. As a result, there was no change in the Company's opening retained earnings at January 1, 2009 or the Company's results from operations for the year ended December 31, 2009.

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

The amendment to CICA Handbook Section 3465 states that where future income taxes may be expected to be included in approved rates charged to customers in the future and to be recovered or returned to future customers, the recognition of a regulatory asset or liability for the increase or reduction in future revenue is required. Furthermore, the regulatory asset or liability established by this requirement is a temporary difference for which an additional future income tax asset or liability is recognized. This change has been applied on a retroactive basis without restatement of prior periods. There was no impact on retained earnings as at January 1, 2009 or results from operations for the year ended December 31, 2009 as a result of the change.

The financial statements have been prepared in accordance with Canadian generally accepted accounting principles [GAAP], as well as guidance prescribed by the Ontario Energy Board [the OEB] in the handbook "Accounting Procedures Handbook for Electric Distribution Utilities" and reflect the significant accounting policies summarized below.

Cash and cash equivalents

Cash equivalents are readily convertible investments with maturities of three months or less from their date of acquisition. Investments are carried at cost, which approximates market value.

Inventories

Inventories consist of repair parts, supplies and materials held for future capital expansion and are valued at lower of weighted average cost and net realizable value.

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES cont'd

Capital assets and amortization

Capital assets are stated at cost, including material and labour and are removed from the accounts at the end of their estimated average service lives, except in those instances where specific identification allows their removal at retirement or disposition. Gains or losses at retirement or disposition of such assets are credited or charged to other revenue.

Amortization is provided on a straight-line basis for capital assets available for use over their estimated service lives, at the following annual rates:

Buildings	2%
Transformer and substation equipment	2.5 – 3.3%
SCADA equipment	6.7%
Distribution system	4%
Meters	4%
General equipment	5 - 30%

Amortization on general equipment directly used in the installation of other capital assets, is capitalized to the new assets based on a pro-ration of time during the year they are used for such purposes.

Full amortization is recorded in the year of acquisition and none in the year of disposal. Construction in process is not amortized until the assets are put in use.

Pension plan

Waterloo North Hydro Inc. provides a pension plan for its employees through the Ontario Municipal Employees Retirement System [OMERS]. OMERS is a multi-employer pension plan which operates as the Ontario Municipal Employees Retirement Fund [the "Fund"] and provides pensions for employees of Ontario municipalities, local boards, public utilities and school boards.

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES cont'd

The Fund is a contributory defined benefit pension plan, which is financed by equal contributions from participating employers and employees and by the investment earnings of the Fund [note 9]. The Company recognizes the expense related to this plan as contributions are made.

Post-employment benefits

Post-employment benefits provided by WNHI include health, dental and life insurance benefits and accumulated sick leave credits. These plans provide benefits to certain employees when they are no longer providing active service. Post-employment benefit expense is recognized in the period in which the employees render the services.

Post-employment benefits are recorded on an accrual basis. The accrued benefit obligations and current service cost are calculated using the projected benefits method pro-rated on service and based on assumptions that reflect management's best estimate. The current service cost for a period is equal to the actuarial present value of benefits attributed to employees' services rendered in the period. Past service costs from plan amendments are amortized on a straight-line basis over the average remaining service period of employees that are active at the date of amendment. Actuarial gains [losses] are amortized into expense over the average remaining service period of active employees to full eligibility.

Contributed capital

Effective May 1, 2000, the Company prospectively adopted the change in accounting policy for contributions received in aid of construction [contributed capital], as prescribed by the OEB "Accounting Procedures Handbook for Electric Distribution Utilities". Capital contributions received from outside sources are used to finance additions to capital assets. Capital contributions received are treated as a "credit" contra account included in the determination of capital assets. The amount is subsequently amortized by a charge to accumulated amortization and a credit to amortization expense, at an equivalent rate to that used for the amortization of the related capital assets.

Revenue recognition

Revenue is recorded on the basis of regular meter readings. Estimates of customer usage since the last meter reading date to the end of the year are recorded as unbilled revenue.

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES cont'd

Customer deposits

Customer deposits are cash collections from customers to guarantee the payment of energy bills. Deposits expected to be refunded to customers within the next fiscal year are classified as a current liability.

Use of estimates

The preparation of financial statements in conformance with Canadian generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses for the year. Actual results could differ from estimates.

Corporate income taxes and capital taxes

The current tax-exempt status of the Company under the Income Tax Act [Canada] and the Corporations Tax Act [Ontario] reflects the fact that the Company is wholly owned by municipalities. This tax-exempt status might be lost in a number of circumstances, including if the municipality ceases to own 90% or more of the shares or capital of the Company, or if a non-government entity has rights immediately or in the future, either absolutely or contingently, to acquire more than 10% of the shares of the Company.

Commencing October 1, 2001, the Company is required, under the Electricity Act, 1998, to make payments in lieu of corporate taxes to Ontario Electricity Financial Corporation. These payments are calculated in accordance with the rules for computing income and capital tax and other relevant amounts contained in the Income Tax Act [Canada] and the Corporations Tax Act [Ontario] as modified by the Electricity Act, 1998 and related regulations.

As a result of becoming subject to payments in lieu of corporate income taxes [PILs], the Company's taxation year was deemed to have ended immediately beforehand and a new taxation year was deemed to have commenced immediately thereafter. The Company was therefore deemed to have disposed of each of its assets at its then fair market value and to have reacquired such assets at that same amount for purposes of computing its future income subject to PILs. For purposes of certain provisions, the Company was deemed to be a new company and, as a result, tax

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES cont'd

Corporate income taxes and capital taxes cont'd

credits or tax losses not previously utilized by the Company would not be available to it after the change in tax status. Essentially, the Company was taxed as though it had a "fresh start" at the time of its change in tax status.

The Company provides for PILs using the asset and liability method. Under this method, future tax assets and liabilities are recognized, to the extent such are determined likely to be realized, for the future tax consequences attributable to differences between the financial carrying amounts of existing assets and liabilities and their respective tax bases. Future tax assets and liabilities are measured using enacted or substantively enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on future tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the date of enactment or substantive enactment.

3. ELECTRIC INDUSTRY RESTRUCTURING AND REGULATION

The Company is regulated by the Ontario Energy Board, under the authority granted by the Ontario Energy Board Act (1998). The OEB has the power and responsibility to approve or fix rates for the transmission and distribution of electricity, providing continued rate protection for rural and remote electricity consumers, and ensuring that distribution companies fulfill obligations to connect and service customers. The OEB may also prescribe license requirements and conditions of service to electricity distributors which may include, among other things, record keeping, regulatory accounting principles, separation of accounts for distinct businesses, and filing and process requirements for rate setting purposes. In its capacity to approve or set rates, the OEB has the authority to specify regulatory accounting treatments that may differ from Canadian generally accepted accounting principles for enterprises operating in a non-rate regulated environment.

In January 2000, the OEB established that distribution rates would be subject to Performance Based Regulation ("PBR"), a method of regulation whereby distribution rates are reduced annually to reflect productivity improvements required of the Company. Under this rate methodology, rates also include regulated amounts for return on Company equity and debt, which were initially determined by the OEB to be 9.88% and 7.25%, respectively. While the initial PBR regulatory framework provided for those regulatory rates of return, subsequent regulation and Provincial Government initiatives prevented distribution companies from fully achieving the theoretical rate of return on equity.

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

3. ELECTRIC INDUSTRY RESTRUCTURING & REGULATION cont'd

In 2005, the Company filed rate applications to adjust its distribution charges to provide for the full theoretical regulatory rate of return of 9.88% and continued recovery of its regulatory assets.

In 2006 the Corporation filed a rate application to adjust its distribution charges to provide for a regulatory rate of return of 9.0%

In 2007, 2008 and 2009 the Corporation also filed to adjust its distribution rates. Rate rebasing is expected to occur in 2011.

Smart Meters

The Province of Ontario has committed to have "Smart Meter" electricity meters installed in 800,000 homes and small businesses by the end of 2007 and throughout Ontario by the end of 2010. Smart Meters permit consumption to be recorded within specific time intervals and specific tariffs to be levied within such intervals. *Bill 21, Energy Conservation and Responsibility Act*, provides the legislative framework and regulations to support this initiative.

Included in distribution rates effective May 1, 2006 is a charge for smart meters of \$0.26 per metered customer per month. Consistent with the OEB's direction and pending further guidance, all smart meter related expenditures and recoveries are currently being deferred in regulatory accounts.

4. BANK INDEBTEDNESS

Waterloo North Hydro Inc. has a line of credit available to it in the amount of \$15,000,000, which was utilized in 2009. The line of credit used in 2009 is \$3,092,097 [2008 - nil]. The line is unsecured and bears interest at the bank prime rate. At December 31, 2009, bank prime was 2.25% [2008 - 3.50%].

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

5. CAPITAL ASSETS

	2009		2008	
	Cost	Accumulated amortization	Cost	Accumulated amortization
	\$	\$	\$	\$
Land and easements	4,153,144	-	2,189,621	-
Buildings	9,463,020	2,416,177	8,547,585	2,260,726
Transformer and substation equipment	28,200,160	10,439,808	25,913,904	9,823,148
SCADA equipment	2,652,088	1,851,539	2,301,961	1,715,509
Distribution system	159,379,376	69,628,181	146,076,845	63,669,595
Meters	9,627,745	5,359,444	9,444,773	5,043,073
General equipment	16,891,820	13,119,152	15,526,121	12,110,698
Contributed capital	(22,468,948)	(4,896,887)	(20,689,911)	(3,998,129)
	207,898,405	97,917,414	189,310,899	90,628,620
Less accumulated amortization	97,917,414		90,628,620	
Net book value	109,980,991		98,682,279	

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

6. NET REGULATORY ASSETS/LIABILITIES

Net regulatory assets (liabilities) represent costs incurred by the Corporation in excess of amounts billed to the consumer at OEB approved rates less recoveries. These amounts have been accumulated pursuant to the Electricity Act and deferred in anticipation of their future recovery in electricity distribution rates. Management assesses the future uncertainty with respect to the final regulatory disposition of those amounts, and to the extent required, makes accounting provisions to reduce the deferred balances accumulated or to increase the recorded liabilities. Upon rendering of the final regulatory decision adjusting distribution rates, the provisions are adjusted to reflect the final impact of that decision, and such adjustment is reflected in net earnings for the period.

Regulatory assets and liabilities attract interest at OEB prescribed rates. In 2009 the rates ranged from 0.55 % to 2.45%

The continuing restructuring of Ontario's electricity industry and other regulatory developments, including current and possible future consultations between the OEB and interested stakeholders, may affect the distribution rates that the Corporation may charge and the costs that the Corporation may recover, including the balance of its regulatory assets.

Post-market opening variances - represent amounts that have accumulated since Market Opening and comprise:

- a) variances between amounts charged by the Independent Electricity System Operator ("IESO") for the operation of the wholesale electricity market and grid, various wholesale market settlement charges and transmission charges, and the amounts billed to customers by the Company based on the OEB approved wholesale market service rate; and,
- b) variances between the amounts charged by the IESO for energy commodity costs and the amounts billed to customers by the Company based on OEB approved rates.

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

6. NET REGULATORY ASSETS/LIABILITIES cont'd

In the absence of rate regulation, generally accepted accounting principles would require the Company to record the costs and recoveries described above in the operating results of the year in which they are incurred and reported earnings before income taxes would be \$3,562,826 lower in 2009 and \$1,970,227 higher in 2008 than reported.

Net regulatory assets and liabilities consist of the following:

	2009 \$	2008 \$
Post market opening variances	(15,966,646)	(15,372,991)
Conservation and demand management	78,643	(509)
Smart meter expenditures (recoveries)	4,297,500	205,419
Recovery of regulatory assets	(198,358)	(183,606)
Future tax liability	(6,695,828)	-
Net regulatory assets and liabilities	(18,484,689)	(15,351,687)

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

7. RELATED PARTY TRANSACTIONS

The Company conducted transactions with related parties during the year ended December 31, 2009. These transactions are in the normal course of operations and are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

During the year, the company provided street lighting energy and street lighting maintenance services to the City of Waterloo in the amounts of \$523,334 and \$160,144 respectively [2008 - \$479,108 and \$194,978 respectively]. In addition, the Company performs regular billing and collections services on behalf of the City of Waterloo for municipal water and sewer charges. In 2009, the Company collected \$27,934,801 [2008 - \$26,064,565] on behalf of the City of Waterloo relating to these charges. The Company charged administrative fees in the amount of \$690,371 [2008 - \$720,602] to the City of Waterloo for this service. This service is being discontinued for 2010. The City of Waterloo is the majority shareholder of Waterloo North Hydro Holding Corporation.

At year-end, the Company owed the City of Waterloo \$715,516 [2008 - \$2,498,865] in unremitted collections.

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

8. LONG-TERM DEBT

	2009 \$	2008 \$
Senior long-term note payable [a]	17,266,271	24,155,492
Junior long-term note payable [b]	16,246,940	16,246,940
	33,513,211	40,402,432

[a] The senior long-term note payable is due to Waterloo North Hydro Holding Corporation, the Company's parent, bears interest at a rate of 6.0% per annum, has no set principal repayment terms and is due on demand.

The company repaid \$6,889,221 of this debt in 2009.

Waterloo North Hydro Holding Corporation has waived the right to demand repayment of any portion of the note during the next fiscal year.

[b] The junior long-term note payable is due to Waterloo North Hydro Holding Corporation, bears interest at a rate of 1 1/8% per annum above the interest rate on debt which the Ontario Energy Board permits the corporation to pay for rate making purposes in the establishment of distribution rates, has no set principal repayment terms and is due on demand.

Waterloo North Hydro Holding Corporation has waived the right to demand repayment of any portion of the note during the next fiscal year.

9. PENSION PLAN

The Corporation makes contributions to the Ontario Municipal Employees Retirement Fund (OMERS), which is a multi-employer plan, on behalf of its staff. The plan is a defined benefit plan which specifies the amount of the retirement benefit to be received by the employees based on the length of service and the best 60 consecutive months average earnings. Contributions by the Corporation were at a rate of 6.3% for employee earnings below the year's maximum pensionable earnings and 9.5% thereafter.

The amount contributed to OMERS for 2009 was \$570,792 [2008 - \$ 537,820] for current service.

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

10. POST EMPLOYMENT BENEFITS

The Company has a number of unfunded defined benefit plans providing post-employment benefits resulting from retirement to most of its employees. These plans include life insurance, health and dental benefits and accumulated sick leave. An actuarial valuation was done as at December 31, 2009.

Information about these defined benefit plans are as follows:

	2009 \$	2008 \$
Accrued benefit obligation		
Balance, beginning of year	3,304,651	3,628,086
Current service cost	110,215	134,810
Interest cost	226,910	195,285
Actuarial (gain)/loss	288,228	(512,879)
Benefits Paid	(152,040)	(75,932)
Balance, end of year	3,777,964	3,369,370
Unamortized actuarial gain (loss)	-	(64,719)
Liability, end of year	3,777,964	3,304,651

The significant actuarial assumptions adopted in measuring the accrued benefit obligations are as follows:

	%
Discount rate	6.0
Future general salary and wage levels increase	4.0
Dental costs increase	4.0
Medical costs increase	10.0 reducing to 5.0% after 10 years

The approximate effect on the accrued benefit obligation and the estimated net benefit expense if the health care trend rate assumption was increased or decreased by 1% is as follows:

1% increase in health care trend rate	\$239,939
1% decrease in health care	(\$214,918)

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

11. SHARE CAPITAL

		2009 \$	2008 \$
Authorized			
Unlimited	common shares		
Unlimited	Class A special shares		
Issued			
1,000	common shares	24,370,424	24,370,424
251,668	Class A special shares - \$10 Par value		
	Non-voting, non cumulative	2,516,680	2,516,680
		<u>26,887,104</u>	<u>26,887,104</u>

12. INTEREST (EXPENSE) INCOME

The Company has interest [expense] income relating to the following:

	2009 \$	2008 \$
Interest on debt with Waterloo North Hydro Holding Corporation		
Senior long-term note payable	(1,240,955)	(1,453,300)
Junior long-term note payable	(1,360,684)	(1,364,412)
Other debt	(153,609)	(198,974)
Regulatory carrying charges	(434,284)	(532,949)
Interest income	114,116	530,959
Net interest expense	<u>(3,075,416)</u>	<u>(3,018,676)</u>

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

13. CORPORATE INCOME AND CAPITAL TAXES

The provision for PILs differs from the amount that would have been recorded using the combined Canadian Federal and Ontario statutory income tax rate. Reconciliation between the statutory and effective tax rates is provided as follows:

Statement of operations

	2009 \$	2008 \$
Rate reconciliation		
Income from continuing operations before income taxes	6,799,676	7,259,115
Statutory Canadian federal and provincial income tax rate 33.5%		33.0%
Expected taxes on income	2,243,893	2,431,804
Increase in income taxes resulting from:		
Permanent differences	9,377	(655,008)
Other temporary differences not benefited	(206,330)	-
Income tax expense	2,046,940	1,776,796
 Effective tax rate 24.48%	 30.10%	

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

14. PRUDENTIAL SUPPORT OBLIGATION

Waterloo North Hydro Inc. purchases power from the IESO on behalf of its customers and retailers. The IESO is responsible for ensuring that prudential support is posted by all market participants to mitigate the impact of an event of default by a market participant on the rest of the market. In this regard Waterloo North Hydro Inc. posted an irrevocable standby letter of credit in the amount of \$18,534,708 underwritten by the corporations's principal bank. This instrument expires April 15, 2010.

15. FINANCIAL INSTRUMENTS

Effective January 1, 2007, the Corporation adopted three new accounting standards comprising the following sections of the Canadian Institute of Chartered Accountants (CICA) Handbook: 1530 – Comprehensive Income; 3855 - Financial Instruments – Recognition and Measurement; 3861 – Financial Instruments – Disclosure and Presentation. The adoption of these new standards required changes in the accounting for financial instruments. The comparative financial statements have not been restated as required under these standards. The principal changes in the accounting for financial instruments, due to the adoption of the accounting standards are described below:

Financial Assets and liabilities

Under the new standards, all financial instruments are classified into one of the following categories – held-for-trading, available for sale, held-to-maturity, other liabilities or loans and receivables. All financial instruments are carried on the balance sheet at fair value except for loans and receivables, held-to-maturity investments and other liabilities, which are measured at amortized cost.

The Corporation has classified its financial instruments as follows:

Cash and cash equivalents	Held for trading
Accounts receivable	Loans and receivables
Unbilled energy receivable	Loans and receivables
Accounts payable and accrued liabilities	Other liabilities

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

15. FINANCIAL INSTRUMENTS cont'd

Due to related party	Other liabilities
Interest payable – shareholder	Other liabilities
Customer deposits	Other liabilities
Long-term debt	Other liabilities

Derivatives and hedge accounting

The Corporation does not have derivatives and does not engage in derivative trading or speculative activities. Hedge accounting has not been used in the preparation of these financial statements.

The carrying values of cash and cash equivalents, accounts receivable, unbilled energy receivable, accounts payable and accrued liabilities, and amounts due to related party approximate fair values because of the short maturity of these instruments. No fair value is available for the long-term note payable since there are no specified repayment terms.

Financial assets held by the Corporation, such as accounts receivable, expose it to credit risk.

The Corporation earns its revenue from a broad base of customers located in the City of Waterloo and the Townships of Wellesley and Woolwich. No one customer accounts for more than 5 % of distribution revenue.

16. CONTINGENT LIABILITY

Griffith et al. v. Toronto Hydro-Electric Commission et al.

This action has been brought under the Class Proceedings Act, 1992. The plaintiff class seeks \$500 million in restitution for amounts paid to Toronto Hydro and to other Ontario municipal electric utilities (“LDCs”) who received late payment penalties which constitute interest at an effective rate in excess of 60% per year, contrary to section 347 of the Criminal Code.

A settlement has been reached in this matter and an amount of \$200,000, which represents Waterloo North Hydro’s share, has been recorded as an expense in 2009.

Waterloo North Hydro Inc.

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

17. GENERAL LIABILITY INSURANCE

The Corporation is a member of the Municipal Electric Association Reciprocal Insurance Exchange [MEARIE] which is a pooling of general liability insurance risks. Members of MEARIE would be assessed on a pro-rata basis should losses be experienced by MEARIE, for the years in which the Corporation was a member.

To December 31, 2009 the Corporation has not been made aware of any additional assessments. Participation in MEARIE expires December 31, 2010. Notice to withdraw from MEARIE must be given six months prior to the commencement of the next underwriting term.

18. EMERGING ACCOUNTING CHANGES

On February 13 2008, the AcSB announced that publicly accountable enterprises will be required to change over to IFRS effective January 1, 2011. Some of the converged standards will be implemented in Canada during the transition period with the remaining standards adopted at the change over date. The Company has launched an internal initiative to govern the conversion process and is currently in the process of evaluating the potential impact of the conversion to IFRS on its financial statements.

APPENDIX C

WATERLOO NORTH HYDRO 2009 ANNUAL REPORT

2009 ANNUAL REPORT

“A PARTNER IN THE COMMUNITY SINCE 1905”



WATERLOO NORTH HYDRO INC.



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2009 ANNUAL REPORT

MESSAGE TO THE SHAREHOLDERS

We saw the introduction of Bill 150 the Green Energy and Green Economy Act (GEA) early in 2009, which started a roller coaster of change with potential for significant impact on our industry and our customers. The emphasis of the GEA was clearly on promoting renewable energy, and LDCs such as Waterloo North Hydro are critical players.

While many of the world's economies were in a downturn, we locally managed to get through the year with only minor negative impacts to our customers and our revenues. Energy consumption decreased by less than 1% over 2008 levels, due to a mix of downturn in the economy, cooler summer, and the implementation of conservation initiatives by our customers.

At the same time, WNH grew by 1.2% to just over 51,000 customers. Subdivision activity was slow; however, we experienced strong commercial activity in the fall, especially with larger size commercial servicing. This is a leading indicator of economic recovery and future residential growth to follow.

At WNH, we began in earnest the planning for a new Administration and Service Centre building. We acquired a parcel of property to house the new building as well as a future transformer station for supply on the east side of Waterloo. An architect's team worked with WNH Senior Management developing the plans for a 105,000 square foot facility designed to achieve LEED Silver standard (Leadership in Energy and Environmental Design). By year-end, detailed plans were well under way with the goal of tendering the project in the spring of 2010.

Waterloo North Hydro continued with strong financial performance in 2009 with a net income higher than expected and a 7.7% Return on Equity. We continued to invest in new infrastructure and replacing old depreciated plant to meet the growth needs of customers in the three municipalities in our service area.

We must thank our employees for their dedication to the success of our customers and the success of Waterloo North Hydro. We also extend our appreciation to the Board of Directors for their support and guidance to the Senior Management Team.

Mr. Eugene Moser
Chair

Mr. Rene W. Gatien
President & CEO

CORPORATE INFORMATION

Waterloo North Hydro Inc. is a wholly owned subsidiary of Water North Hydro Holding Corporation. Its Board of Directors is appointed by the Board of Waterloo North Hydro Holding Corporation and is responsible for the overall direction of the company. Day-to-day leadership and management of the corporation are delegated to the President and Chief Executive Officer and the senior management team.

Members of the Board

Eugene J Moser	Chair
D. Charles Martin	Vice-Chair
Jack Boehmer	Director
Ginny Dybenko	Director
Brenda Halloran	Director
Ross Kelterborn	Director
Ian McLean	Director
Henrik Noesgaard	Director
William L. Strauss	Director

Shareholders of Waterloo North Hydro Holding Corporation

City of Waterloo
Township of Woolwich
Township of Wellesley

Senior Management

Rene W. Gatien, P. Eng., MBA	President & CEO
Marianne Blasman, B. Math	VP, Information Technology
Herb Haller, P. Eng.	VP, Engineering & Stations
Albert Singh, CGA, MBA	VP, Finance & CFO
David Wilkinson, P. Eng., MBA	VP, Operations

Banker

Canadian Imperial Bank of Commerce
1 King Street East, Kitchener ON

Auditor

KPMG
115 King Street South, Waterloo

Counsel

J. David Linton
45 Erb Street East, Waterloo

About Us

Waterloo North Hydro Inc. (WNH) is the local distribution company for the City of Waterloo, the Township of Wellesley and the Township of Woolwich. Waterloo North Hydro was formed under the Business Corporations Act. (Ontario) on May 1, 2000 to operate the local electricity distribution business



for the City of Waterloo, the Township of Wellesley and the Township of Woolwich as required under the *Electricity Act, 1998*.

Waterloo North Hydro Inc. is a wholly owned subsidiary of Waterloo North Hydro Holding Corporation. Waterloo North Hydro Holding Corporation is owned by the City of Waterloo and the Townships of Wellesley and Woolwich.

By the end of December, 2009, Waterloo North Hydro distributed electricity to 45,000 residential customers and 6,000 commercial and industrial customers. The core business of WNH is electricity distribution. WNH has a workforce consisting of 112 full-time employees.

WNH owns and operates the electricity distribution system within the City of Waterloo, the Township of Wellesley and the Township of Woolwich. The distribution network consists of approximately 20,800 poles, 7,500 transformers and 1,540 km of overhead and underground feeder lines in an area covering 672 square kilometers. The network also includes three transformer stations and 20 distribution substations. Waterloo North Hydro transforms electrical power purchased from the Independent Electricity System Operator at three WNH transformer stations to primary distribution voltages and distributes energy to customers through the distribution network.

Our Mission

To create value for our customers and shareholders by providing safe and reliable electrical distribution services at competitive rates.

Our Vision

Waterloo North Hydro will be recognized as a key partner in contributing to community prosperity and success.

Our Values

Respect

Commitment to Excellence

Service

Teamwork and Collaboration

Safety & Environmental Stewardship

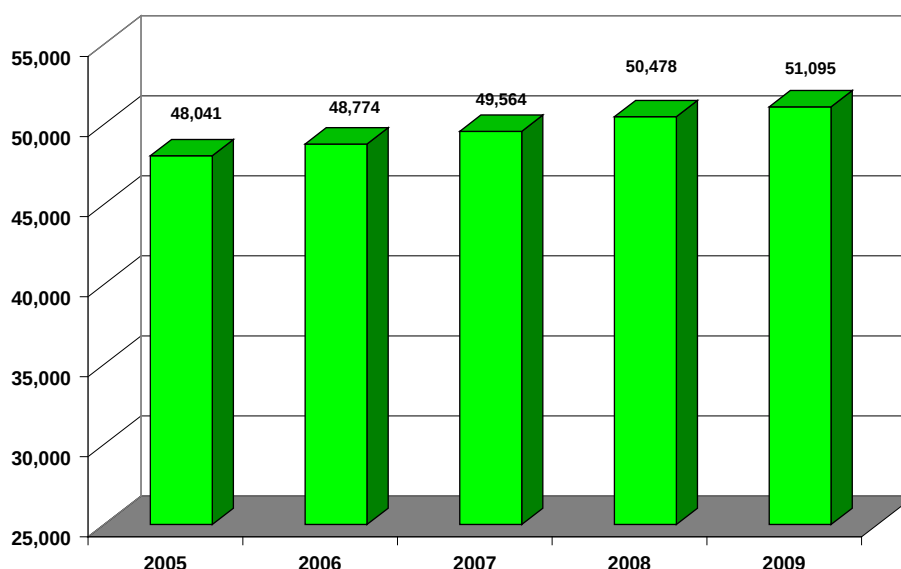
Responsible and Accountable

CORPORATE HIGHLIGHTS

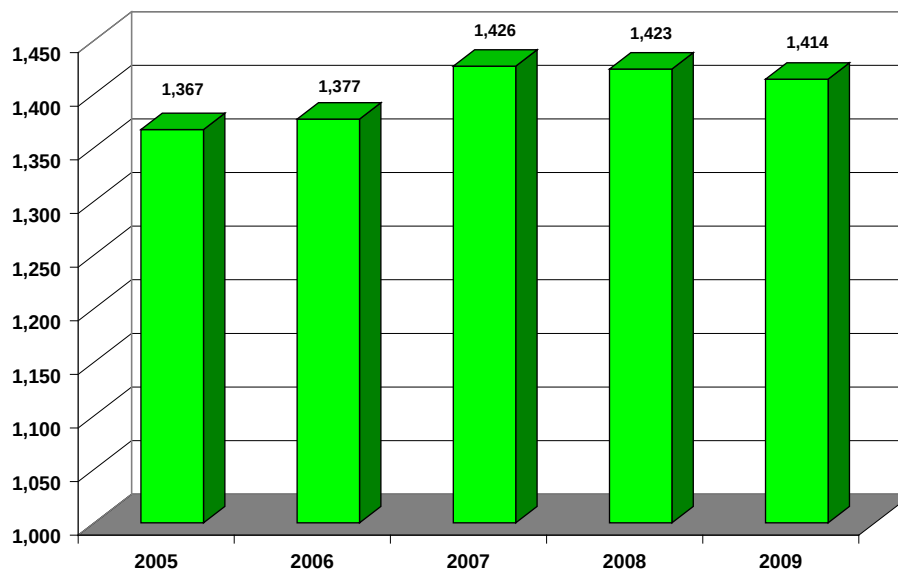
Achieving Sustainable Growth

WNH delivered over 1.4 gigawatt hours of energy to over 51,000 customers in 2009. Total revenues from electricity operations amounted to \$106.6 million or \$12.8 million lower than 2008 representing a decrease of 10.7%. This decrease is primarily due to a lower cost of electricity. The average price in 2009 was 3.18 cents per Kwh compared to 5.19 cents per Kwh for 2008. Energy consumption also decreased slightly by 0.6% from 1,423 GWh in 2008 to 1,414 GWh in 2009. This was due mainly to a cooler than normal summer as the peak load only increased marginally from 255.6 megawatts in 2008 to 259.2 megawatts in 2009. The following charts show the five year trend of customer growth and electricity sales.

Customer Growth



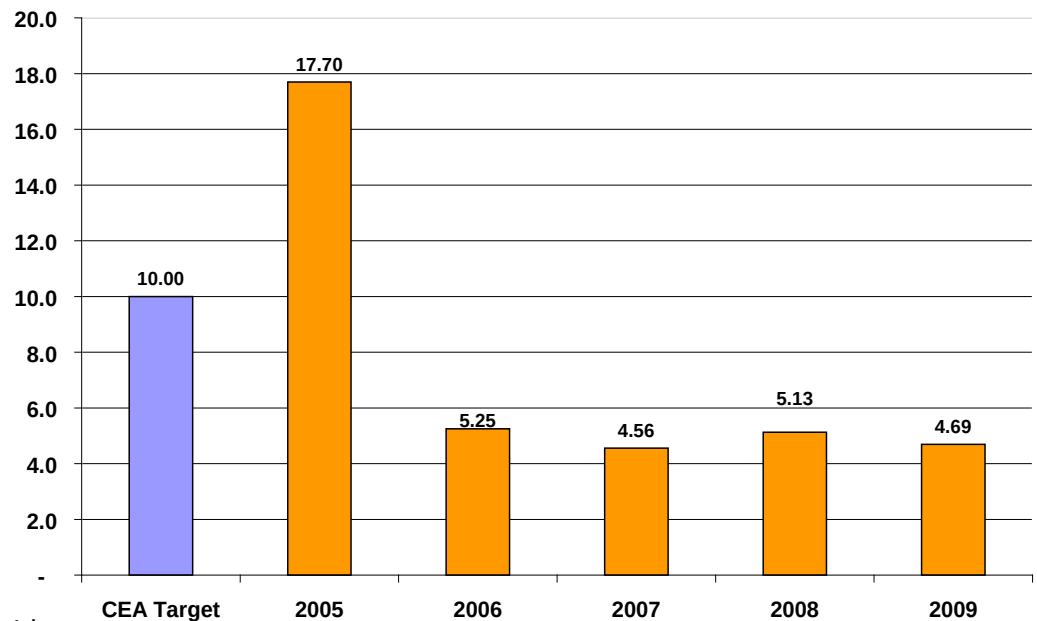
Power Sales - GWh



Providing a Reliable Supply of Power

WNH is committed to providing an uninterrupted supply of power. The total average customer outage for 2009 was 4.69 minutes compared to 5.13 minutes in 2008. The total customer outage includes both interruptions associated with the supply of electricity from the provincial grid

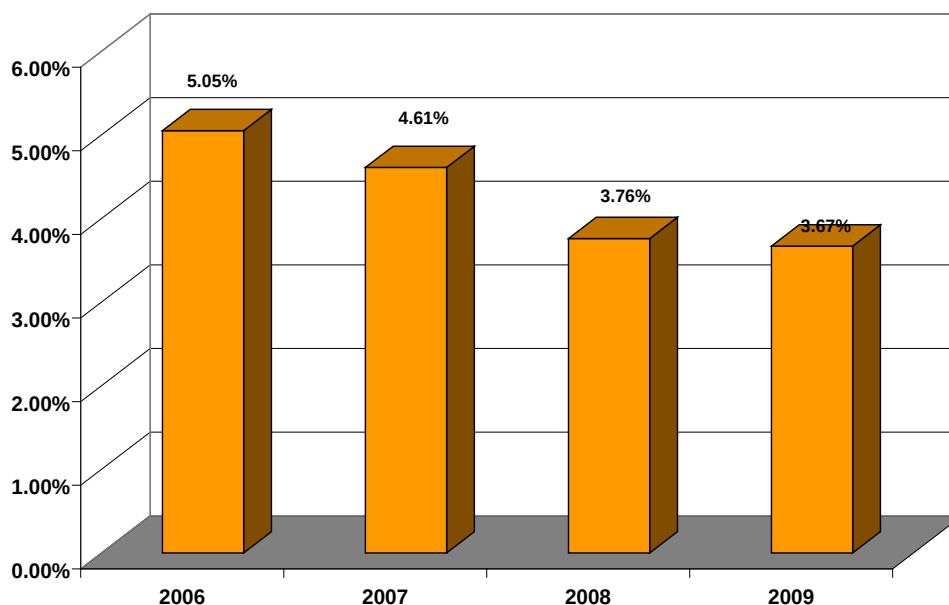
Avg. Monthly Customer Minutes of Interruptions



as well as interruptions originating from the WNH distribution system. Ten (10) minutes per customer per month has been suggested as a reasonable target for reliability by the Canadian Electricity Association. WNH Customers now experience only an average of 4.69 minutes of outage per year compared to a high of 17.7 minutes in 2005.

Reducing Line Losses

Line Losses



WNH is concerned about the level of line losses and strives to design and build its distribution network to minimize losses.

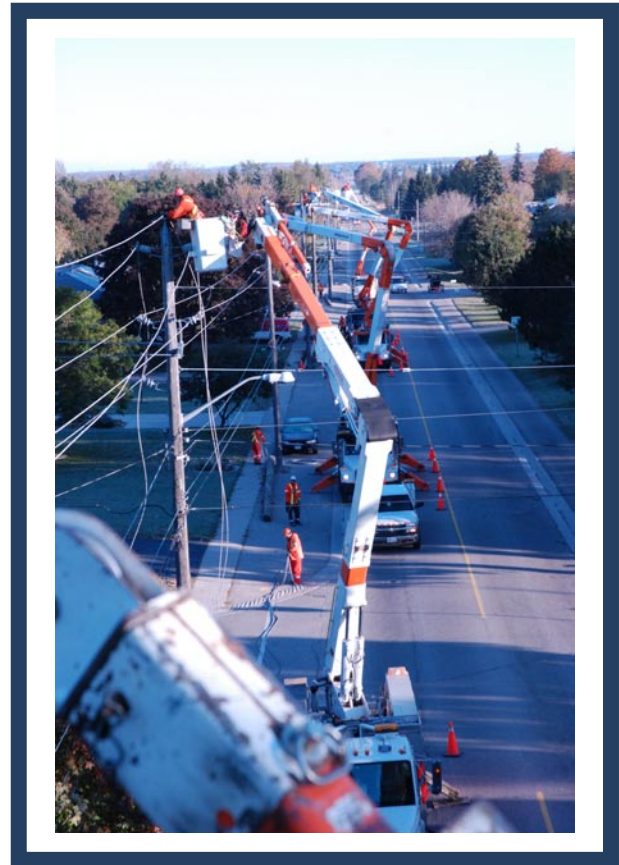
The level of line losses is now 3.67% compared to a high of 5.05% in 2006.

Investing for Future Growth

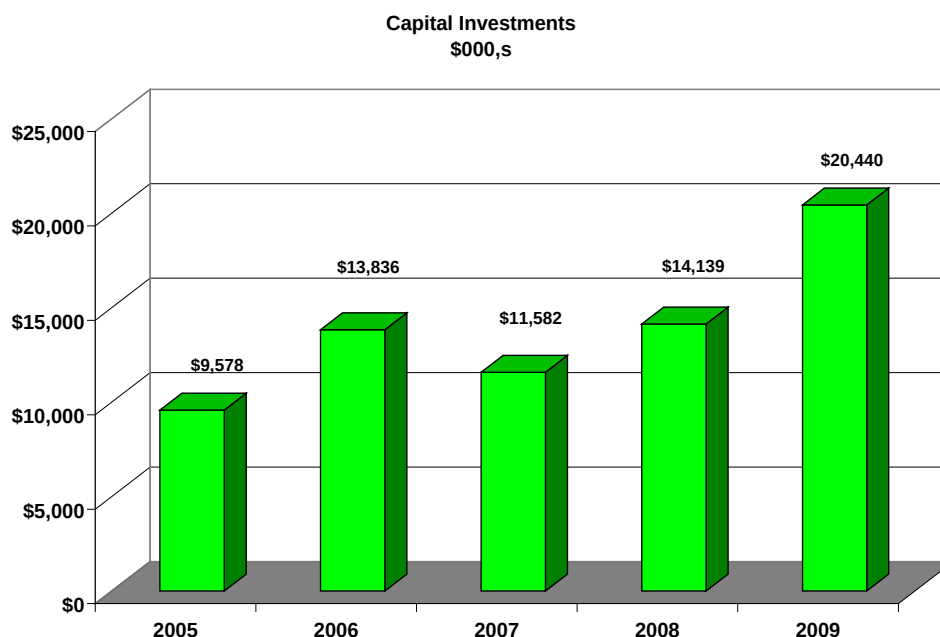
WNH invested \$20.4 million in 2009 in new and upgraded infrastructure to ensure that an adequate and reliable supply of power is available to meet customer needs and to enable economic growth in the region.

In 2009 WNH invested in the following plant:

- Replacement of 18.4 km of depreciated overhead lines including 672 poles
- Replacement and voltage conversion of 13.7 km of depreciated 4 kV underground lines
- Retirement of two 4kV municipal stations
- Replacement of bulk protection systems and SCADA at Scheifele Transformer Station
- Start of engineering and equipment procurement for Eby Rush Station capacity upgrade
- Service installation for 336 new lots in 9 residential projects
- Installation of 4.7 km of new underground primary distribution
- Installation of 20,000 new Smart Meters
- Reverified and changed 3885 meters to comply with Measurement Canada regulations. Approximately 3,300 of these meters were replaced with Smart Meters.



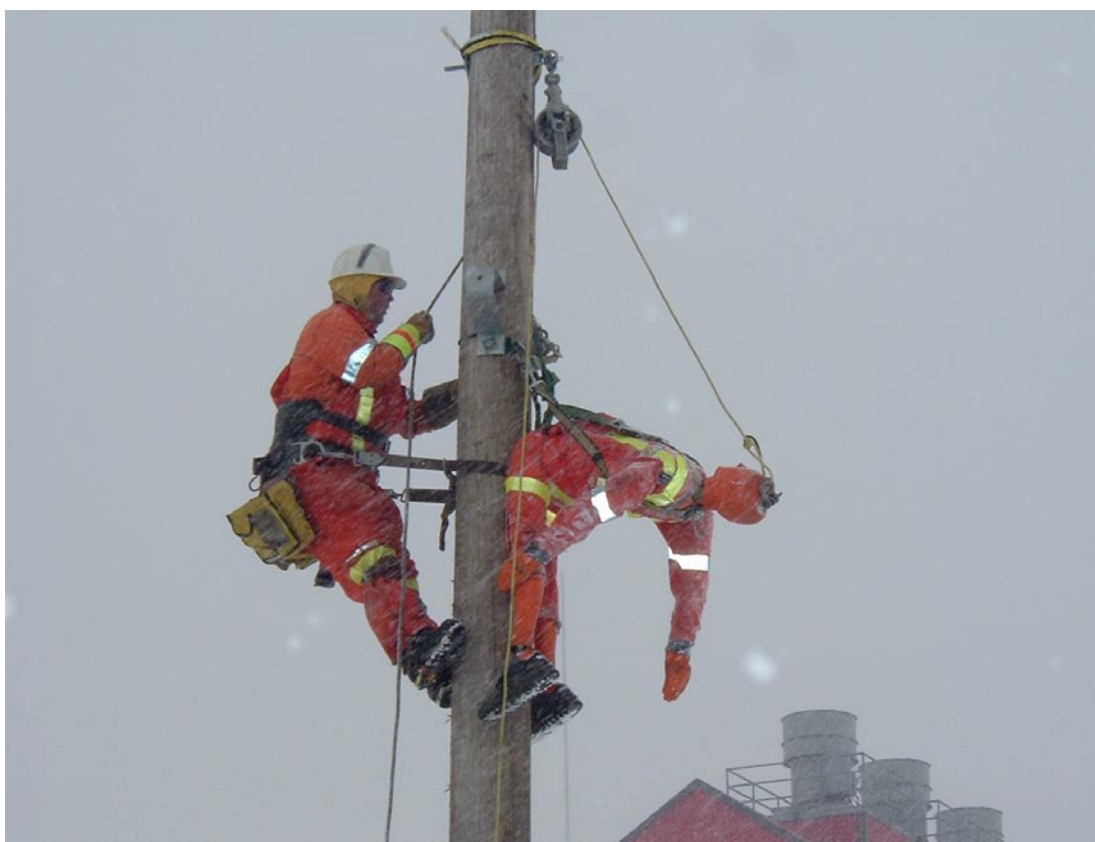
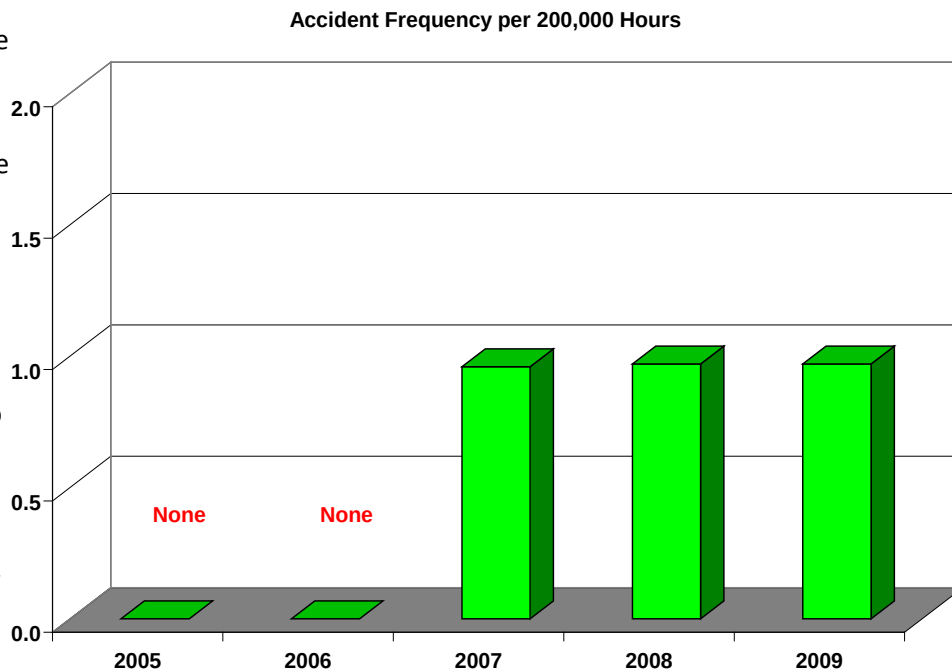
Waterloo North Hydro's commitment to providing our customers with a reliable source of power has resulted in capital investments in the past five years of \$69.6 million in new plant and equipment.



Protecting our Employees' Well Being

Safety takes precedence above all else and continues to be a large part of the way we do business. Every employee who comes to work has the right to return home safely at the end of the day. We continually strive to improve our safety record. It is an issue we care passionately about and deploy every possible measure to ensure that our staff

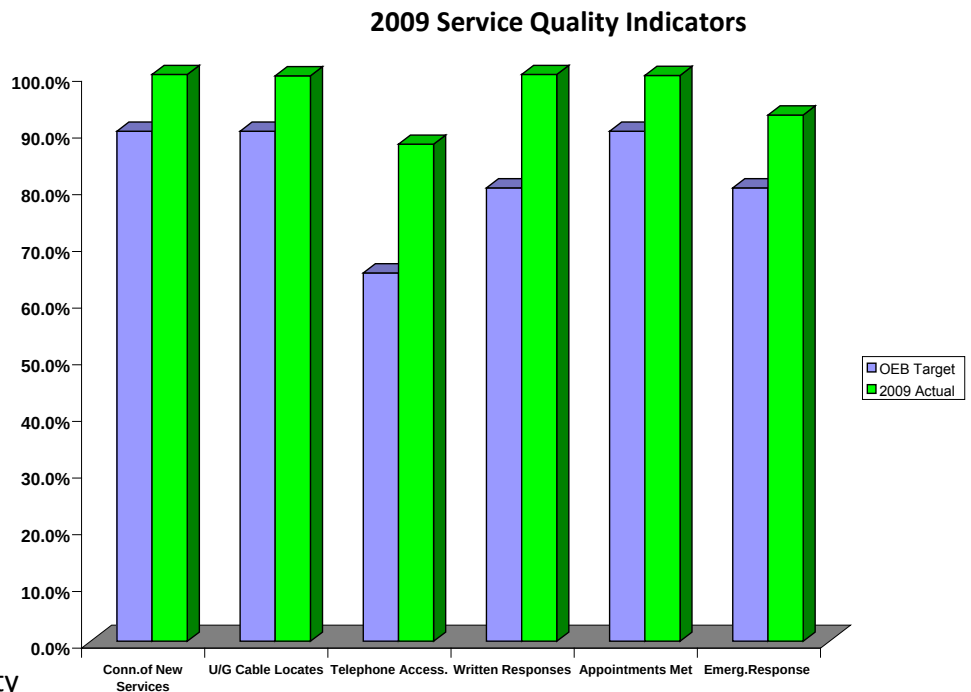
and the public are protected at all times. In 2009 only one employee experienced a lost time injury and missed only one day of work.



“Safety Training in Action”

Providing Outstanding Customer Service

Waterloo North Hydro continued to deliver outstanding customer service in 2009. The Ontario Energy Board (OEB) has established performance standards that ensure that service quality is maintained or enhanced. These standards cover areas such as customer service, emergency response, system reliability and outages. Each utility is required to record and track their performance against these standards and report them to the OEB.

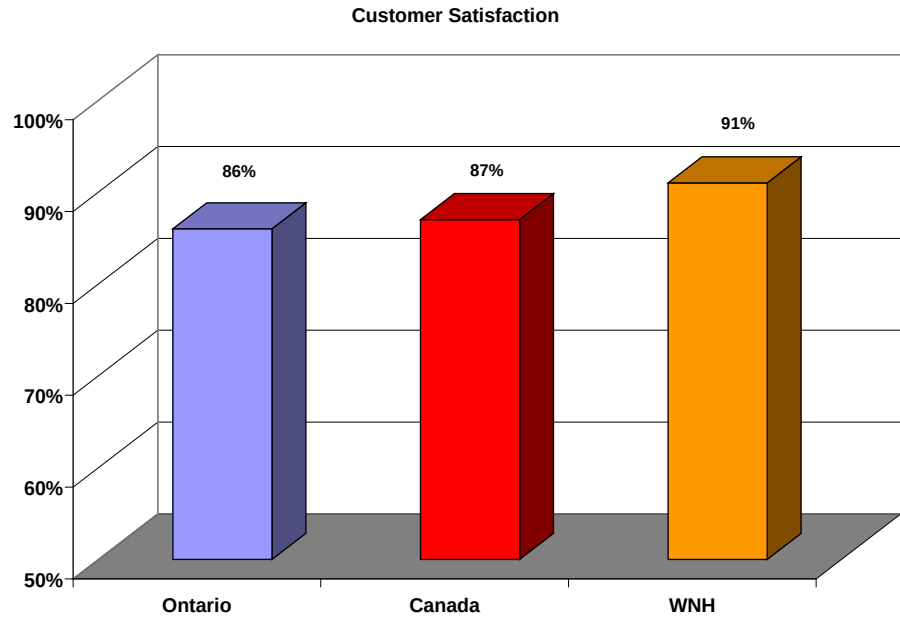


In 2009 WNH exceeded all the performance indicators established by the Ontario Energy Board. These results demonstrate employee commitment to customer service across the organization.



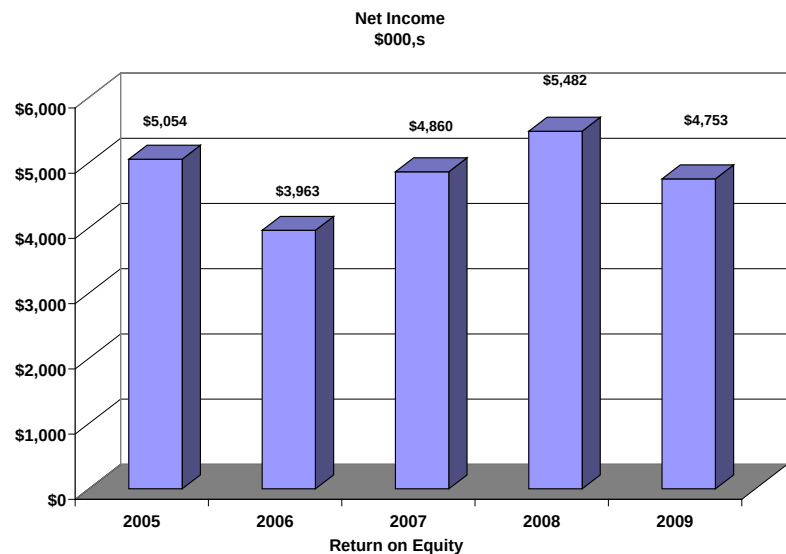
In 2008 WNH

participated in an industry wide customer satisfaction survey that was conducted by an independent survey company. Over 1,000 customers were contacted and their responses were benchmarked against other utilities in Ontario and the rest of Canada. WNH achieved a Customer satisfaction rating of 91.0%.

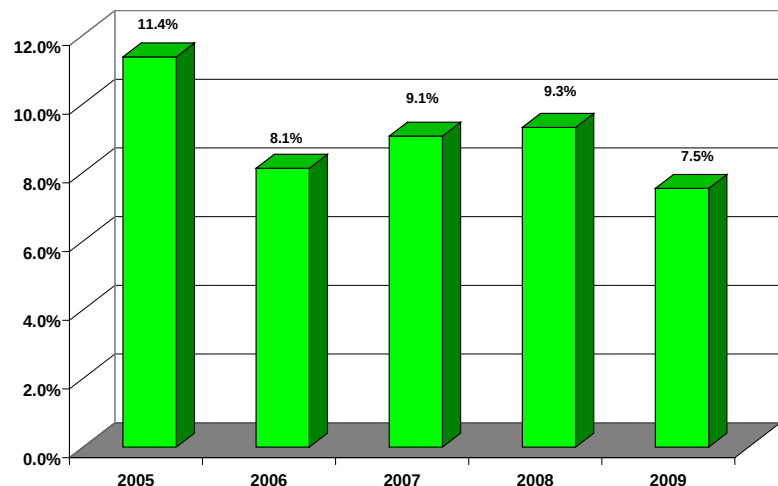


Achieving Solid Financial Performance

Despite the downturn in the economy, Waterloo North Hydro continues to achieve strong financial performance. WNH's net income for the year ended December 31, 2009 amounted to \$4.8 million.

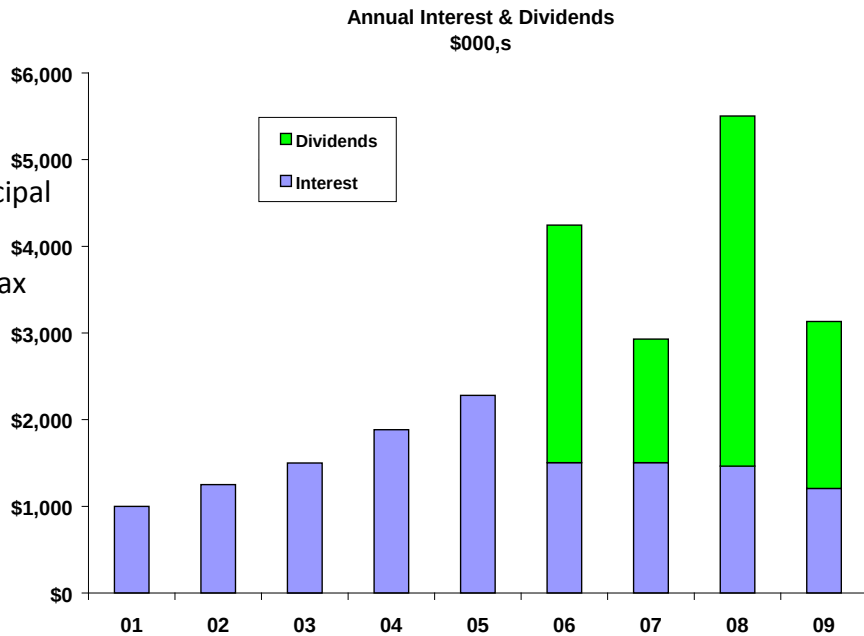


The Return on Equity (ROE) for 2009 is 7.5%. The OEB's maximum allowable return on equity is 9.0%.



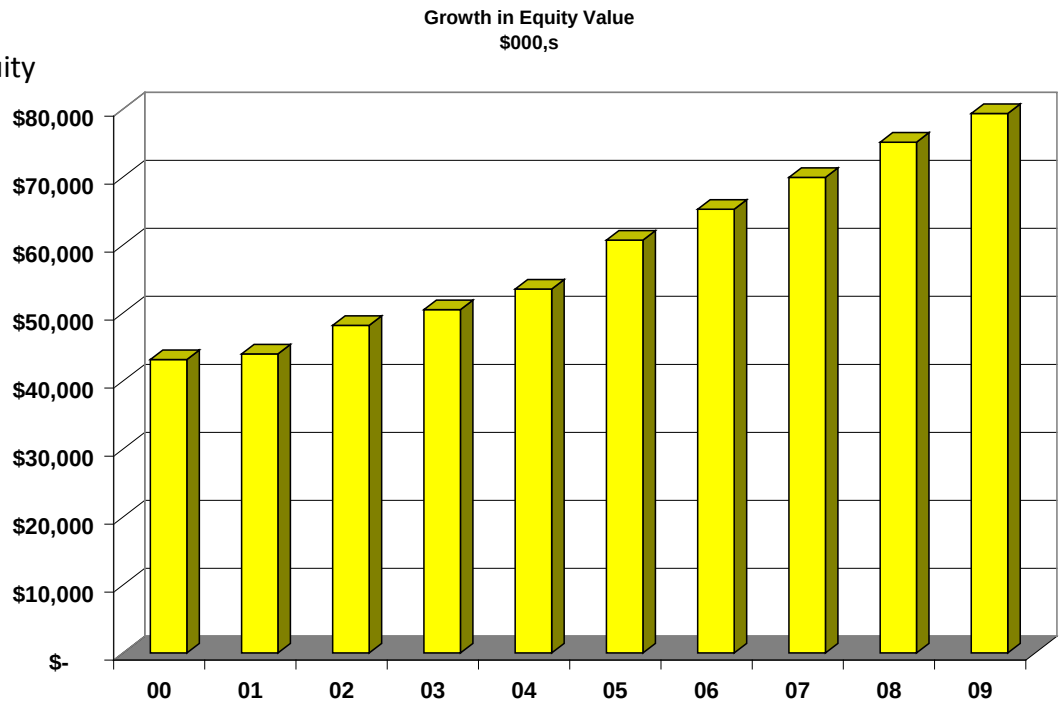
Benefits of Municipal Ownership

In 2009, Waterloo North Hydro provided a significant contribution to its municipal shareholders in the amount of \$3.1 million tax free interest and dividends. The following chart shows that the utility transferred \$23.7 million in cash to the shareholders since incorporation.



Enhancing Shareholder and Community Value

In 2000, initial shareholder equity was \$43.1 million. Since incorporation, in addition to interest and dividend payments of \$23.7 million, shareholder equity has grown by an additional \$36.2 million to \$79.3 million.



Conservation & Customer Education



2009 was the third and most successful year to date for Waterloo North Hydro Inc.'s (WNH) delivery of the Ontario Power Authority's Conservation and Demand Management (CDM) programs. As in past years, we partnered with Cambridge and North Dumfries Hydro, Guelph Hydro, and Kitchener-Wilmot Hydro to create a working consortium in the region. We delivered four programs to our customers and achieved improved results over previous years.

The Great Refrigerator Roundup was in its third year of operation. We saw the collection of 581 refrigerators for a total energy savings of 239,000 kWh. The Grand River Transit advertising joint venture between WNH and Kitchener-Wilmot Hydro was renewed into early 2011.

The Electricity Retrofit Incentive Program (ERIP) was offered again in 2009. The nature of the program lends itself to multi-year results due to the length of time to implement projects. By the end of 2009 WNH had received 32 completed ERIP projects resulting in a 200 kW demand reduction and over \$80,000 in incentive funding to our customers.



In September we held our first large-scale key customer breakfast. Together with our partners we had over 100 customers in attendance. The feedback and response to this was overwhelmingly positive.

WNH delivered the **peaksaver** program again in 2009. Installations last year totalled 428 thermostats. This is more than double our results for 2008. Increased marketing, consumer awareness and community outreach were the key factors at play with the success.



The Power Savings Blitz started in early Q2 of 2009 and ran full-tilt with excellent results right up until the end of December. We achieved 161% of our target with 599 retrofits completed. This totalled over \$500,000 of free retrofit measures installed at no cost to our small commercial businesses.

In addition to these events was Ontario's first Energy Conservation Week. During this time, we promoted the "101 Energy Saving Ideas" from the OPA and handed out 1,000 clotheslines to customers in the community. We held events at the Canadian Tire store on Weber Street and Conestoga Mall.

As part of our community outreach, we contributed and sponsored the following initiatives;

- Donated \$10,000 to the Waterloo Region Children's Museum Energy Playground at a presentation with the former Minister of Energy and Infrastructure, George Smitherman present
- Contributed \$10,000 to Sustainable Waterloo as a founding partner
- Donated \$30,000 to the Residential Energy Efficiency Project and \$9,000 to the Heat Bank
- Co-sponsored the reThink Waterloo event in October where Dr. David Suzuki was the keynote speaker
- Funded an energy meter sign out program with the Waterloo Catholic District School Board where students can learn about energy conservation by signing out an energy meter from their school library.



Corporate Citizenship

Community Involvement

During 2009, our staff was active in a variety of community events and programs including the Elementary School Safety Program, Skills Canada, City of Waterloo Open House and Fire Prevention Week at the Region of Waterloo.

There was a unique opportunity to support the grand opening of St David's High School's new sport field by providing a bucket truck to take aerial photos of the festivities.



Waterloo North Hydro supported and promoted Earth Hour in March, Conservation Week in May, and Voluntary Blackout Day in August. We also supported the Waterloo Regional Children's Museum in energy awareness programs for school children, and the Region of Waterloo Children's Safety Village.

Business Community Involvement

Waterloo North Hydro continues to be members of the Greater Kitchener Waterloo Chamber of Commerce, and the Waterloo Regional Electrical Association. We also participated in and supported the Chamber's annual Energy & Environment Forum. This involvement helps Waterloo North Hydro stay up to date with many of the issues concerning the business community and electrical contractors in our service area.

Public Safety

During 2009, Waterloo North Hydro visited nine elementary schools in our service area. Using our Hi-Line Hazard Display Unit, we presented safety demonstrations to 575 students. In co-operation with our neighbouring utilities we deliver ongoing safety messages on our local radio stations. Safety messages also appear in print media throughout the year.

CHALLENGES FOR 2010 AND BEYOND

We must ensure an adequate and reliable supply of electricity to meet our customers' needs:

- We will upgrade the capacity of the Eby Rush Transformer Station which is expected to be complete in 2011. This will provide an additional 30 Megawatts of power.
- We will continue to build new overhead and underground lines to serve new customers.
- We will continue our program to replace and rebuild overhead and underground lines and decommission low voltage substations and distribution lines.
- We will implement Smart Grid technologies through modernizing our SCADA system and expanding the use of Distribution Automation.

We must continue to make safety a top priority in our utility:

- We will implement WNH Safety Management System starting in 2010.
- We will continue with training and the development of a safety minded culture – safety is one of the ways we do business.

We must recognize that we have to do business in a regulatory environment:

- We will continue to work with the OEB and other regulatory bodies to bring about change that will have a positive impact on our industry.
- We will complete our Smart Metering Implementation by installing over 20,000 Smart meters in 2010.

- We will convert our financial system to be compliant with IFRS in 2011
- We will undertake a major Rate and Cost Allocation Filing in 2010

We must deliver on Shareholder expectations:

- We will meet shareholder expectations with respect to Return on Equity and Dividend payments.
- We will grow the utility and enhance shareholder value
- We will explore opportunities under the Green Energy Act.

We must deliver on customer expectations:

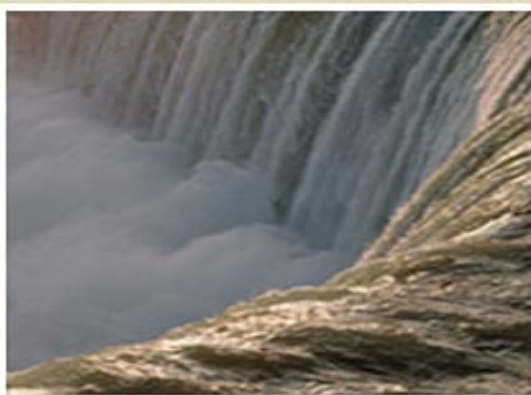
- We will ensure that our rates are competitive with neighbouring utilities.
- We will leverage technology to make it easier for our customers to do business with us.

We must continue to operate efficiently:

- We will continue to find ways to lower our controllable cost per customer.
- We will continue to use technology to improve our business processes.
- We will begin construction of the New Service Centre in 2010.

We must operate our business with minimal impact on the environment:

- We will implement a program to measure and reduce our waste streams.
- We will identify and reduce the risk of environmental impact of our operations through our design and procurement processes.



FINANCIAL STATEMENTS

WATERLOO NORTH HYDRO INC.

DECEMBER 31, 2009



Statement of Management Responsibility

Management is responsible for the integrity of the financial data reported by the Corporation. Fulfilling this responsibility requires the preparation and presentation of financial statements and other data using management's best judgment, estimates and appropriately selected accounting principles considered generally accepted in the rate-regulated electric utility industry, applied on a basis consistent with the preceding year.

Management maintains appropriate systems of internal control, including corporate-wide policies and procedures, which provide reasonable assurance that the Corporation's assets are safeguarded and that financial records are relevant and reliable.

The Board of Directors, through the Audit Committee, ensures that management fulfills its responsibility for financial reporting and internal control. The Audit Committee consists of four Directors of the Board who meet as required with the corporation's external auditors. The Audit Committee has reviewed the financial statements and submitted its report to the Board of Directors.

On behalf of Management,

Rene W. Gatien, P. Eng., MBA
President & CEO

Albert P. Singh, CGA, MBA
Vice-President Finance & CFO



KPMG LLP
Chartered Accountants
115 King Street South
2nd Floor
Waterloo ON N2J 5A3

Telephone (519) 747-8800
Fax (519) 747-8830
Internet www.kpmg.ca

AUDITORS' REPORT TO THE SHAREHOLDER

We have audited the balance sheet of Waterloo North Hydro Inc. as at December 31, 2009 and the statements of retained earnings, operations and cash flows for the year then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 2009 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

KPMG LLP

Chartered Accountants, Licensed Public Accountants

Waterloo, Canada
February 26, 2010

BALANCE SHEET

As at December 31

	2009 \$	2008 \$
ASSETS		
Current		
Cash and cash equivalents	226,635	15,382,396
Accounts receivable	11,944,598	10,070,162
Unbilled energy receivable	12,520,720	13,504,247
Inventories	2,410,081	2,182,150
Prepaid expenses	369,356	335,334
Total current assets	27,471,390	41,474,289
Capital assets - net of accumulated amortization [note 5]	109,980,991	98,682,279
Future Tax	6,695,828	-
Other	50,779	50,779
Total assets	144,198,988	140,207,347
LIABILITIES AND SHAREHOLDER'S EQUITY		
Current		
Accounts payable and accrued liabilities	17,179,533	14,839,697
Due to related party [note 7]	674,879	2,423,183
Interest payable – shareholder	1,360,684	1,364,412
Customer deposits	983,443	1,358,579
Bank indebtedness [note 4]	3,092,097	-
Total current liabilities	23,290,636	19,985,871
Long-term		
Long-term debt [note 8]	33,513,211	40,402,432
Customer deposits	2,054,738	2,285,692
Net regulatory liabilities [note 6]	18,484,689	15,351,687
Post employment benefits [note 10]	3,777,964	3,304,651
Total long-term liabilities	57,830,602	61,344,462
Shareholder's equity		
Share capital [note 11]	26,887,104	26,887,104
Retained earnings	36,190,646	31,989,910
Total shareholder's equity	63,077,750	58,877,014
Total liabilities and shareholder's equity	144,198,988	140,207,347

See accompanying notes

On behalf of the Board:

STATEMENT OF RETAINED EARNINGS

Year ended December 31

	2009 \$	2008 \$
Retained earnings, beginning of year	31,989,910	26,777,591
Dividends paid	(552,000)	(270,000)
Net income	4,752,736	5,482,319
Retained earnings, end of year	36,190,646	31,989,910

See accompanying notes

STATEMENT OF OPERATIONS

Year ended December 31

	2009 \$	2008 \$
REVENUES		
Sales of electricity	79,864,565	92,877,433
Distribution services revenue	24,999,515	24,848,247
	104,864,080	117,725,680
Power purchased	79,864,565	92,877,433
Operating Revenue	24,999,515	24,848,247
Other revenues		
Rental revenue	246,620	245,771
Billing services	690,851	721,052
Late payment charges	213,527	214,685
Gain (loss) on disposal of capital assets	(35,696)	37,654
Miscellaneous	582,385	508,507
	1,697,687	1,727,669
	26,697,202	26,575,916
EXPENSES		
Distribution	4,849,941	5,285,628
Billing and collecting	2,348,006	2,340,954
General administration	2,234,435	1,857,875
Amortization	6,832,754	6,353,972
Community relations	149,716	119,696
Late payment charge settlement [note 16]	200,000	-
Provincial capital taxes	207,258	340,000
	16,822,110	16,298,125
Income before under noted items	9,875,092	10,277,791
Interest – net [note 12]	(3,075,416)	(3,018,676)
Income before provision for payments in lieu of corporate income taxes	6,799,676	7,259,115
Provision for payments in lieu of corporate income taxes [note 13]	(2,046,940)	(1,776,796)
Net income	4,752,736	5,482,319

See accompanying notes

STATEMENT OF CASH FLOWS

Year ended December 31

	2009 \$	2008 \$
OPERATING ACTIVITIES		
Net income	4,752,736	5,482,319
Add (deduct) charges to operations not requiring a current cash payment:		
Amortization	7,288,795	6,697,714
(Gain) on disposal of capital assets	35,696	(37,654)
Increase (decrease) in regulatory liabilities	(3,562,826)	1,970,227
Increase in post employment benefits liability	473,313	(73,527)
Net change in non-cash operating working capital	(565,057)	(1,313,290)
Cash provided by operating activities	8,422,657	12,725,789
INVESTING ACTIVITIES		
Additions to capital assets	(20,440,168)	(14,139,210)
Proceeds on disposal of capital assets	37,928	54,696
Cash applied to investing activities	(20,402,240)	(14,084,514)
FINANCING ACTIVITIES		
Increase (decrease) in customer deposits	(606,090)	679,243
Increase (decrease) in bank debt [note 4]	3,092,097	-
Repayment of long term debt [note 8]	(6,889,221)	-
Increase in contributed capital	1,779,036	1,993,134
Dividends paid	(552,000)	(270,000)
Cash provided by (applied to) financing activities	(3,176,178)	2,402,377
Net cash applied during year	(15,155,761)	1,043,652
Cash and cash equivalents, beginning of year	15,382,396	14,338,744
Cash and cash equivalents, end of year	226,635	15,382,396
Supplementary information:		
Interest paid	2,755,247	3,016,686
Interest received	81,704	498,680
Payments in lieu of corporate income taxes	2,144,200	2,308,585

See accompanying notes

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

1. INCORPORATION

Waterloo North Hydro Inc. [the Company] is a regulated electricity distribution company incorporated under the Business Corporations Act [Ontario] on May 1, 2000. The incorporation was required in accordance with the provincial government's Electricity Competition Act [Bill 35]. The Company is wholly-owned by Waterloo North Hydro Holding Corporation whose shareholders are the City of Waterloo and the Townships of Wellesley and Woolwich.

Under a municipal by-law, the former Hydro-Electric Commission of Waterloo, Wellesley and Woolwich and the City of Waterloo and the Townships of Wellesley and Woolwich transferred the net book value of the assets, liabilities, and the employees, associated with the distribution of electricity and associated business activities, to the new corporations.

Effective October 1, 2001, all electric utility companies in Ontario are subject to a number of taxes, which will be used to repay the stranded debt incurred by the former Ontario Hydro prior to the introduction of Bill 35. Details of these taxes are included in note 13.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

Change in Accounting Policies

Effective January 1, 2009, the Company adopted the amended sections of CICA Handbook Section 1100, Generally Accepted Accounting Principles, CICA Handbook Section 3465, Income taxes and Accounting Guideline 19 – "Disclosures by Entities Subject to Rate Regulation".

The amendment to CICA Handbook Section 1100 removed the temporary exemption pertaining to the application of that section to the recognition and measurement of assets and liabilities arising from rate regulation. In response to the removal of the exemption, the Company established accounting policies for the recognition and measurement of assets and liabilities arising from rate regulation. In accordance with the Canadian GAAP hierarchy guidance framework outlined in CICA Handbook Section 1100, the Company has determined that its assets and liabilities arising from rate regulation qualify for recognition under Canadian GAAP and this recognition is consistent with U.S. Statement of Financial Accounting Standards No. 71, Accounting for the Effects of Certain Types of Regulation ("FAS71"). The Company concluded that its policies for assets and liabilities arising from rate regulation were consistent with the primary sources of Canadian GAAP and were developed through the exercise of professional judgment. As a result, there was no change in the Company's opening retained earnings at January 1, 2009 or the Company's results from operations for the year ended December 31, 2009.

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

The amendment to CICA Handbook Section 3465 states that where future income taxes may be expected to be included in approved rates charged to customers in the future and to be recovered or returned to future customers, the recognition of a regulatory asset or liability for the increase or reduction in future revenue is required. Furthermore, the regulatory asset or liability established by this requirement is a temporary difference for which an additional future income tax asset or liability is recognized. This change has been applied on a retroactive basis without restatement of prior periods. There was no impact on retained earnings as at January 1, 2009 or results from operations for the year ended December 31, 2009 as a result of the change.

The financial statements have been prepared in accordance with Canadian generally accepted accounting principles [GAAP], as well as guidance prescribed by the Ontario Energy Board [the OEB] in the handbook "Accounting Procedures Handbook for Electric Distribution Utilities" and reflect the significant accounting policies summarized below.

Cash and Cash Equivalents

Cash equivalents are readily convertible investments with maturities of three months or less from their date of acquisition. Investments are carried at cost, which approximates market value.

Inventories

Inventories consist of repair parts, supplies and materials held for future capital expansion and are valued at lower of weighted average cost and net realizable value.

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES cont'd

Capital Assets and Amortization

Capital assets are stated at cost, including material and labour and are removed from the accounts at the end of their estimated average service lives, except in those instances where specific identification allows their removal at retirement or disposition. Gains or losses at retirement or disposition of such assets are credited or charged to other revenue.

Amortization is provided on a straight-line basis for capital assets available for use over their estimated service lives, at the following annual rates:

Buildings	2%
Transformer and substation equipment	2.5 – 3.3%
SCADA equipment	6.7%
Distribution system	4%
Meters	4%
General equipment	5 - 30%

Amortization on general equipment directly used in the installation of other capital assets, is capitalized to the new assets based on a pro-ratio of time during the year they are used for such purposes.

Full amortization is recorded in the year of acquisition and none in the year of disposal. Construction in process is not amortized until the assets are put in use.

Pension Plan

Waterloo North Hydro Inc. provides a pension plan for its employees through the Ontario Municipal Employees Retirement System [OMERS]. OMERS are a multi-employer pension plan which operates as the Ontario Municipal Employees Retirement Fund [the "Fund"] and provides pensions for employees of Ontario municipalities, local boards, public utilities and school boards.

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES cont'd

The Fund is a contributory defined benefit pension plan, which is financed by equal contributions from participating employers and employees and by the investment earnings of the Fund [note 9]. The Company recognizes the expense related to this plan as contributions are made.

Post-Employment Benefits

Post-employment benefits provided by WNHI include health, dental and life insurance benefits and accumulated sick leave credits. These plans provide benefits to certain employees when they are no longer providing active service. Post-employment benefit expense is recognized in the period in which the employees render the services.

Post-employment benefits are recorded on an accrual basis. The accrued benefit obligations and current service cost are calculated using the projected benefits method pro-rated on service and based on assumptions that reflect management's best estimate. The current service cost for a period is equal to the actuarial present value of benefits attributed to employees' services rendered in the period. Past service costs from plan amendments are amortized on a straight-line basis over the average remaining service period of employees that are active at the date of amendment. Actuarial gains [losses] are amortized into expense over the average remaining service period of active employees to full eligibility.

Contributed Capital

Effective May 1, 2000, the Company prospectively adopted the change in accounting policy for contributions received in aid of construction [contributed capital], as prescribed by the OEB "Accounting Procedures Handbook for Electric Distribution Utilities". Capital contributions received from outside sources are used to finance additions to capital assets. Capital contributions received are treated as a "credit" contra account included in the determination of capital assets. The amount is subsequently amortized by a charge to accumulated amortization and a credit to amortization expense, at an equivalent rate to that used for the amortization of the related capital assets.

Revenue Recognition

Revenue is recorded on the basis of regular meter readings. Estimates of customer usage since the last meter reading date to the end of the year are recorded as unbilled revenue.

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES cont'd

Customer Deposits

Customer deposits are cash collections from customers to guarantee the payment of energy bills. Deposits expected to be refunded to customers within the next fiscal year are classified as a current liability.

Use of Estimates

The preparation of financial statements in conformance with Canadian generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses for the year. Actual results could differ from estimates.

Corporate Income Taxes and Capital Taxes

The current tax-exempt status of the Company under the Income Tax Act [Canada] and the Corporations Tax Act [Ontario] reflects the fact that the Company is wholly owned by municipalities. This tax-exempt status might be lost in a number of circumstances, including if the municipality ceases to own 90% or more of the shares or capital of the Company, or if a non-government entity has rights immediately or in the future, either absolutely or contingently, to acquire more than 10% of the shares of the Company.

Commencing October 1, 2001, the Company is required, under the Electricity Act, 1998, to make payments in lieu of corporate taxes to Ontario Electricity Financial Corporation. These payments are calculated in accordance with the rules for computing income and capital tax and other relevant amounts contained in the Income Tax Act [Canada] and the Corporations Tax Act [Ontario] as modified by the Electricity Act, 1998 and related regulations.

As a result of becoming subject to payments in lieu of corporate income taxes [PILs], the Company's taxation year was deemed to have ended immediately beforehand and a new taxation year was deemed to have commenced immediately thereafter. The Company was therefore deemed to have disposed of each of its assets at its then fair market value and to have reacquired such assets at that same amount for purposes of computing its future income subject to PILs. For purposes of certain provisions, the Company was deemed to be a new company and, as a result,

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES cont'd

Corporate Income Taxes and Capital Taxes Cont'd

tax credits or tax losses not previously utilized by the Company would not be available to it after the change in tax status. Essentially, the Company was taxed as though it had a “fresh start” at the time of its change in tax status.

The Company provides for PILs using the asset and liability method. Under this method, future tax assets and liabilities are recognized, to the extent such are determined likely to be realized, for the future tax consequences attributable to differences between the financial carrying amounts of existing assets and liabilities and their respective tax bases. Future tax assets and liabilities are measured using enacted or substantively enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on future tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the date of enactment or substantive enactment.

3. ELECTRIC INDUSTRY RESTRUCTURING AND REGULATION

The Company is regulated by the Ontario Energy Board, under the authority granted by the Ontario Energy Board Act (1998). The OEB has the power and responsibility to approve or fix rates for the transmission and distribution of electricity, providing continued rate protection for rural and remote electricity consumers, and ensuring that distribution companies fulfill obligations to connect and service customers. The OEB may also prescribe license requirements and conditions of service to electricity distributors which may include, among other things, record keeping, regulatory accounting principles, separation of accounts for distinct businesses, and filing and process requirements for rate setting purposes. In its capacity to approve or set rates, the OEB has the authority to specify regulatory accounting treatments that may differ from Canadian generally accepted accounting principles for enterprises operating in a non-rate regulated environment.

In January 2000, the OEB established that distribution rates would be subject to Performance Based Regulation (“PBR”), a method of regulation whereby distribution rates are reduced annually to reflect productivity improvements required of the Company. Under this rate methodology, rates also include regulated amounts for return on Company equity and debt, which were initially determined by the OEB to be 9.88% and 7.25%, respectively. While the initial PBR regulatory framework provided for those regulatory rates of return, subsequent regulation and Provincial Government initiatives prevented distribution companies from fully achieving the theoretical rate of return on equity.

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

3. ELECTRIC INDUSTRY RESTRUCTURING & REGULATION cont'd

In 2005, the Company filed rate applications to adjust its distribution charges to provide for the full theoretical regulatory rate of return of 9.88% and continued recovery of its regulatory assets.

In 2006 the Corporation filed a rate application to adjust its distribution charges to provide for a regulatory rate of return of 9.0%

In 2007, 2008 and 2009 the Corporation also filed to adjust its distribution rates. Rate rebasing is expected to occur in 2011.

Smart Meters

The Province of Ontario has committed to have "Smart Meter" electricity meters installed in 800,000 homes and small businesses by the end of 2007 and throughout Ontario by the end of 2010. Smart Meters permit consumption to be recorded within specific time intervals and specific tariffs to be levied within such intervals. *Bill 21, Energy Conservation and Responsibility Act*, provides the legislative framework and regulations to support this initiative.

Included in distribution rates effective May 1, 2006 is a charge for smart meters of \$0.26 per metered customer per month. Consistent with the OEB's direction and pending further guidance, all smart meter related expenditures and recoveries are currently being deferred in regulatory accounts.

4. BANK INDEBTEDNESS

Waterloo North Hydro Inc. has a line of credit available to it in the amount of \$15,000,000, which was utilized in 2009. The line of credit used in 2009 is \$3,092,097 [2008 - nil]. The line is unsecured and bears interest at the bank prime rate. At December 31, 2009, bank prime was 2.25% [2008 - 3.50%].

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

5. CAPITAL ASSETS

	2009		2008	
	Cost	Accumulated amortization	Cost	Accumulated amortization
	\$	\$	\$	\$
Land and easements	4,153,144	-	2,189,621	-
Buildings	9,463,020	2,416,177	8,547,585	2,260,726
Transformer and substation equipment	28,200,160	10,439,808	25,913,904	9,823,148
SCADA equipment	2,652,088	1,851,539	2,301,961	1,715,509
Distribution system	159,379,376	69,628,181	146,076,845	63,669,595
Meters	9,627,745	5,359,444	9,444,773	5,043,073
General equipment	16,891,820	13,119,152	15,526,121	12,110,698
Contributed capital	(22,468,948)	(4,896,887)	(20,689,911)	(3,998,129)
	207,898,405	97,917,414	189,310,899	90,628,620
Less accumulated amortization	97,917,414		90,628,620	
Net book value	109,980,991		98,682,279	

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

6. NET REGULATORY ASSETS/LIABILITIES

Net regulatory assets (liabilities) represent costs incurred by the Corporation in excess of amounts billed to the consumer at OEB approved rates less recoveries. These amounts have been accumulated pursuant to the Electricity Act and deferred in anticipation of their future recovery in electricity distribution rates. Management assesses the future uncertainty with respect to the final regulatory disposition of those amounts, and to the extent required, makes accounting provisions to reduce the deferred balances accumulated or to increase the recorded liabilities. Upon rendering of the final regulatory decision adjusting distribution rates, the provisions are adjusted to reflect the final impact of that decision, and such adjustment is reflected in net earnings for the period.

Regulatory assets and liabilities attract interest at OEB prescribed rates. In 2009 the rates ranged from 0.55 % to 2.45%

The continuing restructuring of Ontario's electricity industry and other regulatory developments, including current and possible future consultations between the OEB and interested stakeholders, may affect the distribution rates that the Corporation may charge and the costs that the Corporation may recover, including the balance of its regulatory assets.

Post-market opening variances - represent amounts that have accumulated since Market Opening and comprise:

- a) variances between amounts charged by the Independent Electricity System Operator ("IESO") for the operation of the wholesale electricity market and grid, various wholesale market settlement charges and transmission charges, and the amounts billed to customers by the Company based on the OEB approved wholesale market service rate; and,
- b) variances between the amounts charged by the IESO for energy commodity costs and the amounts billed to customers by the Company based on OEB approved rates.

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

6. NET REGULATORY ASSETS/LIABILITIES cont'd

In the absence of rate regulation, generally accepted accounting principles would require the Company to record the costs and recoveries described above in the operating results of the year in which they are incurred and reported earnings before income taxes would be \$3,562,826 lower in 2009 and \$1,970,227 higher in 2008 than reported.

Net regulatory assets and liabilities consist of the following:

	2009 \$	2008 \$
Post market opening variances	(15,966,646)	(15,372,991)
Conservation and demand management	78,643	(509)
Smart meter expenditures (recoveries)	4,297,500	205,419
Recovery of regulatory assets	(198,358)	(183,606)
Future tax liability	(6,695,828)	-
Net regulatory assets and liabilities	(18,484,689)	(15,351,687)

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

7. RELATED PARTY TRANSACTIONS

The Company conducted transactions with related parties during the year ended December 31, 2009. These transactions are in the normal course of operations and are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

During the year, the company provided street lighting energy and street lighting maintenance services to the City of Waterloo in the amounts of \$523,334 and \$160,144 respectively [2008 - \$479,108 and \$194,978 respectively]. In addition, the Company performs regular billing and collections services on behalf of the City of Waterloo for municipal water and sewer charges. In 2009, the Company collected \$27,934,801 [2008 - \$26,064,565] on behalf of the City of Waterloo relating to these charges. The Company charged administrative fees in the amount of \$690,371 [2008 - \$720,602] to the City of Waterloo for this service. This service is being discontinued for 2010. The City of Waterloo is the majority shareholder of Waterloo North Hydro Holding Corporation.

At year-end, the Company owed the City of Waterloo \$715,516 [2008 - \$2,498,865] in un-remitted collections.

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

8. LONG-TERM DEBT

	2009 \$	2008 \$
Senior long-term note payable [a]	17,266,271	24,155,492
Junior long-term note payable [b]	16,246,940	16,246,940
	33,513,211	40,402,432

[a] The senior long-term note payable is due to Waterloo North Hydro Holding Corporation, the Company's parent, bears interest at a rate of 6.0% per annum, has no set principal repayment terms and is due on demand.

The company repaid \$6,889,221 of this debt in 2009.

Waterloo North Hydro Holding Corporation has waived the right to demand repayment of any portion of the note during the next fiscal year.

[b] The junior long-term note payable is due to Waterloo North Hydro Holding Corporation, bears interest at a rate of 1 1/8% per annum above the interest rate on debt which the Ontario Energy Board permits the corporation to pay for rate making purposes in the establishment of distribution rates, has no set principal repayment terms and is due on demand.

Waterloo North Hydro Holding Corporation has waived the right to demand repayment of any portion of the note during the next fiscal year.

9. PENSION PLAN

The Corporation makes contributions to the Ontario Municipal Employees Retirement Fund (OMERS), which is a multi-employer plan, on behalf of its staff. The plan is a defined benefit plan which specifies the amount of the retirement benefit to be received by the employees based on the length of service and the best 60 consecutive months average earnings.

Contributions by the Corporation were at a rate of 6.3% for employee earnings below the year's maximum pensionable earnings and 9.5% thereafter.

The amount contributed to OMERS for 2009 was \$570,792 [2008 - \$ 537,820] for current service.

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

10. POST EMPLOYMENT BENEFITS

The Company has a number of unfunded defined benefit plans providing post-employment benefits resulting from retirement to most of its employees. These plans include life insurance, health and dental benefits and accumulated sick leave. An actuarial valuation was done as at December 31, 2009.

Information about these defined benefit plans are as follows:

	2009 \$	2008 \$
Accrued benefit obligation		
Balance, beginning of year	3,304,651	3,628,086
Current service cost	110,215	134,810
Interest cost	226,910	195,285
Actuarial (gain)/loss	288,228	(512,879)
Benefits Paid	(152,040)	(75,932)
Balance, end of year	3,777,964	3,369,370
Unamortized actuarial gain (loss)	-	(64,719)
Liability, end of year	3,777,964	3,304,651

The significant actuarial assumptions adopted in measuring the accrued benefit obligations are as follows:

	%
Discount rate	6.0
Future general salary and wage levels increase	4.0
Dental costs increase	4.0
Medical costs increase	10.0 reducing to 5.0% after 10 years

The approximate effect on the accrued benefit obligation and the estimated net benefit expense if the health care trend rate assumption was increased or decreased by 1% is as follows:

1% increase in health care trend rate	\$239,939
1% decrease in health care	(\$214,918)

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

11. SHARE CAPITAL

		2009 \$	2008 \$
Authorized			
Unlimited common shares			
Unlimited Class A special shares			
Issued			
1,000 common shares		24,370,424	24,370,424
251,668 Class A special shares - \$10 Par value			
Non-voting, non cumulative		2,516,680	2,516,680
		26,887,104	26,887,104

12. INTEREST (EXPENSE) INCOME

The Company has interest [expense] income relating to the following:

	2009 \$	2008 \$
Interest on debt with Waterloo North Hydro Holding Corporation		
Senior long-term note payable	(1,240,955)	(1,453,300)
Junior long-term note payable	(1,360,684)	(1,364,412)
Other debt	(153,609)	(198,974)
Regulatory carrying charges	(434,284)	(532,949)
Interest income	114,116	530,959
Net interest expense	(3,075,416)	(3,018,676)

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

13. CORPORATE INCOME AND CAPITAL TAXES

The provision for PILs differs from the amount that would have been recorded using the combined Canadian Federal and Ontario statutory income tax rate. Reconciliation between the statutory and effective tax rates is provided as follows:

Statement of operations

	2009 \$	2008 \$
Rate reconciliation		
Income from continuing operations before income taxes	6,799,676	7,259,115
Statutory Canadian federal and provincial income tax rate	33.0%	33.5%
Expected taxes on income	2,243,893	2,431,804
Increase in income taxes resulting from:		
Permanent differences	9,377	(655,008)
Other temporary differences not benefited	(206,330)	-
Income tax expense	2,046,940	1,776,796
Effective tax rate	30.10%	24.48%

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

14. PRUDENTIAL SUPPORT OBLIGATION

Waterloo North Hydro Inc. purchases power from the IESO on behalf of its customers and retailers. The IESO is responsible for ensuring that prudential support is posted by all market participants to mitigate the impact of an event of default by a market participant on the rest of the market. In this regard Waterloo North Hydro Inc. posted an irrevocable standby letter of credit in the amount of \$18,534,708 underwritten by the corporation's principal bank. This instrument expires April 15, 2010.

15. FINANCIAL INSTRUMENTS

Effective January 1, 2007, the Corporation adopted three new accounting standards comprising the following sections of the Canadian Institute of Chartered Accountants (CICA) Handbook: 1530 – Comprehensive Income; 3855 - Financial Instruments – Recognition and Measurement; 3861 – Financial Instruments – Disclosure and Presentation. The adoption of these new standards required changes in the accounting for financial instruments. The comparative financial statements have not been restated as required under these standards. The principal changes in the accounting for financial instruments, due to the adoption of the accounting standards are described below:

Financial Assets and Liabilities

Under the new standards, all financial instruments are classified into one of the following categories – held-for-trading, available for sale, held-to-maturity, other liabilities or loans and receivables. All financial instruments are carried on the balance sheet at fair value except for loans and receivables, held-to-maturity investments and other liabilities, which are measured at amortized cost.

The Corporation has classified its financial instruments as follows:

Cash and cash equivalents	Held for trading
Accounts receivable	Loans and receivables
Unbilled energy receivable	Loans and receivables
Accounts payable and accrued liabilities	Other liabilities

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

15. FINANCIAL INSTRUMENTS cont'd

Due to related party	Other liabilities
Interest payable – shareholder	Other liabilities
Customer deposits	Other liabilities
Long-term debt	Other liabilities

Derivatives and Hedge Accounting

The Corporation does not have derivatives and does not engage in derivative trading or speculative activities. Hedge accounting has not been used in the preparation of these financial statements.

The carrying values of cash and cash equivalents, accounts receivable, unbilled energy receivable, accounts payable and accrued liabilities, and amounts due to related party approximate fair values because of the short maturity of these instruments. No fair value is available for the long-term note payable since there are no specified repayment terms.

Financial assets held by the Corporation, such as accounts receivable, expose it to credit risk.

The Corporation earns its revenue from a broad base of customers located in the City of Waterloo and the Townships of Wellesley and Woolwich. No one customer accounts for more than 5 % of distribution revenue.

16. CONTINGENT LIABILITY

Griffith et al. v. Toronto Hydro-Electric Commission et al.

This action has been brought under the Class Proceedings Act, 1992. The plaintiff class seeks \$500 million in restitution for amounts paid to Toronto Hydro and to other Ontario municipal electric utilities (“LDCs”) who received late payment penalties which constitute interest at an effective rate in excess of 60% per year, contrary to section 347 of the Criminal Code.

A settlement has been reached in this matter and an amount of \$200,000, which represents Waterloo North Hydro’s share, has been recorded as an expense in 2009.

NOTES TO FINANCIAL STATEMENTS

December 31, 2009

17. GENERAL LIABILITY INSURANCE

The Corporation is a member of the Municipal Electric Association Reciprocal Insurance Exchange [MEARIE] which is a pooling of general liability insurance risks. Members of MEARIE would be assessed on a pro-rata basis should losses be experienced by MEARIE, for the years in which the Corporation was a member.

To December 31, 2009 the Corporation has not been made aware of any additional assessments. Participation in MEARIE expires December 31, 2010. Notice to withdraw from MEARIE must be given six months prior to the commencement of the next underwriting term.

18. EMERGING ACCOUNTING CHANGES

On February 13 2008, the AcSB announced that publicly accountable enterprises will be required to change over to IFRS effective January 1, 2011. Some of the converged standards will be implemented in Canada during the transition period with the remaining standards adopted at the change over date. The Company has launched an internal initiative to govern the conversion process and is currently in the process of evaluating the potential impact of the conversion to IFRS on its financial statements.

Appendix D

Customer Satisfaction Survey

Waterloo North Hydro Inc.

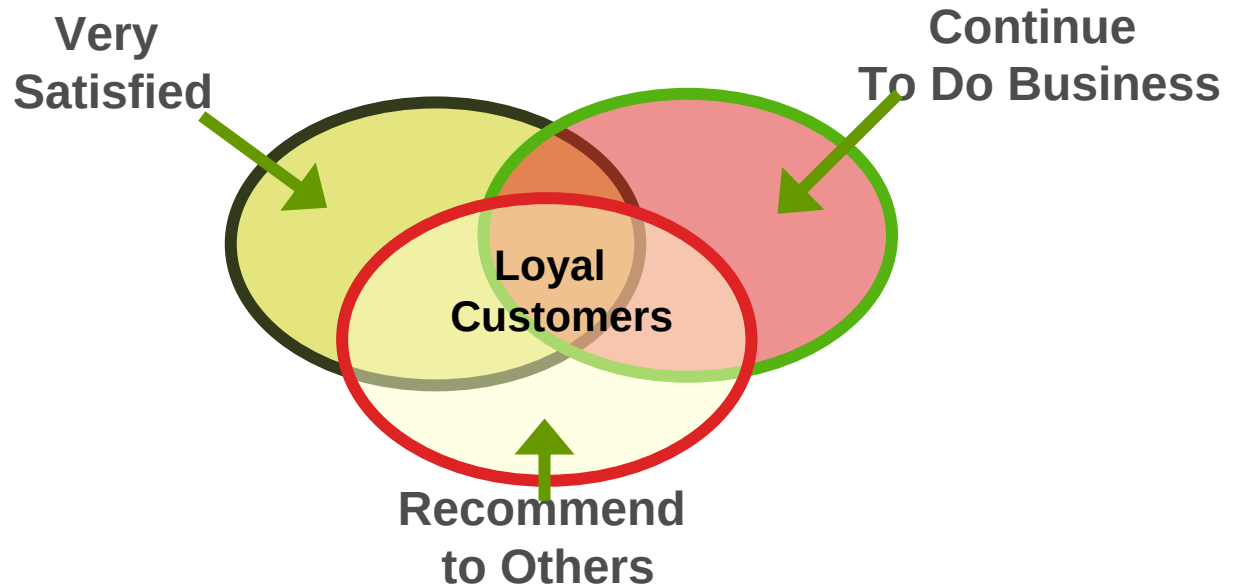
10th Annual Electric Utility Customer Satisfaction Survey



Methodology

- Based on telephone interviews of *403 respondents* who pay or look after the electricity bills for *Waterloo North Hydro*
Note: A sample size of 404 will provide confidence level of 95% (+/-4.0%)
- Customers surveyed were based on a *random sample* approach
- 1,013 households were contacted, 403 completed interviews; response rate is 38%
- The following *segments* were surveyed:
 - Residential – 85%
 - Commercial – 15%
- Waterloo North Hydro customers participated in an “*in-depth*” Customer Satisfaction Telephone Survey consisting of 31 questions
- National benchmark data has been refined to reflect the demographic mix in Canada
- Results of the UtilityPULSE Report Card® are computed by formulas which map the 22 attributes of corporate image to customer satisfaction and loyalty

Customer Loyalty Model



Electricity customers' loyalty...			
	WN Hydro	National	Ontario
Top 2 boxes "very + somewhat" satisfied	91%	79%	77%
Top 2 boxes "definitely + probably" continue	86%	86%	88%
Top 2 boxes "definitely + probably" recommend	70%	66%	70%

The Loyalty Factor

Secure

Secure customers are “very satisfied” overall with their utility. They definitely would not switch to a competitor and definitely would recommend Waterloo North Hydro.

Still Favorable

Still favorable customers are “very satisfied” overall and “definitely” or “probably” would recommend Waterloo North Hydro and not switch.

Indifferent

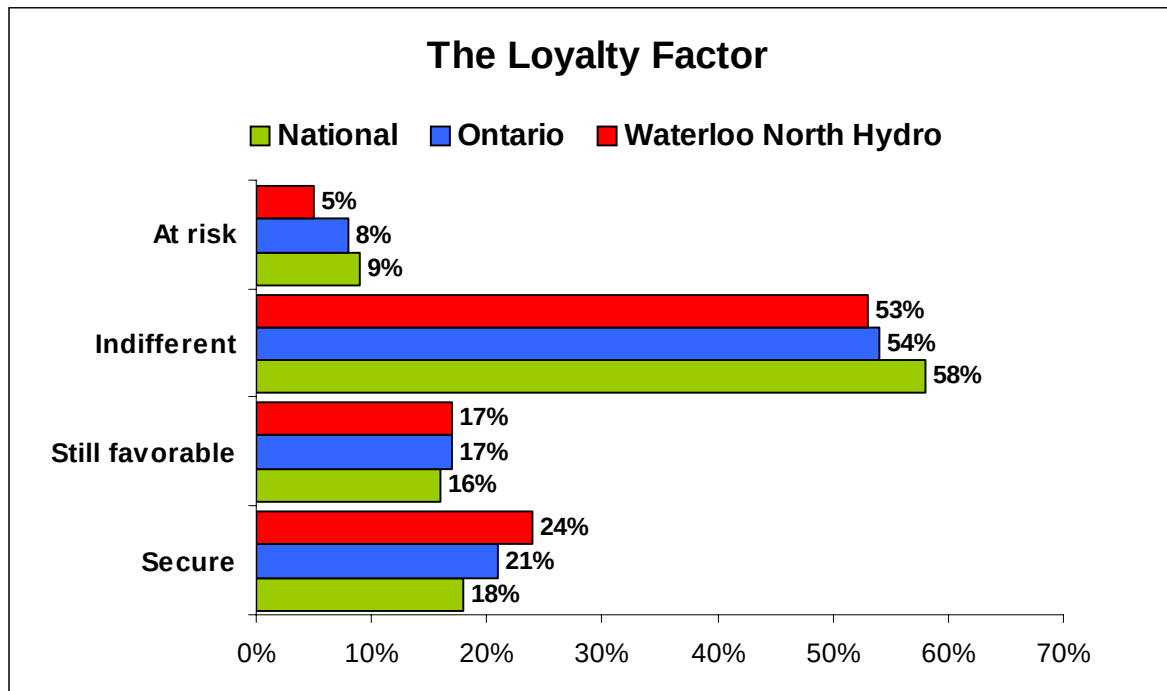
Indifferent customers are less satisfied overall than secure & still-favorable customers & less inclined to recommend Waterloo North Hydro or say they wouldn’t switch.

At Risk

At risk customers, who are “very dissatisfied” with their electricity utility, “definitely” would switch and “definitely” would not recommend Waterloo North Hydro.

The Loyalty Factor

Simul/UtilityPULSE Customer Loyalty Score Segments	WN Hydro'08	WN Hydro'05	National '08	Ontario '08
Secure	24%	12%	18%	21%
Still Favorable	17%	19%	16%	17%
Indifferent	53%	64%	58%	54%
At Risk	5%	5%	9%	8%



Satisfaction with Waterloo North Hydro

	WN Hydro	National	Ontario
Garbage Collection	86%	82%	81%
Local telephone service	83%	88%	86%
The local electricity utility that supplies the electricity you use (2008)	91%	87%	86%
The local electricity utility that supplies the electricity you use (2005)	91%	88%	84%
Your local natural gas utility	77%	48%	66%
Your local libraries	57%	67%	67%
The local cable television service	52%	60%	54%
Public transit service in your area	28%	33%	33%

Satisfaction with Waterloo North Hydro

Electricity bill payers who are satisfied with...		
Waterloo North Hydro	2008	2005
Top 2 boxes “very + fairly” satisfied	91%	91%
Very Satisfied	51%	47%
Fairly Satisfied	39%	43%
Neither Satisfied nor Dissatisfied	3%	1%
Fairly Dissatisfied	2%	4%
Very Dissatisfied	2%	2%



Satisfaction (pre & post)

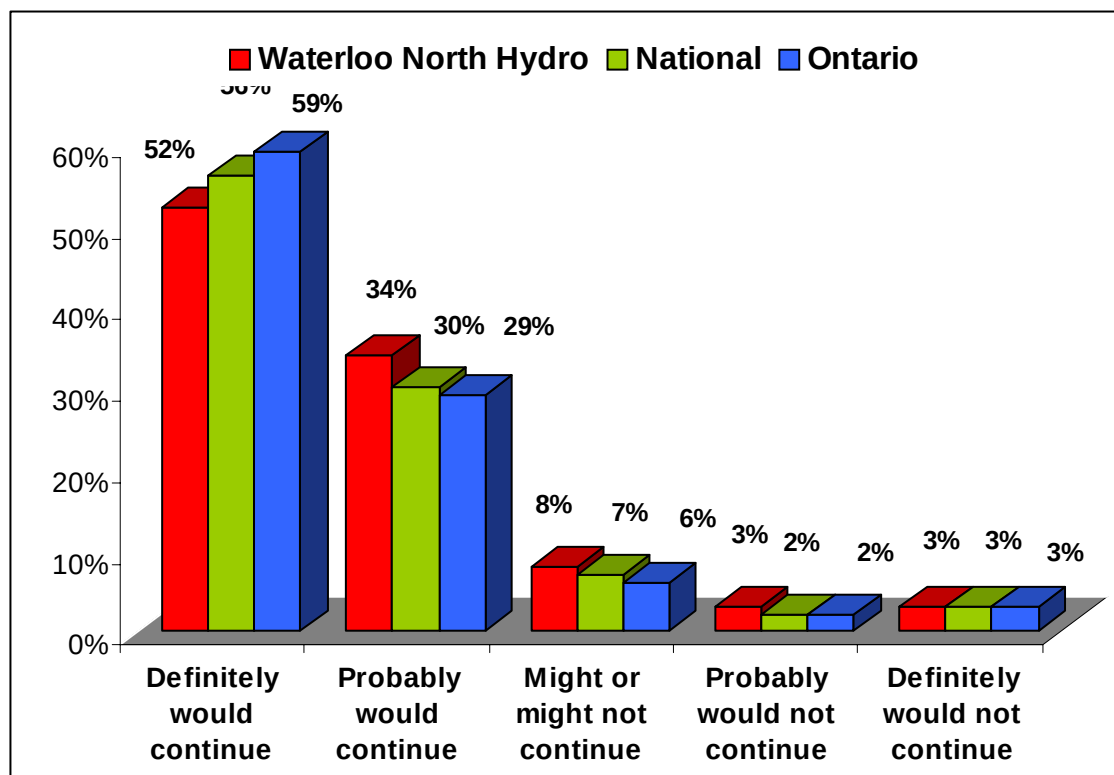


*“Now that we have been discussing electricity for a while, I would like you to say how satisfied or dissatisfied you are with **Waterloo North Hydro**, the local utility that supplies the electricity you use.”*

	Initially	End of interview
	“Local electricity utility”	“Waterloo North Hydro”
Very satisfied	51%	41%
Fairly satisfied	39%	52%
‘Very + Fairly’ satisfied	91%	93%
Neither satisfied nor dissatisfied (volunteered)	3%	1%
Fairly dissatisfied	2%	3%
Very dissatisfied	2%	1%

Continue to do business with ... Waterloo North Hydro

Electricity customers' loyalty – Would they continue to do business ...			
Top 2 boxes "CONTINUE"	Overall WN Hydro	National	Ontario
"definitely + probably" (2008)	86%	86%	88%
"definitely + probably" (2005)	63%	70%	83%



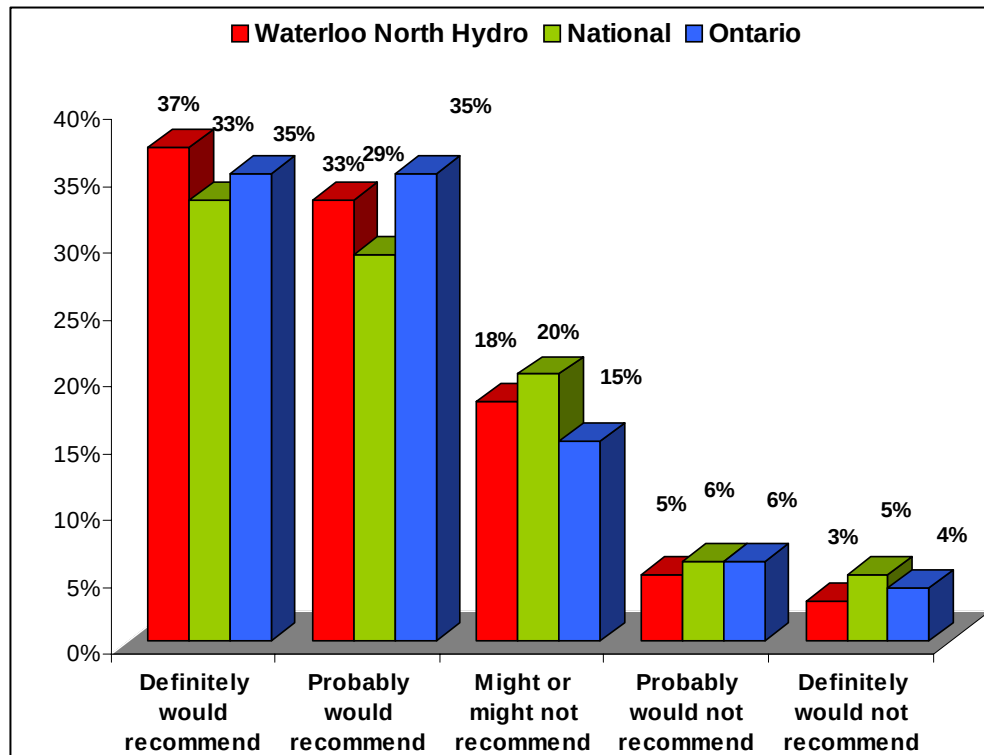
Continue to do business with ... Waterloo North Hydro

Electricity customers' loyalty – If they could switch...

	Overall WN Hydro	Buy direct from WN Hydro	Purchase from Independent Retailer
Top 2 boxes “definitely + probably”	86%	91%	45%
Definitely would continue	52%	57%	7%
Probably would continue	34%	34%	38%
Might or might not continue	8%	5%	29%
Probably would not continue	3%	2%	7%
Definitely would not continue	3%	1%	17%

Recommend ... Waterloo North Hydro

Electricity customers' loyalty – Would you recommend ...			
Top 2 boxes "RECOMMEND"	Overall WN Hydro	National	Ontario
"definitely + probably" (2008)	70%	62%	70%
"definitely + probably" (2005)	60%	59%	59%



Recommend ... Waterloo North Hydro

	Overall WN Hydro	Buy direct from WN Hydro	Purchase from Independent Retailer
Top 2 boxes “definitely + probably”	70%	75%	26%
Definitely would recommend	37%	41%	5%
Probably would recommend	33%	35%	21%
Might or might not recommend	18%	15%	38%
Probably would not recommend	5%	4%	14%
Definitely would not recommend	3%	1%	17%

Utility*PULSE* Report Card®



1 Price & Value

2 Power Quality & Reliability

3 Operational Effectiveness

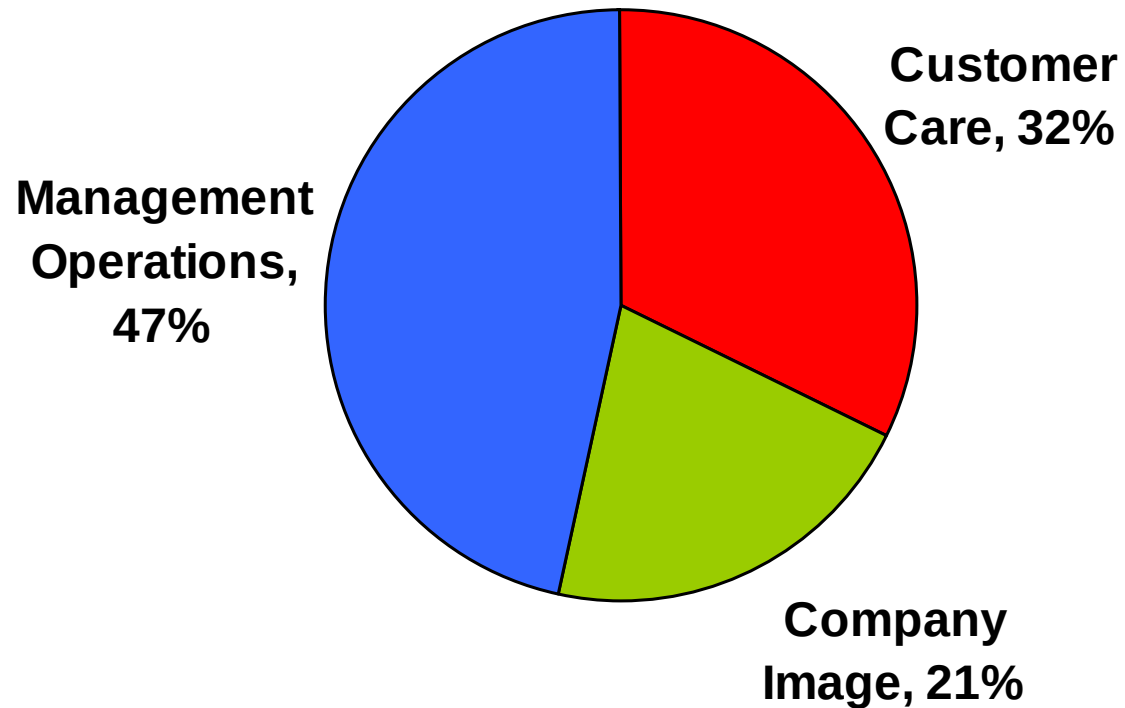
4 Customer Service

5 Corporate Stewardship

6 Company Image

UtilityPULSE

What explains customer satisfaction at Waterloo North Hydro ? What share of the satisfied customer's mind is devoted to corporate image or price? What is the satisfied customer thinking when the bill payer thinks of Waterloo North Hydro ?



Corporate Image

Of the twenty-two attributes in the UtilityPULSE survey, 8 are strongly linked to Corporate Image.

Attributes linked to a hydro utility's image			
Agree 'strongly' + 'somewhat'	WN Hydro	National	Ontario
<i>Company Leadership</i>			
A good corporate citizen	70%	71%	68%
A leader in the industry	57%	66%	62%
A leader in energy conservation	55%	65%	56%
Involved in the community and contributes to worthy local causes	41%	52%	43%
Efficient in the number of employees it has	33%	48%	38%
<i>Corporate Stewardship</i>			
Accountable	70%	73%	68%
A financially well managed organization	49%	56%	47%
Takes steps not to harm the environment	52%	66%	59%

UtilityPULSE Report Card®

Waterloo North Hydro's UtilityPULSE Report Card®

	CATEGORY	WN Hydro	National	Ontario
1	Customer Care	32%	26%	29%
	Price and Value	8%	7%	8%
	Customer Service	24%	20%	22%
2	Company Image	21%	21%	20%
	Company Leadership	12%	12%	11%
	Corporate Stewardship	9%	9%	9%
3	Management Operations	47%	53%	51%
	Operational Effectiveness	23%	28%	27%
	Power Quality and Reliability	24%	25%	24%
Total		100%	100%	100%

Columns do not necessarily add to 100% due to rounding

UtilityPULSE Report Card®

Waterloo North Hydro's UtilityPULSE Report Card®

CATEGORY		NATIONAL	ONTARIO
1	Customer Care	Benchmark	Potential Strength
	Price and Value	Benchmark	Potential Strength
	Customer Service	Benchmark	Potential Strength
2	Company Image	Benchmark	Potential Strength
	Company Leadership	Benchmark	Benchmark
	Corporate Stewardship	Benchmark	Potential Strength
3	Management Operations	Benchmark	Benchmark
	Operational Effectiveness	Benchmark	Benchmark
	Power Quality and Reliability	Benchmark	Benchmark
OVERALL		Benchmark	Benchmark

Strength:

Indicates the utility is performing better than the benchmark

Potential Strength:

Indicates the utility is doing well or slightly above benchmark

Benchmark:

Indicates the utility is performing the same as the benchmark

Potential Liability:

Indicates the utility is performing slightly below the benchmark

Liability:

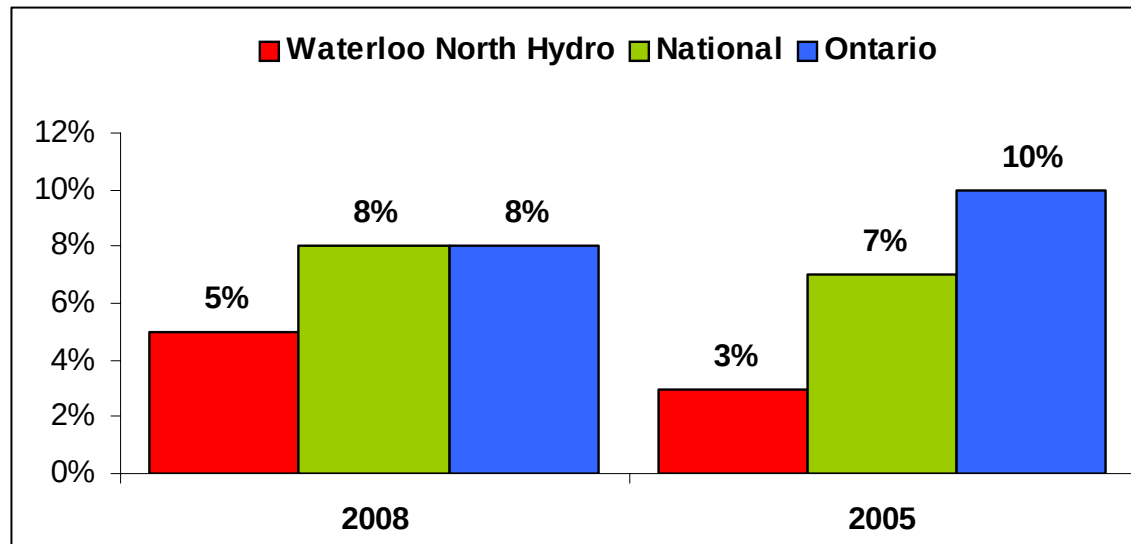
Indicates the utility is performing below the benchmark

Killer B's; Blackouts and Bills

BILLING Problems

Percentage of Respondents indicating that they had a Billing problem in the last 12 months	WN Hydro	National	Ontario
2008	31%	8%	8%
2007	*	9%	11%
2006	*	5%	6%
2005	31%	7%	10%

(*) Data unavailable/Waterloo North Hydro not a participant in 2006-2007 polls



Killer B's; Blackouts and Bills

BILLING Problems-Breakdown

Bill payers with billing problems who say...			
	WN Hydro	National	Ontario
The amount owed was too high	70%	81%	92%
The bill was estimated	20%	50%	60%
The bill was difficult to understand	40%	34%	35%
Payment made was recorded incorrectly or not recorded	25%	17%	27%
The meter reading was incorrect	20%	27%	27%
The bill arrived late	30%	15%	14%
The amount owed was too low	15%	6%	3%

BLACKOUT!

Outages	WN Hydro	National	Ontario
Had outage problems	31%	49%	41%
% with outages who complained	22%	34%	32%
% of complainers who were very satisfied	42%	40%	39%
Had outage but did not complain	76%	66%	68%

- 81% satisfied (“very” or “fairly”) with the way their complaint was handled.

- 15% dissatisfied (“very” or “fairly”) with the way their complaint was handled.



Killer B's; Blackouts and Bills

Blackouts

Bill Payers with Outages who answered "Yes"	WN Hydro
2008	31%
2007	*
2006	*
2005	31%

(*) Data unavailable/Waterloo North Hydro not a participant in 2006-2007 polls

How many ...

During the past 12 months:

- 0% do not recall experiencing any blackouts
- 63% recall experiencing 1-3 blackouts
- 22% recall experiencing 4-9 blackouts
- 11% recall experiencing 10 or more blackouts
- 5% didn't know

Problems foretell lower scores

The impact of solving Waterloo North Hydro customer problems

Agree strongly or somewhat ...	Problem solved	Not solved
Quickly handles outages and restores power	85%	81%
Deals quickly with customers' problems	74%	59%
Accountable	63%	64%
Answers the phone promptly	93%	58%
Customer-focused and treats customers as if they're valued	70%	64%
Provides good value for your money	67%	67%
Completes service work when promised	55%	51%

How Secure and At Risk Waterloo North Hydro customers perceive problem resolution...

Agree strongly or somewhat that the attribute applies ...	Secure Customers	At Risk Customers
Quickly handles outages and restores power	81%	63%
Deals quickly with customers' problems	72%	37%

Service Improvements



And we are interested in knowing what you think are the one or two most important things Waterloo North Hydro could do or fix to improve service to their customers?

	All customers	% of all suggestions
Better, lower prices	15%	28%
Energy conservation improvements	21%	37%
Improved customer communication	9%	17%
Smart meter, pricing based on time of use	5%	9%
Reliable supply, fewer outages	4%	7%
Environment concerns, alternative energy	7%	13%
Be more efficient, cost-conscious	3%	5%
Billing problems and issues	3%	6%
Satisfied – no problems	28%	—
No opinion	17%	—

Eco Consciousness and Motivation



Eco-Leader

(8% of the population based on Simul/UtilityPULSE's 2008 poll)

This eco-type is an enthusiast and proponent for energy conservation. They have a high desire to inspire and persuade and typically willing to be a spokesperson for energy conversation.

Eco-Faithful (27% of the population)

This eco-personality type is the logical and thinking style. Trying to understand the issues and opportunities is what keeps this personality type interested in the subject of energy conservation.

Eco-Observer (17% of the population)

This conservation type will embrace energy conservation when it seems to make sense to them.

Eco-Friend (17% of the population)

Believes strongly in doing the right things, being responsible, embracing tradition and demonstrating responsibility for their own actions.

Eco-Believer (32% of the population)

The Eco-believer is a very strong proponent of using persuasion and highlighting the social benefits of using less energy when trying to get consumers to conserve electricity.



Eco Consciousness and Motivation

The best way to get consumers to conserve electricity...	WN Hydro
Is to use persuasion and highlight the social benefits of using less energy	56%
Is to set objectives and firm targets on the amount of electricity that Consumers can use	30%
Neither	5%
Both	1%
Depends	2%
Don't know/refused	6%



Eco Consciousness and Motivation

How much responsibility do you feel for helping others understand the need for energy conservation...		WN Hydro
Have a personal responsibility to be actively involved in advocating and educating others in how to reduce consumption		14%
Have to be a role-model by reducing own energy consumption		67%
Neither		7%
Both		7%
Depends		1%
Don't know/refused		3%



Eco Consciousness and Motivation



An effective approach for encouraging people to use less electricity....	WN Hydro
An educational approach with facts and details	68%
A moral or inspirational approach, asking Canadians to make sacrifices	19%
Neither	2%
Both	7%
Depends	0%
Don't know/refused	3%



Is there enough scientific evidence that electricity use is a serious problem?	WN Hydro
There is a need for more scientific evidence, facts and data	27%
There is enough scientific evidence, facts and data	62%
Neither	2%
Both	1%
Depends	2%
Don't know/refused	6%



Eco Consciousness and Motivation

In general, when you see a label saying a product is energy-efficient, how believable do you think the information on the label is? Do you think it is...

WN Hydro

Top 2 boxes: Very + Somewhat believable

86%

Bottom 2 boxes: Not too + Not at all believable

9%

When you shop, how likely are you to look for a label on a product that says the product is energy-efficient? Are you...

WN Hydro

Top 2 boxes: Very + Somewhat likely

91%

Bottom 2 boxes: Not too + Not at all likely

7%

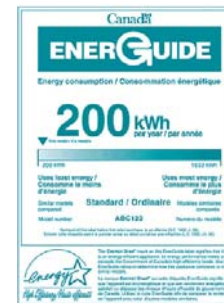
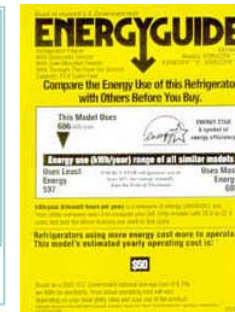


Figure 7. Inverter label with ENERGY STAR® symbol





Eco Consciousness and Motivation

Feelings about paying for energy-efficient products, which is closest to your view...	WN Hydro
People shouldn't have to pay more for energy-efficient products	67%
People should expect to pay more	27%
Depends	3%
Don't know/refused	3%

(*) Data unavailable/Waterloo North Hydro not a participant in 2006-2007 polls





Eco Consciousness and Motivation

How concerned or worried are you, personally, about the impact on the environment from the amount of electricity we are using? Are you...

WN Hydro

Top 2 boxes: Very + Somewhat worried

77%

Bottom 2 boxes: Not too + Not at all worried

21%

The actions of a single person won't make any difference in reducing the use of energy in our province. How strongly do you agree or disagree with the statement?

WN Hydro

Top 2 boxes: Very + Somewhat agree

30%

Bottom 2 boxes: Somewhat + Strongly disagree

68%

How good a job would you say most businesses and industries in our province are doing when it comes to reducing and not wasting the electricity they use? Would you say...

WN Hydro

Top 2 boxes: Excellent + good job

16%

Bottom 2 boxes: Just a fair job + poor job

79%

Results at a Glance:

➤ Satisfaction rate:	91%
➤ Continue to do business:	86%
➤ Recommend to others:	70%
➤ Secure customers:	24%
➤ Provides good value for money:	75%
➤ A leader in the industry:	57%
➤ Customer-focused:	75%
➤ A leader in energy conservation:	55%
➤ Provides consistent, reliable energy:	91%

UtilityPulse Report Card standing: Benchmark



***Customer Care, Price and Value, Customer Service, Company Image and Corporate Stewardship = Potential Strength**

This is privileged and confidential material and no part may be used outside Waterloo North Hydro Inc. without written permission from Simul Corporation.

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Waterloo North Hydro Inc.

10th Annual Electric Utility Customer Satisfaction Survey

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Waterloo North Hydro Inc.
Application for Approval of 2011 Electricity Distribution Rates

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**EXHIBIT 2 - MANAGER'S SUMMARY – ASSET MANAGEMENT PLAN AND
CAPITAL EXPENDITURES PROGRAM:**

Waterloo North Hydro Inc. (WNH) is a medium sized LDC in the Province of Ontario and is responsible for providing all regulated electricity distribution services to over 51,000 residential and business customers in the City of Waterloo, the Township of Wellesley and the Township of Woolwich. With predecessors that date back to 1905, WNH was created in 1978 as a result of Bill 55, legislation that reduced the electrical utilities in the Region of Waterloo from thirteen to three. Waterloo PUC, three other municipal utilities, along with parts of Ontario Hydro area were amalgamated into Waterloo North Hydro creating a service territory that at the time was one of the largest in the province at 672 sq. km.

To provide context, the service area of Waterloo North Hydro is larger than the service area of Toronto, however, WNH has less than 1/12 the customers. Approximately 90% of WNH's service territory is considered rural. A large rural service territory normally results in higher costs in comparison to distributors not serving rural areas, due to lower customer density (customers/km of distribution line), to lower load density (kW /km of distribution line), to longer travel time and further distances to construct and maintain its assets.

With \$110M in net capital assets and a peak demand of 284 MW, WNH's distribution infrastructure is the key element in the delivery of electricity to its existing and new customers. Home to two (2) prominent universities and many high-tech and knowledge based businesses; WNH operates in a robust localized economy that has seen electrical demand over the last 20 years grow at over 2.5 times the provincial average.

Senior Engineering and Operations management have the responsibility for Asset Management at WNH. All have formal training and extensive experience in distribution systems and LDCs. They are responsible for the development of operations budgets, maintenance budgets and capital investment plans reflecting the capacity, condition and growth of the distribution system, allowing for a secure, reliable and cost effective electrical supply.

WNH's asset management practices are focused in two main areas

- 1) the planning and construction of new assets to meet growth
- 2) the inspection, maintenance and replacement of existing assets

1 When planning for growth, WNH has long established system planning processes in place
2 ensuring long term supply and capacity availability to meet customer demands. WNH works
3 closely with Hydro One, the Ontario Power Authority, local municipalities and the development
4 community to ensure the availability and timing of new electrical supply. Supply and reliability
5 concerns are reviewed at regular internal meetings involving engineering and operations staff.
6 Engineering reviews short term (1-5 year) and long-term (6-10 year) system supply needs, and
7 develops load growth forecasts which help identify asset needs for consideration in developing
8 the one (1) year capital budget and five (5) year capital forecast.

9
10 Capital forecasts are based on peak load in kWh; while, revenue load forecasts are based on
11 billed consumption. Utilities must build a distribution system to accommodate the system peak
12 demand for all of its customers. This is why, for example, a 2.0% growth in capital expenditures
13 for distribution plant does not necessarily translate into a 2.0% growth in revenue.

14
15 WNH's existing distribution assets range from new to 65 years of age. WNH has established a
16 systematic approach of inspections, condition and age assessment, data analysis and
17 maintenance for overhead distribution system, underground distribution system, transformer
18 stations and substations. Generally accurate and current asset and inspection records are
19 maintained within the Geographic Information System (GIS), and other electronic databases.
20 WNH began implementing its first ever GIS system in 2005. Much work has been done to
21 transfer paper based asset data into the GIS database and this work continues today.

22
23 System reliability and performance is monitored via a variety of daily, weekly, monthly, annual
24 and on-demand reports and is supported by the Supervisory Control and Data Acquisition
25 (SCADA) system and GIS. Reliability issues are identified by root cause and reviewed by
26 engineering and operations staff at weekly meetings. Service Quality Indicators such as SAIDI,
27 SAIFI and CAIDI are tracked and reported monthly on a rolling basis to the Board of Directors
28 and annually to the OEB.

1 WNH's capital and operating programs have a history of adapting based on findings and in
2 keeping with industry best practices. Looking to further improve on its current asset
3 management practices, WNH commissioned an independent, third party review in 2010.
4 Acumen Engineered Solutions International Inc. (AESI) is an engineering and management
5 consulting firm specializing in business and operating processes and systems for electric
6 utilities, industry, and government. AESI observations are summarized in a report entitled
7 "Waterloo North Hydro Inc. Asset Management Strategy". A copy of this report may be found in
8 Appendix B.

9
10 As stated by the consultant in the Asset Management Strategy, WNH has established
11 comprehensive inspection and maintenance programs to provide for continuous condition
12 assessment and remediation, respectively, of assets within its distribution system. In addition to
13 satisfying the reporting requirements of the Ontario Energy Board's (OEB) Distribution System
14 Code (DSC) and the Independent Electricity System Operator (IESO), these programs provide
15 for continuous system improvement and performance reliability, ensuring long term capacity,
16 supply availability and reliability to meet customer demands. These programs further contribute
17 to the effective and successful management of the distribution system and its assets.

18
19 WNH notes that it has not completed an Asset Condition Study.

20
21 As is detailed in this Exhibit, WNH has invested, and continues to invest, in its infrastructure.
22 Table 2-23 demonstrates this investment in its voltage conversion program, pole replacement
23 program, and underground rehabilitation programs.

24
25 Table 2-1, provides an overall picture of the growth in WNH's capital asset additions from 2004
26 through to its projections in 2013.

27

Table 2-1
Summary of Capital Additions 2004 - 2013

USoA	Description	Actual						Forecast			
		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1805	Land	-	-	17,783	-	248,399	-	-	2,038,000	12,500	5,000
1806	Land Rights	10,642	5,416	6,455	90,888	35,659	15,448	15,805	16,350	16,000	16,000
1808	Building and Fixtures	215,152	138,803	919,621	664,764	5,752	42,847	1,289,002	22,798,117	15,000	15,000
1815	Transformer Station Equipment	219,039	5,048	1,952,965	(12,165)	778,737	647,205	5,636,134	265,871	900,000	600,000
1820	Distribution System Equipment	46,951	-	502,762	11,114	35,856	31,527	59,882	15,171	2,000	2,000
1830	OH - Poles, Towers and Fixtures	2,159,591	1,621,188	1,280,967	4,607,640	3,373,891	4,153,368	4,292,721	4,278,501	3,904,000	3,904,000
1835	OH - Conductors and Devices	925,409	1,239,506	711,675	2,480,132	1,875,354	2,279,721	2,538,264	2,953,287	2,050,750	2,050,750
1840	UG - Conduit	448,120	382,389	581,120	812,166	210,221	485,801	628,603	820,062	480,000	350,000
1845	UG - Conductors and Devices	1,727,618	1,201,356	1,359,811	1,198,911	1,568,180	1,124,839	2,930,459	2,748,362	1,229,000	1,008,000
1850	Line Transformers	2,299,758	2,078,638	1,819,018	2,173,216	2,382,530	3,570,690	2,866,093	4,253,666	3,058,250	2,759,250
1855	Services	785,284	834,470	808,838	854,591	1,260,156	1,281,287	1,814,690	676,804	503,000	503,000
1860	Meters	712,830	408,278	(158,297)	448,132	367,063	240,145	386,860	315,250	500,000	500,000
1915	Office Equipment	31,822	55,241	113,142	54,173	7,050	18,821	6,500	1,710,204	7,500	7,500
1920	Computer Hardware	193,156	500,413	144,767	160,484	91,002	152,428	137,339	349,544	280,000	200,000
1925	Computer Software	435,360	515,715	405,911	333,495	231,044	579,849	629,483	647,615	875,000	680,000
1930	Transportation Equipment	389,488	422,328	260,432	716,173	316,057	799,085	631,743	570,468	607,500	562,500
1935	Stores Equipment	-	1,782	-	-	99,191	2,811	-	53,500	-	-
1940	Tools, Shop and Garage Equipment	60,789	41,179	-	17,337	114,754	25,417	187,888	162,037	180,000	180,000
1945	Measurement and Testing Equipment	7,317	31,867	29,230	13,367	14,066	33,434	16,600	115,278	80,000	10,000
1955	Communication Equipment	49,174	6,376	17,942	47,680	216,739	74,139	-	-	-	-
1960	Miscellaneous Equipment	2,122	45,143	1,167	66,374	25,550	11,983	-	-	-	-
1980	System Supervisory Equipment	64,304	42,456	81,576	31,721	-	434,697	147,459	1,048,432	450,000	250,000
1995	Contributed Capital	(4,452,189)	(2,442,209)	(2,156,723)	(1,682,172)	(1,993,133)	(1,779,037)	(1,818,299)	(2,142,609)	(1,825,000)	(1,825,000)
CAPITAL EXPENDITURES		6,331,739	7,135,384	8,700,162	13,088,021	11,264,118	14,226,505	22,397,227	43,693,910	13,325,500	11,778,000
\$ Increase / (Decrease)			803,645	1,564,777	4,387,860	(1,823,904)	2,962,387	8,170,722	21,296,682	(30,368,410)	(1,547,500)
% Increase / (Decrease)			12.7%	21.9%	50.4%	-13.9%	26.3%	57.4%	95.1%	-69.5%	-11.6%

LONG TERM PLAN FOR THE DISTRIBUTION SYSTEM IN THE CITY OF WATERLOO AND THE TOWNSHIPS OF WOOLWICH AND WELLESLEY:

WNNH owns and operates three (3) transmission grid connected Transformer Stations (TS's) operating at 230 kV/115 kV – 27.6 kV/13.8 kV. In addition WNNH receives power from one (1) Hydro One 115/27.6 kV TS, one (1) 44 kV feeder supplied by Hydro One, and two (2) 27.6 kV feeders supplied by Kitchener-Wilmot Hydro Inc. and Cambridge & North Dumfries Hydro Inc. WNNH also owns and operates two (2) 44 kV/8 kV rural Distribution Stations (DS's), seven (7) rural 27.6/8 kV DS's and eight (8) 27.6 kV and 13.8/4 kV urban Municipal Stations (MS's).

Voltage Conversion

The multitude of distribution voltages, a legacy from the amalgamation of five utilities in the formation of WNNH, create numerous planning, design, construction and operational challenges that increase costs and reduce efficiency. In 1989, Waterloo North Hydro and Ontario Hydro completed a supply study ("Joint Report of the Future Supply to Waterloo North Hydro", Report NO. RSP 148, April 1989) and through that work a long term plan was developed to eliminate ineffective distribution voltages. Ultimately WNNH will distribute only at 13.8 kV and 27.6 kV.

WNNH has been executing voltage conversion plans since 1989 by converting the 4 kV systems to 13.8 kV and 27.6 kV voltages to improve efficiency, reduce losses, replace end-of-life infrastructure and increase circuit capacity on existing overhead lines. Most of this infrastructure dates back to the 1960's and 1970's. In the last five years, WNNH has increased its commitment to the voltage conversions plans. Only seven (7) of the original sixteen (16) 4 kV MS's will be in service by year-end (2010), with the remaining planned for decommissioning over the next 3-5 years. The 8 kV rural distribution system is undergoing a more gradual conversion to 27.6 kV through system expansion and rebuilding of infrastructure and is likely to remain in service for another 10-20 years.

Benefits of these plans include:

- (i) Avoided equipment, building and property costs to maintain distribution substations.
- (ii) Avoided costs to replace end of life distribution substation equipment and buildings.
- (iii) Improved system efficiency (by reducing line and transformer losses).
- (iv) Improved voltage regulation.
- (v) Reduced material inventory costs.
- (vi) Increased distribution line capacity through higher voltage circuits.

(vii) Improved ability to connect distributed generation. Distribution feeder circuits at higher voltages have greater capacity and the resulting ability to accept more or larger distributed generation connections.

New Supply

Bringing new electrical supply capacity on stream is a key component in WNH's overall operation as a distributor. As previously stated, WNH has, and continues to operate, in a robust localized economy that has seen electrical demand over the last 20 years grow at over 2.5 times the provincial average. WNH reviews its system supply requirements and demand forecasts annually and adjusts the timing and need for major supply projects accordingly.

In 2003, WNH conducted a supply study indicating a need for a future 230 kV/27.6 kV transformer station (MTS #4) located in the Winterbourne area of the Township of Woolwich. Supplied by Hydro One 230kV circuits D6V and D7V, the station would have the required transmission capacity and geographic location to meet the growing 27.6 kV electrical loads on the east side of the WNH service territory for the next 20 – 30 years. Peak system demand was growing between 3.8 and 5.3% per year placing the in-service date around 2008 and within the five year Capital forecast window.

In 2006, the province hit an all time peak in electrical demand. The economy was brisk and the Region of Waterloo released an Interim Population Forecast in which the population within WNH's service territory will increase 55% by 2031. The 2007 peak demand took a downturn from record highs, however, demand was still growing between 3.7% (10 year average) and 5.3% (3 year average) per year, consistent with earlier forecasts. Provincial and Regional pressures on green field development and urban intensification began to change the relative growth rates of 13.8 kV and 27.6 kV load areas. Refinement of the supply plan placed more emphasis on the requirement for 13.8 kV supply in the downtown core and less on 27.6 kV such that the in-service date for the new MTS#4 was projected to be in the 2011 – 2012 time frame. The station was still seen as a critical component in the long term supply strategy for the east portion of WNH's service area and, thus, the work began to secure the MTS #4 property. A site was selected and a Class Environmental Assessment completed. Property procurement was completed in early in 2008.

1 The 2008 to 2010 time period has provided a number of challenges in demand forecasting.
2 WNH's own data, supported by a 2008 Bank of Montreal report "Waterloo Region & Guelph
3 Economic Update" pointed to growth in the WNH service area that would be greater than the
4 provincial and national average, however forecasted demand in 2007–2009 did not materialize.
5 Development restrictions suddenly put into place on the west side of Waterloo have held up
6 residential and commercial development in that area. In addition the economic recession,
7 unseasonably cooler summers, and new conservation and demand management initiatives all
8 contributed to the flattening of WNH's demand growth curve. Exhibit 3 Table 3-10 demonstrates
9 the growth rate in residential customers has declined in recent years and the annual usage per
10 customer is also declining, as is demonstrated in Exhibit 3 Table 3-5.

11
12 Also in 2008, WNH identified that the main transformers and associated 115 kV equipment at
13 the Eby Rush Transformer Station (ERTS) required replacement. Built in 1963, the equipment
14 required major work and an increase in size to supply the developing 13.8 kV load growth in the
15 core areas of the City of Waterloo. Along with other work to improve the reliability of the station,
16 the ERTS rebuild was approved as a multi-year project beginning in 2009. This work when
17 complete in 2010 will add 34 MW of capacity to the WNH distribution system and will help delay
18 capacity upgrades at the Howard M Scheifele Transformer Station servicing the east side of
19 Waterloo. The net result of the added capacity at ERTS will also have the impact of delaying the
20 in-service date of MTS #4. Current studies of the all time demand peak set so far in 2010,
21 conservation targets, and timing of a number of significant developments planned in the
22 proposed MTS #4 service area, push projections to commence construction of MTS # 4 in 2015.

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WATERLOO NORTH HYDRO ADMINISTRATION BUILDING AND SERVICE CENTRE

In 2007, after almost 20 years of customer growth without a major expansion to the building on Northfield Drive, WNH staff recognized that a significant shortage of building space in all parts of the business needed to be addressed. Options to meet the business needs of the utility were developed over a one year process with the assistance of consultants Totten Sims Hubicki Associates, Architects. The space needs analysis identified a need to increase gross building floor area to approximately 104,000 ft sq. This included space also considered growth needs for up to 10-15 years after construction.

The need for expansion came from all parts of the business, including fleet, stores, staffing increases and support facilities.

WNH considered four options: renovate the existing space and add new space to current building standards; renovate the existing space and add new space to Leadership in Energy Efficiency Design (LEED) standard (new space only); build a new building to current building standards; or build a new building to LEED standards.

The existing building did not lend itself well to renovations, and as well would result in negative cost and operational implications of renovating existing spaces while attempting to maintain normal business operations.

In reviewing the cost options, WNH determined that from a business perspective the costs of renovating the existing building, where one-half of the building would be 30 years old, as compared to constructing a new building, the benefits of a new building outweighed the costs. The costs of constructing a new building to LEED standards were not much higher than renovating the existing space and the benefits gained are numerous in lower operating costs and energy leadership in the community.

On August 16, 2007, the Board of Waterloo North Hydro Inc. approved the concept of a new Administration Building and Service Centre, built to LEED standards.

1 In 2009 WNH purchased thirty-five (35) acres of land. Twenty (20) acres were designated for
2 the Waterloo North Hydro Administration and Service Centre, ten acres were designated for the
3 future location of a 230 kV transformer station and five (5) acres of a naturally forested buffer
4 area were retained to protect against erosion damage on the site.

5
6 On February 19, 2009 after a qualification and tendering process, architects were selected.
7 Detailed design and costing occurred through the remainder of early 2009 and early 2010. On
8 May 27, 2010 after a pre-qualification and tendering process, the General contractor for the new
9 administration building and service centre was selected. Construction is proceeding and it is
10 scheduled for a construction completion date of October 31, 2011, followed by a one month "air
11 out" process necessary for the LEED standard, with an occupancy date of December 1, 2011.

12
13 Full details on this addition are detailed in Table 2-31.45.
14
15
16

OVERALL BUDGET PROCESS:

Capital and operating budgets are prepared annually using a bottom up approach by all levels in the organization. Each department supervisor and VP prepares and reviews their respective budgets following WNH's Strategic Imperatives, Asset Management Strategy and guidelines provided by the VP Finance & CFO. Business needs, project details, expected results and estimated annual expenditures and capital contributions are prepared for each project and program. A five-year capital forecast is prepared where multi-year and future year capital projects are identified. An annual electrical demand forecast is prepared along with a narrative on the long term supply position of the utility. Contributed Capital is calculated in accordance with the DSC and utilizes WNH's Economic Evaluation Model

The VP responsible for the area approves the initial draft of each department budget before being presented to the Finance department who then review the budgets and follow up as necessary. Once the Finance review is complete, each Supervisor and VP presents their budgets to WNH Executive. Options, alternatives, rationales and priorities are discussed and any resulting changes are then made. The CEO and the VP Finance & CFO make a final review and present the budgets to WNH's Board of Directors for discussion and approval. Once approved, the capital projects and operating programs are executed. The status of projects and programs for the current budget year is reviewable in the ERP (Enterprise Resources Planning) and the Budget module software system throughout the year.

Responsibilities

Budget Responsibilities are as follows:

- Finance Department coordinates the development of the capital budget and forecast processes.
- Engineering department prepares supply and load demand forecasts.
- Each department prepares their own capital and operating budgets.
- WNH's President & CEO and the VP of Finance & CFO approve the capital and operating budgets before they are presented to the Board of Directors.
- The President & CEO, with assistance from the VP of Finance & CFO, present and recommend the budgets to the Board of Directors for approval.

- The Board of Directors, on behalf of the shareholders review and approve the capital and operating budgets.

ACTIVITY DRIVERS

WNN's capital expenditures budget is prepared using two categories of activity drivers that are used consistently each year. The OEB account structure is built within the ERP System. The main categories used by WNN Hydro are:

Category One of Activity Drivers:

1. System Expansion
2. System Enhancement
3. Plant Relocation
4. Requests for Connection
5. Information Technology and Communication
6. Rolling Stock

1. System Expansion:

The drivers of System Expansion include:

System Expansion to Supply New Development

Transformer Stations

WNN is supplied primarily through the IESO controlled, Hydro One Transmission System at transmission voltages of 115 kV and 230 kV. WNN owns and operates three (3) transmission grid connected Transformer Stations (TS's) operating at 115 kV - 13.8 kV, 230 kV - 27.6 kV and 230 kV - 13.8 kV. Expenditures made in this category are due to a need to increase capacity to meet growth in demand. Such needs are normally identified through system supply planning activities.

The implications of not taking proper actions and improving equipment capacity or condition as required, could result in the inability to supply power to customers, damage to equipment, increased safety hazards to workers, unreliable or mis-operation of equipment, explosive equipment failure and breach of requirements set out in the Transmission System Code.

1 **Overhead Distribution System**

2 This category includes expenditures for the addition of new overhead feeder assets required to
3 provide service to new customers in areas not previously serviced, and to previously serviced
4 areas to increase capacity where load density has increased.

5
6 Normally projects are identified through the system planning process which include monitoring
7 and analyzing commercial activities, station and feeder peak loading, municipal development
8 activities, developer activities and land development activities.

9
10 WNH is located in a region of moderately high growth. As these projects are driven by the level
11 of economic activity in our area, expenditures may vary from year to year.

12
13 Not proceeding with this customer requested work would result in refusal of connection of new
14 customers or overloading of existing lines, both of which are detrimental to WNH and its
15 customers. This spending is customer driven.

16
17
18 **Underground Distribution System**

19 This category includes expenditures for the addition of new underground feeder assets required
20 to provide service to new customers in areas not previously serviced and to previously serviced
21 areas to increase capacity where load density has increased. Normally projects are identified
22 through system planning activities which include monitoring and analyzing commercial
23 activities, station and feeder peak loading, municipal development activities, developer activities
24 and land development activities. WNH is located in a region of moderately high growth. As
25 these activities are driven by the level of economic activity in our area, projects do not always
26 follow anticipated timelines and as such are not always known at the time of budget
27 development resulting in expenditures that can vary from year to year.

28
29 Not proceeding with this customer requested work would result in refusal of connection of new
30 customers or overloading of existing lines, both of which are detrimental to WNH and its
31 customers. This spending is customer driven.

1 **Subdivisions**

2 Underground Residential Subdivisions (URD) are capital expansions to the WNH distribution
3 system driven solely by customer demand. In accordance with the Distribution System Code,
4 WNH performs an economic evaluation for each project and provides the developer with an
5 offer to connect. Developers that meet WNH's Conditions of Service and provide the necessary
6 financial commitments are connected. Total expenditures vary with the level of economic activity
7 in WNH's service area.

8
9 This spending is customer driven. The consequences of not proceeding would result in WNH
10 being in conflict with the Distribution System Code and municipal development objectives.

11
12 **Land**

13 The acquisition of land for the purposes of a future Transformer Station and Administration
14 Building and Service Centre site would be reflected as a System Expansion.

15
16 **Meters**

17 The installation of Smart Meters at WNH for residential customers and commercial customers
18 <50 kW is as a result of the Ontario Ministry of Energy's instructions as set forth in Section 2,
19 Procurement, of Ontario Regulation 427/06 made under the Electricity Act, 1998 (and as
20 amended), entitled: Smart Meters: Discretionary Metering Activity and Procurement Principles.
21 As part of the Provincial Smart Metering Initiative - Phase 2 RFP led by London Hydro, WNH
22 has selected and deployed the Sensus Flexnet Smart Metering Infrastructure. The costs for
23 Smart Meters are not included in the rate base for this filing, however, are captured in Deferral
24 account 1555.

25
26 WNH is required under the federal Electricity and Gas Inspection Act to use approved Revenue
27 Metering Equipment for the purpose of establishing the basis of a charge for the supply of
28 electricity to its customers. WNH meets this requirement for its commercial and industrial
29 customers (C&I > 50 kW) by purchasing Measurement Canada approved meters, instrument
30 transformers and other related equipment. Activity in this work program is driven by new C&I
31 customers, obsolescence of equipment and equipment failure. This activity is mandated.

32
33 Meters are capitalized as they are purchased.
34
35

2. System Enhancement

The drivers of System Enhancement include:

Replacement/Upgrades Due to Age/Condition

Transformer Stations

WNH is supplied primarily through the IESO controlled, Hydro One Transmission System at transmission voltages of 115 kV and 230kV. WNH owns and operates three (3) transmission grid connected Transformer Stations (TS's) operating at 115kV - 13.8kV, 230kV - 27.6kV and 230kV - 13.8kV. Expenditures made in this category are due to one of the following reasons:

- the equipment requires replacement or a major refurbishment due to its condition. In such cases, regular maintenance will not address the problem nor is it cost effective. This is normally identified as a result of a variety of regularly scheduled testing and maintenance activities.
- the equipment needs to be replaced due to obsolescence. Such needs are typically identified through the inability to source replacement components.
- the equipment needs to be updated to meet regulatory requirements (Transmission System Code, Market Rules, etc.)

Where at all possible, projects are scheduled such that one project can satisfy more than one need. Projects being captured in this category include new or major refurbishments to existing switches or breakers, transformers, switchgear, protection and control systems, structural support systems, or environmental protection systems.

The implications, of not taking proper actions and improving equipment capacity or condition as required, could result in the inability to supply power to customers, damage to equipment, increased safety hazards to workers, unreliable or mis-operation of equipment, explosive equipment failure and breach of requirements set out in the Transmission System Code.

1 **Overhead Distribution System**

2 Waterloo North Hydro (WNH) has a population of approximately 21,000 overhead line poles.
3 WNH recognizes that the condition of these assets deteriorate over time and takes a proactive
4 approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle
5 (rural), 3 year cycle (urban) and test all poles over 25 years of age. Asset information is stored
6 and analyzed with the help of WNH's Geographic Information System (GIS). Projects are
7 prioritized using condition assessment data, asset age, reliability, supply and safety
8 considerations. Where possible, depreciated line replacements are combined with voltage
9 conversions or feeder capacity upgrades / additions.

10
11 Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to
12 extend pole life. Overhead lines are replaced when alternatives such as maintenance or
13 rehabilitation are not possible or cost effective. The consequences of not proceeding would be
14 to allow the condition of these assets to deteriorate into a state negatively impacting public
15 safety and/or system reliability. There would also be an increase in reactive maintenance costs.

16
17 **Underground Distribution System**

18 This category includes expenditures for the replacement of underground distribution feeder
19 assets. Underground distribution is replaced when alternatives such as maintenance or
20 rehabilitation are not possible or cost effective. Cable rehabilitation has been explored, however,
21 it has not yet been found to be cost effective in our URD applications. WNH has three (3)
22 distinct populations of Underground Distribution, most of which is underground residential
23 distribution (URD).

24
25 1) WNH's first generation of underground distribution was a 4 kV system installed in the early
26 1960's and through to the end of the 1970's. The majority of activity in this area has been, and
27 continues to be, the replacement of these 40 to 50 year old assets with new higher voltage
28 distribution. Improved reliability, efficiency and safety are being achieved by retiring the 4 kV
29 distribution system.

30
31 2) WNH's second generation of underground distribution began in the early 1980's with a 15kV
32 system. Currently the failure rate of the 15 kV underground distribution system is relatively low
33 and it is being replaced only as it fails. WNH continues to monitor the performance of these
34 assets and, as they deteriorate, will need to ramp up expenditures for their replacement in
35 subsequent years.

3) WNH's third generation of underground distribution began around 2000 with a 27 kV system. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years.

The consequences of not proceeding with replacement as noted above would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability. Maintenance costs would also increase as a result of the higher cable splicing and civil restoration.

3. Plant Relocation

This category includes expenditures to relocate/replace pole line assets that conflict with roadway construction activities. The level of spending is driven by the activities of the road authorities and specific projects are rarely known at the time that the budget is developed. Total expenditures can vary greatly from year to year and reimbursement is normally limited to 50% of labour and labour saving devices.

There are no alternatives to these activities. These expenditures are not discretionary as compliance is mandated by the Public Service Works on Highways Act, R.S.O. 1990

4. Request for Connections

This category includes expenditures for the connection costs to service new large commercial and industrial customers. Also captured here are the costs to upgrade the capacity of existing services. The cost per service can vary widely with the nature and capacity of each service request. Total expenditures vary with the level of economic activity in the WNH service area.

There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.

5. Information Technology and Communication

This budget category includes the items charged to Computer Hardware (1920), Computer Software (1925) and Communications Equipment (1955) and System Supervisory Equipment (1980). Expenditures on information technology are generally the result of one of the following drivers:

a) Computer Hardware – New

This category provides funding for the expansion of our computer hardware resources.

b) Computer Hardware - Replacements

This category provides funding for renewal of existing computer hardware that has reached the end of its useful life.

c) Computer Software

This category provides funding for the purchase and enhancement of computer software, both new and upgrades. WNH also has programmers that write custom software applications where off-the-shelf applications are not readily available or do not have the required functionality.

d) Communications Equipment

WNH owns and operates a variety of communications equipment including a mobile radio system and an internal telephone system. This category provides the funding for necessary upgrades to expand capabilities and to replace obsolete hardware and software.

e) System Supervisory Equipment

WNH monitors and controls its transformer stations and some distribution switches via a Supervisory Control and Data Acquisition (SCADA) system. This category provides the funding for necessary upgrades to expand capabilities and to replace obsolete hardware and software.

1 **f) Geographic Information System (GIS)**

2
3 In 2005 WNH began implementing an ESRI Geographic Information System (GIS) to
4 support its business operations, the first ever at WNH. GIS integrates hardware,
5 software, and data for capturing, managing, analyzing, and displaying asset and
6 customer information. GIS provides critical tools to organize information and knowledge
7 about assets in the field, to help make informed decisions, improve communications and
8 increase efficiency of work processes. From its inception, much work has been
9 performed in transferring paper based asset data into the GIS data base. WNH currently
10 uses its GIS to assist with engineering design, asset management, supply planning,
11 outage planning and budgeting processes. Data types currently maintained are asset
12 type, quantity, condition, location, and results of inspection and maintenance programs.
13 The GIS is regularly updated and expanded as new assets are installed, as with new
14 construction, or as assets are replaced, and is also updated as new analytical tools are
15 needed. Long term plans will integrate the GIS with other enterprise information systems
16 such as outage management, SCADA, Operational Data System (ODS) and engineering
17 analysis tools to provide faster, more efficient analysis and response to power system
18 operational issues.

19
20 The consequences of not proceeding would be to maintain asset information in paper
21 based formats that are difficult and inefficient to maintain. These formats also do not
22 support the increased asset analysis and reporting required for current asset
23 management and regulatory compliance.

24
25 **6. Rolling Stock**

26
27 This budget category includes the items charged to Transportation Equipment (1930) and Tools
28 and Garage Equipment (1940). These accounts capture purchases of new and replacement
29 vehicles and equipment as well as expenditures for major rebuilds that extend the useful service
30 life of vehicles and equipment. These expenditures are required to ensure that our equipment
31 and fleet remains in excellent condition for serving the need of our customers and to allow the
32 fleet to be expanded to provide service to an expanding customer base.

Category Two of Activity Drivers:

In addition to the Category One Activity Drivers as described above, WNH tracks its capital expenditures on a more granular level, by Projects. This further breakdown of the tracking allows WNH to assess the level and the nature of spending. As the Project Number is carried from year to year, comparison of spending by year is readily available. The list of projects used for tracking purposes is listed in Table 2-2 below.

**Table 2-2
Project Listing**

Project #	Project Description
06BL01	Furniture & Equipment Billing
06CA01	Furniture & Equipment Customer Service
06CE01	Furniture & Equipment Administration
06EN01	Furniture & Equipment Engineering
06EN02	Land
06EN03	Land Rights
06EN04	Overhead - Rebuild Lines
06EN05	Overhead - Relocate Lines
06EN06	Overhead - New Feeders
06EN07	Overhead - New Services
06EN08	Underground - New Feeders
06EN09	Underground - Cable Replacement
06EN10	Underground - Residential Subdivisions
06EN11	Underground - New Services
06EN12	Capital Contributions
06EN13	GIS - Mapping
06FL01	Furniture & Equipment Fleet
06FL02	Vehicles
06FN01	Furniture & Equipment Finance
06FN02	Communications Equipment - Finance
06GM01	Furniture & Equipment - General Maintenance
06GM02	Service Centre
06LP01	Furniture & Equipment Health, Safety & Environment
06MT01	Meters - Residential
06MT02	Meters - Commercial
06MT03	Meters - Wholesale
06MT04	Furniture & Equipment Metering
06OA01	Furniture & Equipment Operations
06OH01	Operations Overhead Capital
06PS01	Furniture & Equipment Purchasing/Stores
06SN01	MS Building Upgrade
06SN02	TS Building Upgrade
06SN03	MS Equipment Upgrade
06SN04	TS Equipment Upgrade
06SN05	SCADA Equipment
06SN06	Communications Equipment - SCADA
06SN07	Furniture & Equipment Stations
06SN08	MS/DS Disposal Costs
06SS01	Furniture & Equipment System Support
06SS02	Systems Hardware
06SS03	Systems Software
07CL01	Communications Equipment
07EN15	Engineering Computer Hardware
07EN16	Engineering Computer Software
07OU01	Operations Underground Capital
08MT05	Smart Meters
09GM03	New Service Centre Costs

CAPITAL EXPENDITURES OVERVIEW

These schedules shows WNH's actual capital expenditures and contributed capital by year from 2004 through 2009 and forecast capital expenditures and contributed capital for the years 2010 through to 2013 in Tables 2-3 through 2-11 by OEB account. In each year exclusions have been made for work-in-progress (WIP), showing the change that resulted to the actual rate base.

Capital expenditures, in general, have increased year over year; however, capital expenditures for the years 2006, 2008, 2009 and 2010 (USoA 1808 and 1815) were higher than other years mostly due to the refurbishment of transformer stations. In 2011 the increase in USoA 1808 is primarily attributable to the New Administration Building and Service Centre that WNH is constructing.

It should be noted that the Smart Meter Initiative has been excluded from this analysis. Although WNH invested significant dollars on this initiative in 2009 and 2010, the amounts spent will be transferred to the variance account 1555 – Smart Meter Capital until completion of all Smart Meter installs and WNH submits an application to the Board for Smart Meter cost recovery.

WNH collects Contributions in Aid of Capital Expansions and Connections (Contributed Capital) in compliance with the provisions in the Distribution System Code and the utility's Conditions of Service filed with the Board in June, 2009. Contributed Capital included in the 2010 Bridge Year and 2011 Test Year has been calculated as a result of the use of WNH's Economic Evaluation Model.

Contributed Capital is considered a source of working capital thus reducing the overall cash required to fund WNH's capital expenditure programs

Contributions are tracked in the OEB account to which the contribution relates and its balances are a direct reduction of rate base. Historical Contributed Capital balances are detailed by USoA for the years 2004-2009 in Table 2-23.

Table 2-3
2004 Capital Expenditures

USoA	Description	Change to Rate Base
		2004
1805	Land	-
1806	Land Rights	10,642
1808	Building and Fixtures	215,152
1815	Transformer Station Equipment	219,039
1820	Distribution System Equipment	46,951
1830	OH - Poles, Towers and Fixtures	2,159,591
1835	OH - Conductors and Devices	925,409
1840	UG - Conduit	448,120
1845	UG - Conductors and Devices	1,727,618
1850	Line Transformers	2,299,758
1855	Services	785,284
1860	Meters	712,830
1915	Office Equipment	31,822
1920	Computer Hardware	193,156
1925	Computer Software	435,360
1930	Transportation Equipment	389,488
1935	Stores Equipment	-
1940	Tools, Shop and Garage Equipment	60,789
1945	Measurement and Testing Equipment	7,317
1955	Communication Equipment	49,174
1960	Miscellaneous Equipment	2,122
1980	System Supervisory Equipment	64,304
1995	Contributed Capital	(4,452,189)
CAPITAL EXPENDITURES		6,331,739

Table 2-4
2005 Capital Expenditures

USoA	Description	Change to Rate Base
		2005
1805	Land	-
1806	Land Rights	5,416
1808	Building and Fixtures	138,803
1815	Transformer Station Equipment	5,048
1820	Distribution System Equipment	-
1830	OH - Poles, Towers and Fixtures	1,621,188
1835	OH - Conductors and Devices	1,239,506
1840	UG - Conduit	382,389
1845	UG - Conductors and Devices	1,201,356
1850	Line Transformers	2,078,638
1855	Services	834,470
1860	Meters	408,278
1915	Office Equipment	55,241
1920	Computer Hardware	500,413
1925	Computer Software	515,715
1930	Transportation Equipment	422,328
1935	Stores Equipment	1,782
1940	Tools, Shop and Garage Equipment	41,179
1945	Measurement and Testing Equipment	31,867
1955	Communication Equipment	6,376
1960	Miscellaneous Equipment	45,143
1980	System Supervisory Equipment	42,456
1995	Contributed Capital	(2,442,209)
CAPITAL EXPENDITURES		7,135,384

Table 2-5
2006 Capital Expenditures

USoA	Description	Actual	WIP	WIP	Change to Rate Base
		2006	Year End 2005	Year End 2006	2006
1805	Land	17,783	-	-	17,783
1806	Land Rights	6,455	-	-	6,455
1808	Building and Fixtures	937,824	-	(18,203)	919,621
1815	Transformer Station Equipment	1,971,344	-	(18,379)	1,952,965
1820	Distribution System Equipment	502,762	-	-	502,762
1830	OH - Poles, Towers and Fixtures	2,412,721	-	(1,131,754)	1,280,967
1835	OH - Conductors and Devices	1,327,003	-	(615,328)	711,675
1840	UG - Conduit	690,436	-	(109,316)	581,120
1845	UG - Conductors and Devices	1,568,801	-	(208,990)	1,359,811
1850	Line Transformers	2,334,236	-	(515,218)	1,819,018
1855	Services	808,838	-	-	808,838
1860	Meters	(72,097)	5,128	(91,328)	(158,297)
1915	Office Equipment	113,142	-	-	113,142
1920	Computer Hardware	145,409	-	(642)	144,767
1925	Computer Software	405,911	-	-	405,911
1930	Transportation Equipment	523,360	-	(262,928)	260,432
1935	Stores Equipment	-	-	-	-
1940	Tools, Shop and Garage Equipment	-	-	-	-
1945	Measurement and Testing Equipment	29,230	-	-	29,230
1955	Communication Equipment	17,942	-	-	17,942
1960	Miscellaneous Equipment	8,611	-	(7,444)	1,167
1980	System Supervisory Equipment	85,994	-	(4,418)	81,576
1995	Contributed Capital	(2,156,723)	-	-	(2,156,723)
CAPITAL EXPENDITURES		11,678,980	5,128	(2,983,947)	8,700,162

Table 2-6
2007 Capital Expenditures

USoA	Description	Actual	WIP	WIP	Change to Rate Base
		2007	Year End 2006	Year End 2007	2007
1805	Land	-	-	-	-
1806	Land Rights	90,888	-	-	90,888
1808	Building and Fixtures	646,561	18,203	-	664,764
1815	Transformer Station Equipment	(30,544)	18,379	-	(12,165)
1820	Distribution System Equipment	11,114	-	-	11,114
1830	OH - Poles, Towers and Fixtures	3,475,886	1,131,754	-	4,607,640
1835	OH - Conductors and Devices	1,864,804	615,328	-	2,480,132
1840	UG - Conduit	702,850	109,316	-	812,166
1845	UG - Conductors and Devices	989,921	208,990	-	1,198,911
1850	Line Transformers	1,657,998	515,218	-	2,173,216
1855	Services	854,591	-	-	854,591
1860	Meters	356,804	91,328	-	448,132
1915	Office Equipment	54,173	-	-	54,173
1920	Computer Hardware	159,842	642	-	160,484
1925	Computer Software	333,495	-	-	333,495
1930	Transportation Equipment	453,245	262,928	-	716,173
1935	Stores Equipment	-	-	-	-
1940	Tools, Shop and Garage Equipment	17,337	-	-	17,337
1945	Measurement and Testing Equipment	13,367	-	-	13,367
1955	Communication Equipment	47,680	-	-	47,680
1960	Miscellaneous Equipment	58,930	7,444	-	66,374
1980	System Supervisory Equipment	27,303	4,418	-	31,721
1995	Contributed Capital	(1,682,172)	-	-	(1,682,172)
CAPITAL EXPENDITURES		10,104,075	2,983,947	-	13,088,021

Table 2-7
2008 Capital Expenditures

USoA	Description	Actual	WIP	WIP	Change to Rate Base
		2008	Year End 2007	Year End 2008	2008
1805	Land	248,399	-	-	248,399
1806	Land Rights	35,659	-	-	35,659
1808	Building and Fixtures	124,665	-	(118,913)	5,752
1815	Transformer Station Equipment	778,737	-	-	778,737
1820	Distribution System Equipment	35,856	-	-	35,856
1830	OH - Poles, Towers and Fixtures	3,781,556	-	(407,665)	3,373,891
1835	OH - Conductors and Devices	2,096,102	-	(220,748)	1,875,354
1840	UG - Conduit	262,011	-	(51,790)	210,221
1845	UG - Conductors and Devices	1,690,354	-	(122,174)	1,568,180
1850	Line Transformers	2,645,280	-	(262,750)	2,382,530
1855	Services	1,282,845	-	(22,689)	1,260,156
1860	Meters	377,224	-	(10,161)	367,063
1915	Office Equipment	7,050	-	-	7,050
1920	Computer Hardware	91,002	-	-	91,002
1925	Computer Software	231,044	-	-	231,044
1930	Transportation Equipment	316,057	-	-	316,057
1935	Stores Equipment	99,191	-	-	99,191
1940	Tools, Shop and Garage Equipment	114,754	-	-	114,754
1945	Measurement and Testing Equipment	14,066	-	-	14,066
1955	Communication Equipment	216,739	-	-	216,739
1960	Miscellaneous Equipment	25,550	-	-	25,550
1980	System Supervisory Equipment	-	-	-	-
1995	Contributed Capital	(1,993,133)	-	-	(1,993,133)
CAPITAL EXPENDITURES		12,481,008	-	(1,216,890)	11,264,118

Table 2-8
2009 Capital Expenditures

USoA	Description	Actual	WIP	WIP	Change to Rate Base
		2009	Year End 2008	Year End 2009	2009
1805	Land	1,948,075	-	(1,948,075)	-
1806	Land Rights	15,448	-	-	15,448
1808	Building and Fixtures	915,436	118,913	(991,502)	42,847
1815	Transformer Station Equipment	2,218,932	-	(1,571,727)	647,205
1820	Distribution System Equipment	31,527	-	-	31,527
1830	OH - Poles, Towers and Fixtures	4,190,522	407,665	(444,819)	4,153,368
1835	OH - Conductors and Devices	2,301,807	220,748	(242,834)	2,279,721
1840	UG - Conduit	540,071	51,790	(106,060)	485,801
1845	UG - Conductors and Devices	1,463,778	122,174	(461,113)	1,124,839
1850	Line Transformers	3,537,938	262,750	(229,998)	3,570,690
1855	Services	1,238,340	22,689	20,258	1,281,287
1860	Meters	229,984	10,161	-	240,145
1915	Office Equipment	18,821	-	-	18,821
1920	Computer Hardware	152,428	-	-	152,428
1925	Computer Software	582,457	-	(2,608)	579,849
1930	Transportation Equipment	938,157	-	(139,072)	799,085
1935	Stores Equipment	2,811	-	-	2,811
1940	Tools, Shop and Garage Equipment	46,535	-	(21,118)	25,417
1945	Measurement and Testing Equipment	33,434	-	-	33,434
1955	Communication Equipment	74,139	-	-	74,139
1960	Miscellaneous Equipment	11,983	-	-	11,983
1980	System Supervisory Equipment	447,524	-	(12,827)	434,697
1995	Contributed Capital	(1,779,037)	-	-	(1,779,037)
CAPITAL EXPENDITURES		19,161,112	1,216,890	(6,151,497)	14,226,505

Table 2-9
2010 Capital Expenditures

USoA	Description	Actual	WIP	WIP	Change to Rate Base
		2010	Year End 2009	Year End 2010	2010
1805	Land	-	1,948,075	(1,948,075)	(0)
1806	Land Rights	15,805	-	-	15,805
1808	Building and Fixtures	11,149,992	991,502	(10,852,492)	1,289,002
1815	Transformer Station Equipment	4,064,407	1,571,727	-	5,636,134
1820	Distribution System Equipment	59,882	-	-	59,882
1830	OH - Poles, Towers and Fixtures	4,087,212	444,819	(239,310)	4,292,721
1835	OH - Conductors and Devices	2,421,466	242,834	(126,036)	2,538,264
1840	UG - Conduit	598,844	106,060	(76,301)	628,603
1845	UG - Conductors and Devices	2,615,643	461,113	(146,297)	2,930,459
1850	Line Transformers	2,821,973	229,998	(185,878)	2,866,093
1855	Services	1,834,948	(20,258)	-	1,814,690
1860	Meters	386,860	-	-	386,860
1915	Office Equipment	6,500	-	-	6,500
1920	Computer Hardware	137,339	-	-	137,339
1925	Computer Software	626,875	2,608	-	629,483
1930	Transportation Equipment	492,671	139,072	-	631,743
1935	Stores Equipment	-	-	-	-
1940	Tools, Shop and Garage Equipment	166,770	21,118	-	187,888
1945	Measurement and Testing Equipment	16,600	-	-	16,600
1955	Communication Equipment	-	-	-	-
1960	Miscellaneous Equipment	-	-	-	-
1980	System Supervisory Equipment	221,905	12,827	(87,273)	147,459
1995	Contributed Capital	(1,818,299)	-	-	(1,818,299)
CAPITAL EXPENDITURES		29,907,392	6,151,497	(13,661,662)	22,397,227

Table 2-10
2011 Capital Expenditures

USoA	Description	Actual	WIP	WIP	Change to
		2011	Year End 2010	Year End 2011	Rate Base 2011
1805	Land	89,925	1,948,075	-	2,038,000
1806	Land Rights	16,350	-	-	16,350
1808	Building and Fixtures	11,945,625	10,852,492	-	22,798,117
1815	Transformer Station Equipment	265,871	-	-	265,871
1820	Distribution System Equipment	15,171	-	-	15,171
1830	OH - Poles, Towers and Fixtures	4,594,638	239,310	(555,447)	4,278,501
1835	OH - Conductors and Devices	3,127,193	126,036	(299,942)	2,953,287
1840	UG - Conduit	743,761	76,301	-	820,062
1845	UG - Conductors and Devices	2,609,612	146,297	(7,547)	2,748,362
1850	Line Transformers	4,323,985	185,878	(256,197)	4,253,666
1855	Services	676,804	-	-	676,804
1860	Meters	315,250	-	-	315,250
1915	Office Equipment	1,710,204	-	-	1,710,204
1920	Computer Hardware	349,544	-	-	349,544
1925	Computer Software	647,615	-	-	647,615
1930	Transportation Equipment	680,468	-	(110,000)	570,468
1935	Stores Equipment	53,500	-	-	53,500
1940	Tools, Shop and Garage Equipment	162,037	-	-	162,037
1945	Measurement and Testing Equipment	115,278	-	-	115,278
1955	Communication Equipment	-	-	-	-
1960	Miscellaneous Equipment	-	-	-	-
1980	System Supervisory Equipment	961,159	87,273	-	1,048,432
1995	Contributed Capital	(2,142,609)	-	-	(2,142,609)
CAPITAL EXPENDITURES		31,261,380	13,661,662	(1,229,133)	43,693,910

Table 2-11
2012 – 2013 Forecast Capital Expenditures

USoA	Description	Forecast	Forecast
		2012	2013
1805	Land	12,500	5,000
1806	Land Rights	16,000	16,000
1808	Building and Fixtures	15,000	15,000
1815	Transformer Station Equipment	900,000	600,000
1820	Distribution System Equipment	2,000	2,000
1830	OH - Poles, Towers and Fixtures	3,904,000	3,904,000
1835	OH - Conductors and Devices	2,050,750	2,050,750
1840	UG - Conduit	480,000	350,000
1845	UG - Conductors and Devices	1,229,000	1,008,000
1850	Line Transformers	3,058,250	2,759,250
1855	Services	503,000	503,000
1860	Meters	500,000	500,000
1915	Office Equipment	7,500	7,500
1920	Computer Hardware	280,000	200,000
1925	Computer Software	875,000	680,000
1930	Transportation Equipment	607,500	562,500
1935	Stores Equipment	-	-
1940	Tools, Shop and Garage Equipment	180,000	180,000
1945	Measurement and Testing Equipment	80,000	10,000
1955	Communication Equipment	-	-
1960	Miscellaneous Equipment	-	-
1980	System Supervisory Equipment	450,000	250,000
1995	Contributed Capital	(1,825,000)	(1,825,000)
CAPITAL EXPENDITURES		13,325,500	11,778,000

MANAGER'S SUMMARY – FIXED ASSETS AND RATE BASE:

WNH utilizes the OEB USoA for recording and grouping its assets. The net fixed assets include only those distribution assets that are associated with activities that enable the conveyance of electricity for distribution purposes. The WNH rate base calculation excludes any non-distribution assets.

WNH uses the following accounts (with written descriptions) in the calculation of its net fixed assets:

Distribution Plant

1805 - Land

This account is used to record the numerous land deeds held by WNH, including land for network vaults, distribution stations, service centre and transformer stations. In WNH's financial system, costs are separated for each land holding by asset number (individually assigned asset number within the capital asset system).

1806 - Land Rights

This account is used to record easement land rights. In WNH's financial system, costs are separated for each land right purchased by asset number.

1808 - Buildings & Fixtures

This account is used to record buildings owned by WNH including the main service centre which houses all employees, twenty-two distribution station buildings, three transformer stations and the administration and service centre building. In WNH's financial system, costs are separated for each building by asset number.

1815 - Transformer Station Equipment – Normally Primary Above 50 kV

This account is used to record the installed cost of transformer station equipment in each of WNH's three transformer stations. In WNH's financial system, costs are separated for each transformer station by asset number. WNH's transformer stations were deemed as distribution assets in its 2006 Electricity Distribution Rate Order (EB-2005-0448).

1 *1820 - Distribution Station Equipment – Normally Primary below 50 kV*

2 This account is used to record the installed cost of equipment in each of WNH's twenty-two
3 distribution stations, plus a portable mobile substation. In WNH's financial system, costs are
4 separated for each distribution station by asset number.

6 *1830 - Poles, Towers and Fixtures*

7 This account is used to record the installed cost of poles, towers, and fixtures used for
8 supporting overhead distribution conductors and service wires in accordance with the example
9 items from the Accounting Procedures Handbook issued by the OEB. WNH has approximately
10 21,063 poles within its service territory.

12 *1835 - Overhead Conductors and Devices*

13 This account is used to record the installed cost of overhead conductors and devices used for
14 distribution purposes in accordance with the example items from the Accounting Procedures
15 Handbook issued by the OEB. WNH has 1,059 kilometers of overhead line within its service
16 territory.

18 *1840 - Underground Conduit*

19 This account is used to record the installed cost of underground conduit and ductbanks used for
20 housing distribution cables or wires in accordance with the example items from the Accounting
21 Procedures Handbook issued by the OEB. WNH has approximately 482 kilometers of occupied
22 underground conduit within its service territory.

24 *1845 - Underground Conductors and Devices*

25 This account is used to record the installed cost of underground conductors and devices used
26 for distribution purposes in accordance with the example items from the Accounting Procedures
27 Handbook issued by the OEB.

1850 - Distribution Transformers

This account is used to record the installed cost of overhead and underground distribution line transformers and distribution line voltage regulators for use in transforming electricity to the voltage at which it is to be used by the customer in accordance with the example items from the Accounting Procedures Handbook issued by the OEB. WNH has approximately 7,513 distribution transformers within its service territory. In WNH's financial system, costs are recorded by annual additions and also segregated by overhead and underground.

1855 - Services

This account is used to record the installed cost of overhead and underground services in accordance with the example items from the Accounting Procedures Handbook issued by the OEB. In WNH's financial system, costs are separated by service type (overhead or underground) and are also segregated by Residential and Commercial with a unique asset number for each category.

1860 - Meters

This account is used to record the installed cost of traditional meters (excluding Smart Meters). In WNH's metering sub-system, meters are identified by type, capacity and function.

General Plant

1915 - Office Furniture and Equipment

This account contains the cost of general office furniture and equipment. In WNH's financial system, the items in this account are considered identifiable assets and each has a unique asset number.

1920 - Computer Equipment Hardware

This account contains the cost of all computer hardware purchased. In WNH's financial system, the items in this account are considered identifiable assets and each has a unique asset number.

1925 - Computer Software

This account contains the installed cost of all computer software purchased or developed in-house. In WNH's financial system, the items in this account are considered identifiable assets and each has a unique asset number.

1 *1930 - Transportation Equipment*

2 This account contains the cost of all vehicles owned by WNH. There are currently 55 vehicles in
3 the fleet with no plans to increase the number of vehicles by 2011, however replacement of
4 vehicles that have reached end of useful life will continue. The items in this account are
5 considered identifiable assets and each has a unique asset number.

7 *1935 - Stores Equipment*

8 This account contains the cost of equipment used in WNH's warehouse for shipping, receiving,
9 handling and storage of materials. In WNH's financial system, the items in this account are
10 considered identifiable assets and each has a unique asset number.

12 *1940 - Tools, Shop and Garage Equipment*

13 This account contains the cost of all tools and non-power equipment purchased by WNH in
14 accordance with the example items from the Accounting Procedures Handbook issued by the
15 OEB. In WNH's financial system, the items in this account are considered identifiable assets
16 and each has a unique asset number.

18 *1945 - Measurement and Testing Equipment*

19 This account contains the cost of all measurement and testing equipment purchased by WNH in
20 accordance with the example items from the Accounting Procedures Handbook issued by the
21 OEB. In WNH's financial system, the items in this account are considered identifiable assets
22 and each has a unique asset number.

24 *1955 - Communication Equipment*

25 This account contains the cost of all communication equipment purchased by WNH. In WNH's
26 financial system, the items in this account are consider identifiable assets and each has a
27 unique asset number.

29 *1960 - Miscellaneous Equipment*

30 This account contains the cost of all equipment of a capital nature purchased by WNH that is
31 not included in the other accounts. In WNH's financial system, the items in this account are
32 considered identifiable assets and each has a unique asset number.

1 *1980 - System Supervisory Equipment*

2 This account contains the cost of all Supervisory Control and Data Acquisition (SCADA)
3 equipment used by WNH. In WNH's financial system, the items in this account are considered
4 identifiable assets and each has a unique asset number.

6 *1995 – Contributions and Grants*

7 This account includes amounts relating to contribution or grants in cash, services or property
8 from government or government agencies, corporations, individuals and others received in aid
9 of construction or for acquisition of fixed assets (contributed capital). In WNH's financial system
10 separate records are kept as to the identity of the project and the contributor.

12 **Work in Progress**

14 For Work-In-Progress (WIP), WNH transfers assets from WIP to capital when the project is
15 substantially complete and in-service, or, in the case of a transformer station, at the point at
16 which the station is energized. WNH does not apply carrying charges to its WIP. For the
17 estimation of WIP balances (account 2055) at the end of the 2010 Bridge and 2011 Test years,
18 WNH used the following methodology:

- 20 • Calculated the historical average balances of WIP on its books, excluding WIP balances
21 for transformer stations and unusual items.
- 22 • Analyze special projects to estimate their completion dates. Projects that were not
23 expected to be completed within the budget year were identified and year-end WIP
24 balances for those projects calculated.
- 25 • The historical average balance and the calculated special project balances were then
26 added together to estimate a reasonable year-end WIP total.

28 This methodology applies to the items that would be transferred to the appropriate USoA
29 account upon capitalization.

Capitalization of Interest

WNH, to date, has not capitalized interest costs where capital assets are financed internally from working capital. However, with the construction of WNH's new Administration Building and Service Centre, WNH will commence capitalizing interest on this building. Interest capitalization will commence in August 2010 and continue until December 2011. Details of interest capitalization are shown in Table 2-31-45.

WNH's Work Order System

WNH's general ledger is work order driven. For capital work that is to be completed, work orders are issued with a unique numeric identifier description through WNH's Sungard Public Sector work order system. Some work orders are "standard" or "standing", which means that they continue from year to year. Other work orders are "special", which means that they are taken out for a specific purpose when needed.

All capital work orders are attached to a project and to accounts, and they are categorized according to the work that is being performed. Within WIP, each project has a specific work order which has the OEB capital accounts attached. Upon project completion, the work order cost is transferred from the WIP account to the corresponding asset account on the balance sheet.

WNH capitalizes all of its Engineering costs. The Engineering cost center is allocated to capital work orders based on an Engineering Overhead charge of 9% of total project cost. Overhead allocation rates are reviewed annually to ensure cost accuracy in its application.

Assumptions

For each year, WNH assumed increases to the following factors when estimating its capital costs:

2010

3% general economic wage increase in direct labour costs effective April 1, 2010.

Statutory increases in CPP, EI, EHT and WSIB.

Increase in OMERS reflecting recently increased rates.

General Inflation on non-labour expenses of 1.3%.

2011

3% general economic wage increase in direct labour costs effective April 1, 2011.

Statutory increases in CPP, EI, EHT and WSIB.

Increase in OMERS reflecting recently increased rates.

General Inflation on non-labour expenses of 2.0%.

All costs increases were assumed to be related to labour. For material inventory costs, WNH used the current material unit costs reported by the Purchasing Department at the time the budget was prepared; therefore, inflation on material has not been assumed nor factored into 2010 and 2011 capital costs. Any PST/HST impacts have been removed from operating and capital costs in 2011, any impacts for 2010 are captured in the Board ordered Deferral Account (EB-2009-0210).

Capitalization Policy

WNH's Capitalization Policy is as follows:

The purpose of capitalizing expenditures is to provide an equitable allocation of costs among existing and future customers. As capital assets are expected to provide future economic benefits for more than one year, any expenditure incurred for the acquisition, construction, development or betterment of the capital assets should be capitalized. These capitalized costs are allocated over the estimated useful life of the assets by amortization. The Company adopts the full cost accounting in accordance with guidance in the Canadian Institute of Chartered Accountants (CICA) Handbook.

➤ Asset Cost

Costs for capital assets installed or erected by the Company include:

- Direct material
- Direct labour
- Direct vehicle costs
- Indirect costs including overheads for material, labour, health, safety, environment and operations administration
- Sub-contracting cost, if any

Definition of cost (extract from CICA Handbook paragraph 3061.05):

Cost is the amount of consideration given up to acquire, construct, develop, or better a capital asset and includes all costs directly attributable to the acquisition, construction, development or betterment of the capital asset including installing it at the location and in the condition necessary for its intended use.

A betterment is a cost which is incurred to enhance the service potential of a capital asset. Expenditures for betterments are capitalized. This enhancement in service potential can include an increase in the physical output or service capacity, decrease in associated operations costs, extension in the useful life of the asset, or improvement in the quality of the asset's output.

1 *Definition of betterment (extract from CICA Handbook paragraph 3061.26):*

2
3 Cost incurred to enhance the service potential of a capital asset. Service potential may
4 be enhanced when there is an increase in the previously assessed physical output or
5 service capacity, associated operating costs are lowered, the life or useful life is
6 extended, or the quality of output is improved. The cost incurred in the maintenance of
7 the service potential of a capital asset is a repair, not betterment. If a cost has the
8 attributes of both a repair and a betterment, the portion considered to be a betterment is
9 included in the cost of the asset.

10
11 ➤ **Asset Recognition**

12 Property, plant and equipment that meet the definition of a capital asset as
13 provided in the CICA Handbook are capitalized. Expenditures that do not meet
14 the definition are expensed in the current year.

15
16 *Definition of assets (extract CICA Handbook paragraph 1000.29):*

17
18 Assets are economic resources controlled by an entity as a result of past transactions or
19 events from which future economic benefits may be obtained. Assets have three
20 essential characteristics:

- 21
22 a) they embody a future benefit that involves a capacity, singularly or in combination
23 with other assets, in the case of profit-oriented enterprises, to contribute directly
24 or indirectly to future net cash flows, and in the case of not-for-profit
25 organizations, to provide services;
26 b) the entity can control access to the benefit; and
27 c) the transaction or event giving rise to the entity's right to, or control of, the benefit
28 has already incurred.

29
30 In addition, in identifying a benefit there must be:

- 31
32 a) an ability to earn income or supply a service over its useful life;
33 b) a reasonable expectation that the benefit will be provided in future periods; and
34 c) the future period must be identifiable and greater than one year.

35

➤ Capitalization Threshold

Theoretically, any expenditure that meets the asset cost and asset recognition criteria would be recorded as a capital asset. However, for practical reasons, qualifying costs would only be capitalized if it has a useful life of more than one year; and the item cost is greater than \$1,000 for readily identifiable assets. This threshold may be changed at the discretion of the VP Finance & CFO. Land will always be capitalized, regardless of cost.

➤ Construction In Progress

Capital assets under construction at year-end are referred to as construction work in progress and disclosed as a component of capital assets. Construction in progress is recognized as a capital asset and amortized when either the asset is put into service or construction is substantially completed.

➤ Spare transformers and meters

Spare transformers and meters are accounted for as capital assets since they form an integral part of the reliability program for a distribution system. They are not intended for resale and cannot be classified as inventory in accordance with CICA Handbook Section 3030.

➤ Allowance For Funds Used During Construction (AFUDC)

In regard to the measurement of the carrying costs of a capital asset under construction and the capitalization of interest costs, the CICA Handbook notes that the cost of a capital asset that is acquired, constructed, or developed over time includes carrying costs directly attributable to the acquisition, construction, or development activity. For a rate-regulated capital asset, the cost includes the directly attributable allowance for funds used during construction allowed by the regulator per CICA s.3060.26. The financing charge will be at the rate deemed by the Ontario Energy Board ("OEB") for rate setting purposes. The Company will commence capitalizing interest costs on the construction of its new Administration Building and Service Centre in August 2010.

➤ Amortization

Amortization is provided on a straight-line basis for capital assets available for use over their estimated service lives, at the following annual rates:

Buildings	2%	(50 years)
Transformer station equipment	2.5%	(40 years)
Distribution station equipment	3.33%	(30 years)
Distribution system	4%	(25 years)
Meters	4%	(25 years)
Smart meters	6.67%	(15 years)
SCADA equipment	6.67%	(15 years)
Communication equipment	10%	(10 years)
Other capital assets	10-30%	(3.33 – 10 years)

Full amortization is recorded in the year of acquisition; no amortization is recorded in the year of disposition.

➤ Disposals and Write Downs

For readily identifiable assets retired or disposed of, the asset cost and related accumulated amortization are removed from the applicable capital accounts. Differences between the proceeds, if any, and the unamortized asset amount plus removal costs are recorded as a gain or loss in the year of disposal.

For grouped assets, the assets and accumulated amortization are removed from the records at the end of their estimated average service life, regardless of actual service life.

➤ Betterment vs. Repair and Maintenance

The following questions are considered to determine if costs incurred are for betterment of the capital asset or expensed as maintenance and repairs:

	Yes	No
o Increase in the previously assessed physical output or service capacity?	☐	☐
o Lower the associated operating costs?	☐	☐
o Substantial improvement in the quality or efficiency of output? (>10%)	☐	☐
o Is the life of the asset extended?	☐	☐

Criteria

At least one question must be answered “Yes” to qualify for betterment.

RATE BASE OVERVIEW:

The rate base used for the purpose of calculating the revenue requirement used in this Application follows the definition used in the 2006 EDR Handbook as an average of the balances at the beginning and the end of the 2011 Test Year, plus a working capital allowance, which is 15% of the sum of the cost of power and distribution expenses. WNH has used the standard 15% working capital allowance, taking direction from the Board's decision on the 2010 rates application of Chatham-Kent Hydro Inc., EB-2009-0261. In Chatham Kent's decision, the Board stated "The Board will not direct CK Hydro to undertake a lead/lag study in preparation for its next cost of service rebasing application. As the Board communicated in its decision on Burlington Hydro Inc.'s 2010 distribution rates application reference above, the Board expects that it will undertake further work to review the working capital methodology."

WNH has provided its rate base calculations for the years 2006 Board Approved, 2006 Actual, 2007 Actual, 2008 Actual, 2009 Actual, 2010 Bridge Year and 2011 Test Year in Table 2-12. WNH has calculated its 2011 rate base as \$152,808,317.

WNH has also provided a summary of its calculations of the cost of power and distribution expenses used in the calculations for determining working capital for the years 2006 Board Approved, 2006 Actual, 2007 Actual, 2008 Actual, 2009 Actual, 2010 Bridge Year and 2011 Test Year in Table 2-13. Note the Cost of Power is not included in Distribution Expenses in Exhibit 4 but rather is used only for the Working Capital calculation. Distribution expenses are more fully explained in Exhibit 4.

In calculating the Cost of Power, WNH used the following rates: Power – RPP - \$.065 for first 600 kWh, \$.075 for any additional kW; Non-RPP – Power \$36.66/MWh and \$27.72/MWh for a total \$64.38/MWh (as per Board's April 15, 2010 RPP Price Report) and the Retail Transmission Network and Retail Rates were those proposed in this application at May 1, 2011.

Fixed Asset Continuity Statements

Continuity schedules are provided in Tables 2-14 – 2-19.

Table 2-12
Summary of Rate Base

Description	2006 OEB Approved	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Bridge Year	2011 Test Year
Gross Fixed Assets	148,725,569	164,297,813	177,181,864	188,120,009	202,017,817	223,954,642	262,219,694
Accumulated Depreciation	65,162,758	77,523,158	83,930,906	90,632,779	97,965,764	105,748,291	112,488,866
Net Book Value	83,562,811	86,774,655	93,250,959	97,487,230	104,052,053	118,206,351	149,730,828
Average Net Book Value	83,075,300	85,689,030	90,012,807	95,369,094	100,769,641	111,129,202	133,968,589
Working Capital	97,230,451	102,692,215	102,519,646	101,936,330	88,782,187	126,842,329	125,598,185
Working Capital Allowance	14,584,568	15,403,832	15,377,947	15,290,450	13,317,328	19,026,349	18,839,728
Rate Base	97,659,868	101,092,863	105,390,754	110,659,544	114,086,970	130,155,551	152,808,317

Table 2-13
Summary of Working Capital

Description	2006 OEB Approved	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Bridge Year	2011 Test Year
Cost of Power	88,496,882	94,167,524	93,826,037	92,994,631	79,978,881	117,034,245	115,414,347
Operations	3,479,237	3,079,565	3,380,262	3,638,282	3,473,986	3,480,071	3,877,534
Maintenance	1,565,312	1,719,190	1,523,299	1,730,289	1,384,651	1,564,256	1,559,180
Billing & Collecting	1,643,292	1,362,238	1,472,667	1,595,556	1,599,224	2,179,495	2,188,939
Community Relations	192,345	582,943	310,784	119,696	121,619	221,160	246,777
Administration & General Expenses	1,553,383	1,780,756	2,006,595	1,857,875	2,223,826	2,363,101	2,311,407
Taxes Other than Income	300,000	-	0	-	-	-	-
Working Capital	97,230,451	102,692,215	102,519,646	101,936,330	88,782,187	126,842,329	125,598,185

Table 2-14
Fixed Asset Continuity Schedule – (Distribution and Operations)
As at December 31, 2006

		Cost				Accumulated Depreciation				
OEB	Description	Opening Balance	Additions	Disposals	Closing Balance	Opening Balance	Additions	Disposals	Closing Balance	Net Book Value
1805	Land	1,563,004	17,783		1,580,787	0			0	1,580,787
1806	Land Rights	227,432	6,455		233,887	0			0	233,887
1808	Buildings and Fixtures	7,388,747	919,621		8,308,368	1,976,708	89,771		2,066,479	6,241,889
1810	Leasehold Improvements				0				0	0
1815	Transformer Station Equipment - Normally Primary above 50 kV	18,717,060	1,952,965		20,670,025	5,194,860	550,463		5,745,322	14,924,703
1820	Distribution Station Equipment - Normally Primary below 50 kV	3,994,419	502,762		4,497,181	2,769,906	85,884		2,855,789	1,641,392
1825	Storage Battery Equipment				0				0	0
1830	Poles, Towers and Fixtures	27,963,164	1,280,967		29,244,131	11,990,301	1,214,389		13,204,689	16,039,442
1835	Overhead Conductors and Devices	11,018,627	711,675		11,730,302	4,294,895	455,721		4,750,617	6,979,685
1840	Underground Conduit	10,401,973	581,120		10,983,093	4,381,349	415,926		4,797,274	6,185,819
1845	Underground Conductors and Devices	23,545,674	1,359,811		24,905,485	10,087,075	936,631		11,023,706	13,881,779
1850	Line Transformers	27,722,802	1,819,018		29,541,820	10,769,065	1,165,014		11,934,080	17,607,740
1855	Services	15,008,445	808,838		15,817,283	6,897,264	594,844		7,492,108	8,325,175
1860	Meters	8,264,143	(158,297)		8,105,846	4,139,493	286,357		4,425,850	3,679,996
1865	Other Installations on Customer's Premises				0				0	0
1905	Land				0				0	0
1906	Land Rights				0				0	0
1908	Buildings and Fixtures				0				0	0
1910	Leasehold Improvements				0				0	0
1915	Office Furniture and Equipment	604,297	113,142		717,439	385,878	55,273		441,151	276,288
1920	Computer Equipment - Hardware	2,383,700	144,767		2,528,467	1,739,246	242,108		1,981,354	547,113
1925	Computer Software	2,162,054	405,911		2,567,965	1,427,341	324,064		1,751,405	816,560
1930	Transportation Equipment	5,611,659	260,432	145,556	5,726,535	4,166,774	528,165	145,556	4,549,383	1,177,152
1935	Stores Equipment	156,150	0		156,150	116,606	9,757		126,363	29,787
1940	Tools, Shop and Garage Equipment	545,673	0		545,673	253,950	53,805		307,755	237,918
1945	Measurement and Testing Equipment	568,369	29,230		597,599	445,007	30,663		475,669	121,930
1950	Power Operated Equipment				0				0	0
1955	Communication Equipment	173,638	17,942		191,580	100,772	16,271		117,043	74,537
1960	Miscellaneous Equipment	488,793	1,167		489,960	378,100	30,902		409,003	80,957
1970	Load Management Controls - Customer Premises				0				0	0
1975	Load Management Controls - Utility Premises				0				0	0
1980	System Supervisory Equipment	2,091,267	81,576		2,172,843	1,367,292	123,487		1,490,779	682,064
1985	Sentinel Lighting Rentals				0				0	0
1990	Other Tangible Property				0				0	0
1995	Contributions and Grants	(14,857,883)	(2,156,723)		(17,014,606)	(1,742,077)	(680,584)		(2,422,661)	(14,591,945)
2005	Property under Capital Lease				0				0	0
	Total before Work in Process	155,743,207	8,700,162	145,556	164,297,813	71,139,802	6,528,911	145,556	77,523,158	86,774,655
	Work in Process	5,128	2,978,819		2,983,947	0	0	0	0	2,983,947
	Total after Work in Process	155,748,335	11,678,981	145,556	167,281,760	71,139,802	6,528,911	145,556	77,523,158	89,758,602

Table 2-15
Fixed Asset Continuity Schedule – (Distribution and Operations)
As at December 31, 2007

		Cost				Accumulated Depreciation				
OEB	Description	Opening Balance	Additions	Disposals	Closing Balance	Opening Balance	Additions	Disposals	Closing Balance	Net Book Value
1805	Land	1,580,787	0		1,580,787	0			0	1,580,787
1806	Land Rights	233,887	90,888		324,775	0			0	324,775
1808	Buildings and Fixtures	8,308,368	664,764		8,973,132	2,066,479	88,257		2,154,736	6,818,396
1810	Leasehold Improvements	0	0		0	0			0	0
1815	Transformer Station Equipment - Normally Prim	20,670,025	(12,165)		20,657,860	5,745,322	554,493		6,299,815	14,358,045
1820	Distribution Station Equipment - Normally Prima	4,497,181	11,114		4,508,295	2,855,789	85,884		2,941,674	1,566,621
1825	Storage Battery Equipment	0			0	0			0	0
1830	Poles, Towers and Fixtures	29,244,131	4,607,640		33,851,771	13,204,689	1,198,375		14,403,065	19,448,706
1835	Overhead Conductors and Devices	11,730,302	2,480,132		14,210,434	4,750,617	537,757		5,288,374	8,922,060
1840	Underground Conduit	10,983,093	812,166		11,795,259	4,797,274	434,976		5,232,250	6,563,009
1845	Underground Conductors and Devices	24,905,485	1,198,911		26,104,396	11,023,706	941,130		11,964,835	14,139,561
1850	Line Transformers	29,541,820	2,173,216		31,715,036	11,934,080	1,251,013		13,185,092	18,529,944
1855	Services	15,817,283	854,591		16,671,874	7,492,108	617,721		8,109,829	8,562,045
1860	Meters	8,105,846	448,132		8,553,978	4,425,850	301,073		4,726,923	3,827,056
1865	Other Installations on Customer's Premises	0			0	0			0	0
1905	Land	0			0	0			0	0
1906	Land Rights	0			0	0			0	0
1908	Buildings and Fixtures	0			0	0			0	0
1910	Leasehold Improvements	0			0	0			0	0
1915	Office Furniture and Equipment	717,439	54,173		771,612	441,151	57,540		498,691	272,921
1920	Computer Equipment - Hardware	2,528,467	160,484		2,688,951	1,981,354	253,553		2,234,907	454,044
1925	Computer Software	2,567,965	333,495		2,901,460	1,751,405	346,212		2,097,617	803,843
1930	Transportation Equipment	5,726,535	716,173	203,970	6,238,738	4,549,383	426,538	203,970	4,771,951	1,466,787
1935	Stores Equipment	156,150	0		156,150	126,363	9,501		135,864	20,286
1940	Tools, Shop and Garage Equipment	545,673	17,337		563,010	307,755	55,407		363,163	199,847
1945	Measurement and Testing Equipment	597,599	13,367		610,966	475,669	30,220		505,889	105,077
1950	Power Operated Equipment	0			0	0			0	0
1955	Communication Equipment	191,580	47,680		239,260	117,043	19,349		136,392	102,868
1960	Miscellaneous Equipment	489,960	66,374		556,334	409,003	32,383		441,385	114,949
1970	Load Management Controls - Customer Premise	0			0	0			0	0
1975	Load Management Controls - Utility Premises	0			0	0			0	0
1980	System Supervisory Equipment	2,172,843	31,721		2,204,564	1,490,779	118,208		1,608,987	595,577
1985	Sentinel Lighting Rentals	0			0	0			0	0
1990	Other Tangible Property	0			0	0			0	0
1995	Contributions and Grants	(17,014,606)	(1,682,172)		(18,696,778)	(2,422,661)	(747,871)		(3,170,532)	(15,526,246)
2005	Property under Capital Lease	0			0	0			0	0
	Total before Work in Process	164,297,813	13,088,021	203,970	177,181,864	77,523,158	6,611,718	203,970	83,930,906	93,250,959
0	Work in Process	2,983,947	0	2,983,947	0	0	0	0	0	0
	Total after Work in Process	167,281,760	13,088,021	3,187,917	177,181,864	77,523,158	6,611,718	203,970	83,930,906	93,250,959

Table 2-16
Fixed Asset Continuity Schedule – (Distribution and Operations)
As at December 31, 2008

		Cost				Accumulated Depreciation				
OEB	Description	Opening Balance	Additions	Disposals	Closing Balance	Opening Balance	Additions	Disposals	Closing Balance	Net Book Value
1805	Land	1,580,787	248,399		1,829,186	0			0	1,829,186
1806	Land Rights	324,775	35,659		360,434	0			0	360,434
1808	Buildings and Fixtures	8,973,132	5,752		8,978,884	2,154,736	105,990		2,260,726	6,718,158
1810	Leasehold Improvements	0			0	0			0	0
1815	Transformer Station Equipment - Normally Primar	20,657,860	778,737		21,436,597	6,299,815	495,776		6,795,591	14,641,006
1820	Distribution Station Equipment - Normally Primar	4,508,295	35,856		4,544,151	2,941,674	90,044		3,031,718	1,512,433
1825	Storage Battery Equipment	0			0	0			0	0
1830	Poles, Towers and Fixtures	33,851,771	3,373,891		37,225,662	14,403,065	1,407,228		15,810,293	21,415,369
1835	Overhead Conductors and Devices	14,210,434	1,875,354		16,085,788	5,288,374	609,809		5,898,183	10,187,605
1840	Underground Conduit	11,795,259	210,221		12,005,480	5,232,250	452,153		5,684,403	6,321,077
1845	Underground Conductors and Devices	26,104,396	1,568,180		27,672,576	11,964,835	1,011,540		12,976,375	14,696,201
1850	Line Transformers	31,715,036	2,382,530		34,097,566	13,185,092	1,341,369		14,526,461	19,571,105
1855	Services	16,671,874	1,260,156		17,932,030	8,109,829	664,051		8,773,880	9,158,150
1860	Meters	8,553,978	367,063		8,921,041	4,726,923	316,149		5,043,072	3,877,970
1865	Other Installations on Customer's Premises	0			0	0			0	0
1905	Land	0			0	0			0	0
1906	Land Rights	0			0	0			0	0
1908	Buildings and Fixtures	0			0	0			0	0
1910	Leasehold Improvements	0			0	0			0	0
1915	Office Furniture and Equipment	771,612	7,050		778,662	498,691	53,909		552,601	226,061
1920	Computer Equipment - Hardware	2,688,951	91,002		2,779,953	2,234,907	217,964		2,452,872	327,081
1925	Computer Software	2,901,460	231,044		3,132,504	2,097,617	383,117		2,480,734	651,770
1930	Transportation Equipment	6,238,738	316,057	245,524	6,309,271	4,771,951	430,369	244,572	4,957,748	1,351,523
1935	Stores Equipment	156,150	99,191	80,449	174,892	135,864	11,098	64,359	82,603	92,289
1940	Tools, Shop and Garage Equipment	563,010	114,754		677,764	363,163	64,626		427,788	249,976
1945	Measurement and Testing Equipment	610,966	14,066		625,032	505,889	29,580		535,469	89,563
1950	Power Operated Equipment	0			0	0			0	0
1955	Communication Equipment	239,260	216,739		455,999	136,392	19,141		155,532	300,467
1960	Miscellaneous Equipment	556,334	25,550		581,884	441,385	23,965		465,350	116,534
1970	Load Management Controls - Customer Premise	0			0	0			0	0
1975	Load Management Controls - Utility Premises	0			0	0			0	0
1980	System Supervisory Equipment	2,204,564	0		2,204,564	1,608,987	110,523		1,719,510	485,054
1985	Sentinel Lighting Rentals	0			0	0			0	0
1990	Other Tangible Property	0			0	0			0	0
1995	Contributions and Grants	(18,696,778)	(1,993,133)		(20,689,911)	(3,170,532)	(827,596)		(3,998,129)	(16,691,782)
2005	Property under Capital Lease	0			0	0			0	0
	Total before Work in Process	177,181,864	11,264,118	325,973	188,120,009	83,930,906	7,010,804	308,931	90,632,779	97,487,230
	Work in Process	0	1,216,890		1,216,890	0			0	1,216,890
	Total after Work in Process	177,181,864	12,481,008	325,973	189,336,899	83,930,906	7,010,804	308,931	90,632,779	98,704,120

Table 2-17
Fixed Asset Continuity Schedule – (Distribution and Operations)
As at December 31, 2009

		Cost				Accumulated Depreciation				
OEB	Description	Opening Balance	Additions	Disposals	Closing Balance	Opening Balance	Additions	Disposals	Closing Balance	Net Book Value
1805	Land	1,829,186			1,829,186	0			0	1,829,186
1806	Land Rights	360,434	15,448		375,882	0			0	375,882
1808	Buildings and Fixtures	8,978,884	42,847		9,021,731	2,260,726	155,452		2,416,178	6,605,553
1810	Leasehold Improvements	0			0	0			0	0
1815	Transformer Station Equipment - Normally Primary	21,436,597	647,205		22,083,802	6,795,591	534,721		7,330,312	14,753,490
1820	Distribution Station Equipment - Normally Primary	4,544,151	31,527		4,575,678	3,031,718	82,978		3,114,696	1,460,982
1825	Storage Battery Equipment	0			0	0			0	0
1830	Poles, Towers and Fixtures	37,225,662	4,153,368		41,379,030	15,810,293	1,545,951		17,356,244	24,022,786
1835	Overhead Conductors and Devices	16,085,788	2,279,721		18,365,509	5,898,183	695,020		6,593,203	11,772,306
1840	Underground Conduit	12,005,480	485,801		12,491,281	5,684,403	459,168		6,143,571	6,347,710
1845	Underground Conductors and Devices	27,672,576	1,124,839		28,797,416	12,976,375	1,071,477		14,047,852	14,749,564
1850	Line Transformers	34,097,566	3,570,690		37,668,256	14,526,461	1,479,902		16,006,363	21,661,893
1855	Services	17,932,030	1,281,287		19,213,317	8,773,880	707,069		9,480,949	9,732,368
1860	Meters	8,921,041	240,145	59,540	9,101,646	5,043,072	322,187	5,815	5,359,444	3,742,203
1865	Other Installations on Customer's Premises	0			0	0			0	0
1905	Land	0			0	0			0	0
1906	Land Rights	0			0	0			0	0
1908	Buildings and Fixtures	0			0	0			0	0
1910	Leasehold Improvements	0			0	0			0	0
1915	Office Furniture and Equipment	778,662	18,821		797,483	552,601	47,052		599,653	197,830
1920	Computer Equipment - Hardware	2,779,953	152,428		2,932,381	2,452,872	209,819		2,662,691	269,690
1925	Computer Software	3,132,504	579,849		3,712,353	2,480,734	413,393		2,894,127	818,226
1930	Transportation Equipment	6,309,271	799,085	178,774	6,929,582	4,957,748	473,656	178,774	5,252,630	1,676,952
1935	Stores Equipment	174,892	2,811		177,703	82,603	11,154		93,757	83,946
1940	Tools, Shop and Garage Equipment	677,764	25,417		703,181	427,788	61,450		489,238	213,943
1945	Measurement and Testing Equipment	625,032	33,434		658,466	535,469	26,640		562,109	96,357
1950	Power Operated Equipment	0			0	0			0	0
1955	Communication Equipment	455,999	74,139	90,384	439,754	155,532	38,845	70,650	123,727	316,027
1960	Miscellaneous Equipment	581,884	11,983		593,867	465,350	19,019		484,369	109,498
1970	Load Management Controls - Customer Premises	0			0	0			0	0
1975	Load Management Controls - Utility Premises	0			0	0			0	0
1980	System Supervisory Equipment	2,204,564	434,697		2,639,261	1,719,510	132,029		1,851,539	787,722
1985	Sentinel Lighting Rentals	0			0	0			0	0
1990	Other Tangible Property	0			0	0			0	0
1995	Contributions and Grants	(20,689,911)	(1,779,037)		(22,468,948)	(3,998,129)	(898,758)		(4,896,887)	(17,572,061)
2005	Property under Capital Lease	0			0	0			0	0
	Total before Work in Process	188,120,009	14,226,505	328,698	202,017,817	90,632,779	7,588,224	255,239	97,965,764	104,052,053
	Work in Process	1,216,890	4,934,607		6,151,497	0			0	6,151,497
	Total after Work in Process	189,336,899	19,161,112	328,698	208,169,314	90,632,779	7,588,224	255,239	97,965,764	110,203,550

Table 2-18
Fixed Asset Continuity Schedule – (Distribution and Operations)
Forecast as at December 31, 2010

		Cost				Accumulated Depreciation				
OEB	Description	Opening Balance	Additions	Disposals	Closing Balance	Opening Balance	Additions	Disposals	Closing Balance	Net Book Value
1805	Land	1,829,186		11,000	1,818,186	0			0	1,818,186
1806	Land Rights	375,882	15,805		391,687	0			0	391,687
1808	Buildings and Fixtures	9,021,731	1,289,002	30,433	10,280,299	2,416,178	180,264	17,065	2,579,377	7,700,922
1810	Leasehold Improvements	0			0	0			0	0
1815	Transformer Station Equipment - Normally Primary	22,083,802	5,636,134		27,719,936	7,330,312	669,083		7,999,394	19,720,541
1820	Distribution Station Equipment - Normally Primary	4,575,678	59,882	79,263	4,556,297	3,114,696	84,133	79,263	3,119,566	1,436,731
1825	Storage Battery Equipment	0			0	0			0	0
1830	Poles, Towers and Fixtures	41,379,030	4,292,721		45,671,751	17,356,244	1,693,595		19,049,838	26,621,913
1835	Overhead Conductors and Devices	18,365,509	2,538,264		20,903,773	6,593,203	788,151		7,381,355	13,522,419
1840	Underground Conduit	12,491,281	628,603		13,119,884	6,143,571	477,492		6,621,063	6,498,822
1845	Underground Conductors and Devices	28,797,416	2,930,459		31,727,875	14,047,852	1,165,410		15,213,263	16,514,613
1850	Line Transformers	37,668,256	2,866,093		40,534,349	16,006,363	1,598,976		17,605,339	22,929,010
1855	Services	19,213,317	1,814,690		21,028,007	9,480,949	770,265		10,251,213	10,776,793
1860	Meters	9,101,646	386,860		9,488,506	5,359,444	343,672		5,703,116	3,785,390
1865	Other Installations on Customer's Premises	0			0	0			0	0
1905	Land	0			0	0			0	0
1906	Land Rights	0			0	0			0	0
1908	Buildings and Fixtures	0			0	0			0	0
1910	Leasehold Improvements	0			0	0			0	0
1915	Office Furniture and Equipment	797,483	6,500		803,983	599,653	39,915		639,567	164,416
1920	Computer Equipment - Hardware	2,932,381	137,339		3,069,720	2,662,691	137,204		2,799,895	269,825
1925	Computer Software	3,712,353	629,483		4,341,836	2,894,127	435,956		3,330,084	1,011,752
1930	Transportation Equipment	6,929,582	631,743	339,706	7,221,619	5,252,630	499,875	339,706	5,412,799	1,808,820
1935	Stores Equipment	177,703			177,703	93,757	10,974		104,731	72,972
1940	Tools, Shop and Garage Equipment	703,181	187,888		891,069	489,238	66,754		555,992	335,077
1945	Measurement and Testing Equipment	658,466	16,600		675,066	562,109	21,067		583,176	91,890
1950	Power Operated Equipment	0			0	0			0	0
1955	Communication Equipment	439,754			439,754	123,727	38,837		162,564	277,190
1960	Miscellaneous Equipment	593,867			593,867	484,369	18,083		502,452	91,415
1970	Load Management Controls - Customer Premises	0			0	0			0	0
1975	Load Management Controls - Utility Premises	0			0	0			0	0
1980	System Supervisory Equipment	2,639,261	147,459		2,786,720	1,851,539	151,508		2,003,047	783,674
1985	Sentinel Lighting Rentals	0			0	0			0	0
1990	Other Tangible Property	0			0	0			0	0
1995	Contributions and Grants	(22,468,948)	(1,818,299)		(24,287,247)	(4,896,887)	(972,654)		(5,869,540)	(18,417,707)
2005	Property under Capital Lease	0			0	0			0	0
	Total before Work in Process	202,017,817	22,397,227	460,402	223,954,642	97,965,764	8,218,561	436,034	105,748,291	118,206,351
	Work in Process	6,151,497	10,812,837	3,302,672	13,661,662	0			0	13,661,662
	Total after Work in Process	208,169,314	33,210,064	3,763,074	237,616,303	97,965,764	8,218,561	436,034	105,748,291	131,868,013

Table 2-19
Fixed Asset Continuity Schedule – (Distribution and Operations)
Forecast as at December 31, 2011

		Cost				Accumulated Depreciation				
OEB	Description	Opening Balance	Additions	Disposals	Closing Balance	Opening Balance	Additions	Disposals	Closing Balance	Net Book Value
1805	Land	1,818,186	2,038,000	754,394	3,101,792	0			0	3,101,792
1806	Land Rights	391,687	16,350		408,037	0			0	408,037
1808	Buildings and Fixtures	10,280,299	22,798,117	4,674,464	28,403,953	2,579,377	326,254	1,758,156	1,147,475	27,256,478
1810	Leasehold Improvements	0			0	0			0	0
1815	Transformer Station Equipment - Normally Primary	27,719,936	265,871		27,985,807	7,999,394	661,517		8,660,911	19,324,895
1820	Distribution Station Equipment - Normally Primary	4,556,297	15,171		4,571,468	3,119,566	82,332		3,201,897	1,369,571
1825	Storage Battery Equipment	0			0	0			0	0
1830	Poles, Towers and Fixtures	45,671,751	4,278,501		49,950,252	19,049,838	1,754,625		20,804,463	29,145,789
1835	Overhead Conductors and Devices	20,903,773	2,953,287		23,857,060	7,381,355	838,756		8,220,111	15,636,949
1840	Underground Conduit	13,119,884	820,062		13,939,947	6,621,063	492,255		7,113,317	6,826,629
1845	Underground Conductors and Devices	31,727,875	2,748,362		34,476,238	15,213,263	1,209,783		16,423,046	18,053,191
1850	Line Transformers	40,534,349	4,253,666		44,788,016	17,605,339	1,616,224		19,221,563	25,566,453
1855	Services	21,028,007	676,804		21,704,811	10,251,213	760,387		11,011,601	10,693,210
1860	Meters	9,488,506	315,250		9,803,756	5,703,116	331,317		6,034,433	3,769,323
1865	Other Installations on Customer's Premises	0			0	0			0	0
1905	Land	0			0	0			0	0
1906	Land Rights	0			0	0			0	0
1908	Buildings and Fixtures	0			0	0			0	0
1910	Leasehold Improvements	0			0	0			0	0
1915	Office Furniture and Equipment	803,983	1,710,204		2,514,187	639,567	123,989		763,556	1,750,630
1920	Computer Equipment - Hardware	3,069,720	349,544		3,419,264	2,799,895	143,205		2,943,100	476,165
1925	Computer Software	4,341,836	647,615		4,989,451	3,330,084	419,536		3,749,619	1,239,831
1930	Transportation Equipment	7,221,619	570,468		7,792,087	5,412,799	459,374		5,872,172	1,919,914
1935	Stores Equipment	177,703	53,500		231,203	104,731	13,547		118,278	112,925
1940	Tools, Shop and Garage Equipment	891,069	162,037		1,053,106	555,992	67,898		623,890	429,216
1945	Measurement and Testing Equipment	675,066	115,278		790,344	583,176	22,978		606,155	184,189
1950	Power Operated Equipment	0			0	0			0	0
1955	Communication Equipment	439,754			439,754	162,564	38,837		201,401	238,353
1960	Miscellaneous Equipment	593,867			593,867	502,452	17,903		520,356	73,511
1970	Load Management Controls - Customer Premises	0			0	0			0	0
1975	Load Management Controls - Utility Premises	0			0	0			0	0
1980	System Supervisory Equipment	2,786,720	1,048,432		3,835,152	2,003,047	132,357		2,135,404	1,699,748
1985	Sentinel Lighting Rentals	0			0	0			0	0
1990	Other Tangible Property	0			0	0			0	0
1995	Contributions and Grants	(24,287,247)	(2,142,609)		(26,429,856)	(5,869,540)	(1,014,342)		(6,883,882)	(19,545,973)
2005	Property under Capital Lease	0			0	0			0	0
	Total before Work in Process	223,954,642	43,693,910	5,428,858	262,219,694	105,748,291	8,498,731	1,758,156	112,488,866	149,730,828
	Work in Process	13,661,662	1,229,133	13,661,662	1,229,132	0			0	1,229,132
	Total after Work in Process	237,616,303	44,923,042	19,090,520	263,448,826	105,748,291	8,498,731	1,758,156	112,488,866	150,959,960

RATE BASE VARIANCE ANALYSIS

WNH has calculated the materiality threshold on its rate base to be \$144,903 for 2011 variance analysis purposes in accordance with the Filing Requirements. This calculation is summarized in Table 2-20 below:

Table 2-20
Materiality Threshold Calculation

Service Revenue Requirement (from Revenue Deficiency Calculation)	30,036,603
Less Revenue Offsets	(1,055,963)
Base Revenue Requirement	28,980,640
Allocated to:	
Low Voltage Wheeling Costs	165,000
Directly Assigned CDM	-
Other	28,815,640
Total	28,980,640

Variance Calculation .5% of Distribution Revenue Requirement

\$ 144,903

The following Tables 2-21 and 2-22 sets out WNH's rate base and working capital calculations for 2006 Board Approved and 2006 Actual, 2007 Actual, 2008 Actual, 2009 Actual, the 2010 Bridge Year and the 2011 Test Year. Table 2-23 shows the Gross Asset and Accumulated Depreciation variance amounts for these same years. Tables 2-25 through 2-31 show the variance analysis, providing details on any project >\$125,000 in any one year.

WNH notes that the 2006 OEB Approved rate base was determined through the 2006 EDR process and is based on the 2004 year end rate base adjusted for Tier 1 Adjustments. Accordingly, the variance between 2006 Actual and 2006 OEB Approved spans a two-year period.

WNH offers the following comments in respect of the relevant variances identified in Tables 2-21 and 2-22.

For the purposes of this section, the term "distribution expenses" means eligible distribution expenses for the calculation of working capital net of the cost of power.

1 For the detailed working capital allowance calculation, see Table 2-24.

2
3 **2011 Test Year:**
4

5 As shown in Table 2-21, the total rate base in the 2011 test year is forecast to be \$152,808,317.
6 Average net fixed assets accounts for \$133,968,589 of this total. The remainder is the
7 allowance for working capital which totals \$18,839,728.
8

9 ***2011 Test Year vs. 2010 Bridge Year***
10

11 The total rate base is expected to be \$22,652,766 higher in the 2011 Test Year than in the 2010
12 Bridge Year. This increase is shown in Table 2-21 and is attributable primarily to an increase in
13 average net fixed assets of \$22,839,387. The addition to gross fixed assets in 2011 of
14 \$38,265,052 is primarily attributable to the addition of WNH's new Building and Service Centre.
15 Table 2-31 and related Business Case Analyses in Appendix C constitute the variance analysis,
16 providing details on any project >\$125,000.
17

18 The working capital allowance decreased by \$186,622 from the 2010 Bridge Year. For 2011,
19 the increase primarily reflects an expected increase in distribution expenses of \$375,755 or
20 3.8%. A detailed calculation of the working capital allowance for the 2011 Test Year can be
21 found in Table 2-24.
22

23 WNH notes that its current administration building and service centre have been removed from
24 the capital cost in 2011.
25

26 ***2010 Bridge Year vs. 2009 Actual***
27

28 The total rate base for the 2010 Bridge Year is expected to be \$130,155,551, which represents
29 an increase of \$16,068,582 over the 2009 Actual Year, attributable to increase in the average
30 fixed assets of \$10,359,561 (primarily due to an increase in investment rebuilding and
31 upgrading in WNH's TS') and the working capital allowance increased by \$5,709,021 from the
32 previous year.
33
34
35

WNH has forecast an increase in the cost of power for 2010 of \$37,055,364, primarily due to the fact that 2009 did not reflect the Power-Global Adjustment Purchases and Sales on Non-RPP Customers and 2010 does reflect this cost in its estimate of Cost of Power. Distribution expenses show an expected increase of \$1,004,777 or 11.4%. A detailed calculation of the working capital allowance for the 2010 Bridge Year can be found in Table 2-24.

2009 Actual vs. 2008 Actual

The rate base of \$114,086,970 for 2009 Actual increased over 2008 Actual by \$3,427,426. The working capital allowance decreased by (\$1,973,122). In 2009, distribution expenses decreased by (\$138,393) or (1.5%) and the cost of power in 2009 was (\$13,015,750) less than the cost of power 2008 resulting in a decrease in the working capital allowance. The decrease in working capital was offset by an increase in average net assets of \$5,400,547 as a result of normal capital expenditures transferred to capital.

2008 Actual vs. 2007 Actual

The rate base of \$110,659,544 for 2008 Actual increased over 2007 Actual by \$5,269,790. In addition, the working capital allowance decreased by (\$87,497). In 2008, distribution expenses increased by \$248,090 or 2.9%. The cost of power in 2008 was (\$831,406) lower than the cost of power 2007. The decrease in working capital was offset by an increase in average net assets of \$5,356,287 as a result of normal capital expenditures transferred to capital.

2007 Actual vs. 2006 Actual

The rate base of \$105,390,754 for 2007 Actual increased over 2006 Actual by \$4,297,891. This increase is made up of a change in average net assets of \$4,323,777 as a result of normal capital expenditures transferred to capital. The working capital allowance decreased by (\$25,885) which resulted from a decrease (\$341,486) in the cost of power for 2007. Distribution expenses modestly increased in 2007 by \$168,917 or 2.0%.

2006 Actual vs. 2006 Board Approved

The rate base of \$101,092,863 for 2006 Actual was higher than the 2006 Board Approved by \$3,432,995. The difference reflects the fact that the 2006 Board Approved amounts were calculated as the average of the 2003 and 2004 actual amounts.

The variance between the 2006 Actual and the 2006 Board Approved included the difference between the 2004 actual and the 2006 Board Approved amounts as well as the 2005 normal investments.

**Table 2-21
Rate Base Variances**

Description	2006 OEB Approved	2006 Actual Year	2006 Variance from 2006 OEB Approved	2007 Actual Year	2007 Variance from 2006 Actual	2008 Actual Year	2008 Variance from 2007 Actual	2009 Actual Year	2009 Variance from 2008 Actual	2010 Bridge Year	2010 Variance from 2009 Actual	2011 Test Year	2011 Variance from 2010 Bridge
Gross Fixed Assets	148,725,569	164,297,813	15,572,244	177,181,864	12,884,051	188,120,009	10,938,145	202,017,817	13,897,808	223,954,642	21,936,825	262,219,694	38,265,052
Accumulated Depreciation	65,162,758	77,523,158	12,360,400	83,930,906	6,407,748	90,632,779	6,701,873	97,965,764	7,332,985	105,748,291	7,782,527	112,488,866	6,740,575
Net Book Value	83,562,811	86,774,655	3,211,844	93,250,959	6,476,303	97,487,230	4,236,271	104,052,053	6,564,823	118,206,351	14,154,298	149,730,828	31,524,477
Average Net Book Value	83,075,300	85,689,030	2,613,730	90,012,807	4,323,777	95,369,094	5,356,287	100,769,641	5,400,547	111,129,202	10,359,561	133,968,589	22,839,387
Working Capital	97,230,451	102,692,215	5,461,765	102,519,646	(172,570)	101,936,330	(583,315)	88,782,187	(13,154,143)	126,842,329	38,060,142	125,598,185	(1,244,144)
Working Capital Allowance	14,584,568	15,403,832	819,265	15,377,947	(25,885)	15,290,450	(87,497)	13,317,328	(1,973,122)	19,026,349	5,709,021	18,839,728	(186,622)
Rate Base	97,659,868	101,092,863	3,432,995	105,390,754	4,297,891	110,659,544	5,268,790	114,086,970	3,427,426	130,155,551	16,068,582	152,808,317	22,652,766

**Table 2-22
Working Capital**

Description	2006 OEB Approved	2006 Actual Year	2006 Variance from 2006 OEB Approved	2007 Actual Year	2007 Variance from 2006 Actual	2008 Actual Year	2008 Variance from 2007 Actual	2009 Actual Year	2009 Variance from 2008 Actual	2010 Bridge Year	2010 Variance from 2009 Actual	2011 Test Year	2011 Variance from 2010 Bridge
Cost of Power	88,496,882	94,167,524	5,670,642	93,826,037	(341,486)	92,994,631	(831,406)	79,978,881	(13,015,750)	117,034,245	37,055,364	115,414,347	(1,619,898)
Operations	3,479,237	3,079,565	(399,672)	3,380,262	300,697	3,638,282	258,020	3,473,986	(164,297)	3,480,071	6,085	3,877,534	397,463
Maintenance	1,565,312	1,719,190	153,878	1,523,299	(195,891)	1,730,289	206,990	1,384,651	(345,637)	1,564,256	179,605	1,559,180	(5,076)
Billing & Collecting	1,643,292	1,362,238	(281,054)	1,472,667	110,429	1,595,556	122,890	1,599,224	3,668	2,179,495	580,271	2,188,939	9,444
Community Relations	192,345	582,943	390,598	310,784	(272,158)	119,696	(191,088)	121,619	1,923	221,160	99,541	246,777	25,617
Administration & General Expenses	1,553,383	1,780,756	227,373	2,006,595	225,840	1,857,875	(148,720)	2,223,826	365,951	2,363,101	139,275	2,311,407	(51,694)
Taxes Other than Income	300,000	-	(300,000)	0	0	-	(0)	-	-	-	-	-	-
Working Capital	97,230,451	102,692,215	5,461,765	102,519,646	(172,570)	101,936,330	(583,315)	88,782,187	(13,154,143)	126,842,329	38,060,142	125,598,185	(1,244,144)

VARIANCE ANALYSIS ON ACCUMULATED DEPRECIATION

Changes in accumulated depreciation are directly affected by changes in fixed assets due to additions of new investment in assets, the removal of fully depreciated assets from the grouped asset classes, and the disposition of identifiable assets. The 2006 Board Approved closing balance for accumulated depreciation is based on the average of WNH's 2003 and 2004 year end account balances, plus Tier 1 capital adjustments approved in WNH's 2006 EDR Application. As such, the variance between 2006 Board Approved and 2006 Actual represents two years of depreciation changes, and in order to arrive at the annual impact, the variance must be divided by two.

From 2006 Actual to the 2011 Test Year Table 2-23 illustrates the change in accumulated depreciation, which is a representation of the depreciation expense in the year for each of the above accounts. The change in accumulated depreciation is a result of capital expenditures over a seven year period. Since a detailed analysis of capital expenditures and rate base has been provided in this Exhibit, no further explanation of the changes in accumulated depreciation accounts is required.

WNH notes that the existing Administration Building and Service Centre have been removed from Accumulated Depreciation, and no amortization expense was claimed, in 2011.

**Table 2-23
Gross Assets**

Description	2006 OEB Approved*	2006 Actual Year	Variance from 2006 OEB Approved	2007 Actual Year	Variance from 2006 Actual	2008 Actual Year	Variance from 2007 Actual	2009 Actual Year	Variance from 2008 Actual	2010 Bridge Year	Variance from 2009 Actual	2011 Test Year	Variance from 2010 Bridge
Land and Buildings													
1805 Land	1,562,664	1,580,787	18,123	1,580,787	-	1,829,186	248,399	1,829,186	-	1,818,186	11,000	3,101,792	1,283,606
1806 Land Rights	217,904	233,887	15,983	324,775	90,888	360,434	35,659	375,882	15,448	391,687	15,805	408,037	16,350
1808 Buildings and Fixtures	7,154,174	8,308,368	1,154,194	8,973,132	664,764	8,978,884	5,752	9,021,731	42,847	10,280,299	1,258,568	28,403,953	18,123,653
Subtotal - Land and Buildings	8,934,743	10,123,042	1,188,299	10,878,694	755,652	11,168,504	289,810	11,226,799	58,295	12,490,172	1,263,373	31,913,781	19,423,609
TS Primary Above 50													
1815 Transformer Station Equipment - Normally Primary above 50 kV	18,602,492	20,670,025	2,067,533	20,657,860	-	21,436,597	778,737	22,083,802	647,205	27,719,936	5,636,134	27,985,807	265,871
Subtotal - TS Primary Above 50	18,602,492	20,670,025	2,067,533	20,657,860	-	21,436,597	778,737	22,083,802	647,205	27,719,936	5,636,134	27,985,807	265,871
DS Primary Below 50													
1820 Distribution Station Equipment - Normally Primary below 50 kV	4,216,183	4,497,181	280,998	4,508,295	11,114	4,544,151	35,856	4,575,678	31,527	4,556,297	-	4,571,468	15,171
Subtotal - DS Primary Below 50	4,216,183	4,497,181	280,998	4,508,295	11,114	4,544,151	35,856	4,575,678	31,527	4,556,297	-	4,571,468	15,171
Poles and Wires													
1830 Poles, Towers and Fixtures	25,262,179	29,244,131	3,981,952	33,851,771	4,607,640	37,225,662	3,373,891	41,379,030	4,153,368	45,671,751	4,292,721	49,950,252	4,278,501
1835 Overhead Conductors and Devices	9,316,416	11,730,302	2,413,886	14,210,434	2,480,132	16,085,788	1,875,354	18,365,509	2,279,721	20,903,773	2,538,264	23,857,060	2,953,287
1840 Underground Conduit	9,800,794	10,983,093	1,182,299	11,795,259	812,166	12,005,480	210,221	12,491,281	485,801	13,119,884	628,603	13,939,947	820,062
1845 Underground Conductors and Devices	21,475,238	24,905,485	3,430,247	26,104,396	1,198,911	27,672,576	1,568,180	28,797,416	1,124,840	31,727,875	2,930,459	34,476,238	2,748,362
Subtotal - Poles and Wires	65,854,628	76,863,011	11,008,383	85,961,860	9,098,849	92,989,506	7,027,646	101,033,236	8,043,730	111,423,284	10,390,048	122,223,496	10,800,212
Line Transformers													
1850 Line Transformers	24,494,285	29,541,820	5,047,535	31,715,036	2,173,216	34,097,566	2,382,530	37,668,256	3,570,690	40,534,349	2,866,093	44,788,016	4,253,666
Subtotal - Line Transformers	24,494,285	29,541,820	5,047,535	31,715,036	2,173,216	34,097,566	2,382,530	37,668,256	3,570,690	40,534,349	2,866,093	44,788,016	4,253,666
Services and Meters													
1855 Services	13,781,332	15,817,283	2,035,951	16,671,874	854,591	17,932,030	1,260,156	19,213,317	1,281,287	21,028,007	1,814,690	21,704,811	676,804
1860 Meters	7,837,079	8,105,846	268,767	8,553,978	448,132	8,921,041	367,063	9,101,646	180,605	9,488,506	386,860	9,803,756	315,250
1861 Smart Meters	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal - Services and Meters	21,618,411	23,923,129	2,304,718	25,225,852	1,302,723	26,853,071	1,627,219	28,314,963	1,461,892	30,516,513	2,201,550	31,508,567	992,054
IT Assets													
1920 Computer Equipment - Hardware	1,786,709	2,528,467	741,758	2,688,951	160,484	2,779,953	91,002	2,932,381	152,428	3,069,720	137,339	3,419,264	349,544
1925 Computer Software	525,036	2,567,965	2,042,929	2,901,460	333,495	3,132,504	231,044	3,712,353	579,849	4,341,836	629,483	4,989,451	647,615
Subtotal - IT Assets	2,311,746	5,096,432	2,784,686	5,590,411	493,979	5,912,457	322,046	6,644,734	732,277	7,411,556	766,822	8,408,715	997,159
Equipment													
1915 Office Furniture and Equipment	533,144	717,439	184,295	771,612	54,173	778,662	7,050	797,483	18,821	803,983	6,500	2,514,187	1,710,204
1930 Transportation Equipment	5,087,912	5,726,535	638,623	6,238,738	512,203	6,309,271	70,533	6,929,582	620,311	7,221,619	292,037	7,792,087	570,468
1935 Stores Equipment	154,368	156,150	1,782	156,150	-	174,892	18,742	177,703	2,811	177,703	-	231,203	53,500
1940 Tools, Shop and Garage Equipment	474,099	545,673	71,574	563,010	17,337	677,764	114,754	703,181	25,417	891,069	187,888	1,053,106	162,037
1945 Measurement and Testing Equipment	532,844	597,599	64,755	610,966	13,367	625,032	14,066	658,466	33,434	675,066	16,600	790,344	115,278
1955 Communication Equipment	142,674	191,580	48,906	239,260	47,680	455,999	216,739	439,754	(16,245)	439,754	-	439,754	-
1960 Miscellaneous Equipment	442,590	489,960	47,370	556,334	66,374	581,884	25,550	593,867	11,983	593,867	-	593,867	-
Subtotal - Equipment	7,367,631	8,424,936	1,057,305	9,136,070	711,134	9,603,504	467,434	10,300,036	696,532	10,803,061	503,025	13,414,547	2,611,486
Other Distribution Assets													
1980 System Supervisory Equipment	2,016,659	2,172,843	156,184	2,204,564	31,721	2,204,564	-	2,639,261	434,697	2,786,720	147,459	3,835,152	1,048,432
1995 Contributions and Grants	(10,189,580)	(17,014,606)	(6,825,026)	(18,696,778)	(1,682,172)	(20,689,911)	(1,993,133)	(22,468,948)	(1,779,037)	(24,287,247)	(1,818,299)	(26,429,856)	(2,142,609)
Subtotal - Other Distribution Assets	(8,172,920)	(14,841,763)	(6,668,843)	(16,492,214)	(1,650,451)	(18,485,347)	(1,993,133)	(19,829,687)	(1,344,340)	(21,500,527)	(1,670,840)	(22,594,703)	(1,094,177)
GROSS ASSET TOTAL	145,227,199	164,297,813	19,070,614	177,181,864	12,884,051	188,120,009	10,938,145	202,017,817	13,897,808	223,954,642	21,936,825	262,219,694	38,265,052

Table 2-23
Accumulated Depreciation

Description	2006 OEB Approved*	2006 Actual Year	Variance from 2006 OEB Approved	2007 Actual Year	Variance from 2006 Actual	2008 Actual Year	Variance from 2007 Actual	2009 Actual Year	Variance from 2008 Actual	2010 Bridge Year	Variance from 2009 Actual	2011 Test Year	Variance from 2010 Bridge
Land and Buildings													
1805 Land		-	-	-	-	-	-	-	-	-	-	-	-
1806 Land Rights		-	-	-	-	-	-	-	-	-	-	-	-
1808 Buildings and Fixtures	1,832,825	2,066,479	233,654	2,154,736	88,257	2,260,726	105,990	2,416,178	155,452	2,579,377	163,200	1,147,475	1,431,902
Subtotal - Land and Buildings	1,832,825	2,066,479	233,654	2,154,736	88,257	2,260,726	105,990	2,416,178	155,452	2,579,377	163,200	1,147,475	1,431,902
TS Primary Above 50													
1815 Transformer Station Equipment - Normally Primary above 50 kV	4,479,818	5,745,322	1,265,504	6,299,815	554,493	6,795,591	495,776	7,330,312	534,721	7,999,394	669,083	8,660,911	661,517
Subtotal - TS Primary Above 50	4,479,818	5,745,322	1,265,504	6,299,815	554,493	6,795,591	495,776	7,330,312	534,721	7,999,394	669,083	8,660,911	661,517
DS Primary Below 50													
1820 Distribution Station Equipment - Normally Primary below 50 kV	2,795,698	2,855,789	60,091	2,941,674	85,884	3,031,718	90,044	3,114,696	82,978	3,119,566	4,870	3,201,897	82,332
Subtotal - DS Primary Below 50	2,795,698	2,855,789	60,091	2,941,674	85,884	3,031,718	90,044	3,114,696	82,978	3,119,566	4,870	3,201,897	82,332
Poles and Wires													
1830 Poles, Towers and Fixtures	10,361,273	13,204,689	2,843,416	14,403,065	1,198,375	15,810,293	1,407,228	17,356,244	1,545,951	19,049,838	1,693,595	20,804,463	1,754,625
1835 Overhead Conductors and Devices	3,664,894	4,750,617	1,085,723	5,288,374	537,757	5,898,183	609,809	6,593,203	695,020	7,381,355	788,151	8,220,111	838,756
1840 Underground Conduit	3,798,569	4,797,274	998,705	5,232,250	434,976	5,684,403	452,153	6,143,571	459,168	6,621,063	477,492	7,113,317	492,255
1845 Underground Conductors and Devices	8,803,931	11,023,706	2,219,774	11,964,835	941,130	12,976,375	1,011,540	14,047,852	1,071,477	15,213,263	1,165,410	16,423,046	1,209,783
Subtotal - Poles and Wires	26,628,668	33,776,286	7,147,618	36,888,524	3,112,238	40,369,254	3,480,730	44,140,870	3,771,616	48,265,518	4,124,649	52,560,938	4,295,419
Line Transformers													
1850 Line Transformers	9,168,895	11,934,080	2,765,184	13,185,092	1,251,013	14,526,461	1,341,369	16,006,363	1,479,902	17,605,339	1,598,976	19,221,563	1,616,224
Subtotal - Line Transformers	9,168,895	11,934,080	2,765,184	13,185,092	1,251,013	14,526,461	1,341,369	16,006,363	1,479,902	17,605,339	1,598,976	19,221,563	1,616,224
Services and Meters													
1855 Services	6,056,739	7,492,108	1,435,369	8,109,829	617,721	8,773,880	664,051	9,480,949	707,069	10,251,213	770,265	11,011,601	760,387
1860 Meters	3,723,594	4,425,850	702,255	4,726,923	301,073	5,043,072	316,149	5,359,444	316,372	5,703,116	343,672	6,034,433	331,317
1861 Smart Meters	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal - Services and Meters	9,780,333	11,917,958	2,137,625	12,836,752	918,794	13,816,951	980,200	14,840,392	1,023,441	15,954,329	1,113,937	17,046,033	1,091,704
IT Assets													
1920 Computer Equipment - Hardware	1,371,252	1,981,354	610,102	2,234,907	253,553	2,452,872	217,964	2,662,691	209,819	2,799,895	137,204	2,943,100	143,205
1925 Computer Software	962,005	1,751,405	789,400	2,097,617	346,212	2,480,734	383,117	2,894,127	413,393	3,330,084	435,956	3,749,619	419,536
Subtotal - IT Assets	2,333,257	3,732,759	1,399,503	4,332,524	599,765	4,933,606	601,082	5,556,818	623,212	6,129,978	573,160	6,692,719	562,741
Equipment													
1915 Office Furniture and Equipment	317,544	441,151	123,607	498,691	57,540	552,601	53,909	599,653	47,052	639,567	39,915	763,556	123,989
1930 Transportation Equipment	3,449,779	4,549,383	1,099,604	4,771,951	222,568	4,957,748	185,797	5,252,630	294,882	5,412,799	160,169	5,872,172	459,374
1935 Stores Equipment	98,873	126,363	27,490	135,864	9,501	142,603	53,261	151,757	11,154	162,911	11,154	174,065	11,154
1940 Tools, Shop and Garage Equipment	174,960	307,755	132,795	363,163	55,407	427,788	64,626	489,238	61,450	555,992	66,754	623,890	67,898
1945 Measurement and Testing Equipment	398,514	475,669	77,155	505,889	30,220	535,469	29,580	562,109	26,640	583,176	21,067	606,155	22,978
1955 Communication Equipment	77,437	117,043	39,606	136,392	19,349	155,532	19,141	174,727	19,191	193,918	19,191	213,109	19,191
1960 Miscellaneous Equipment	322,139	409,003	86,864	441,385	32,383	465,350	23,965	484,369	19,019	502,452	18,083	520,356	17,903
Subtotal - Equipment	4,839,246	6,426,367	1,587,121	6,853,334	426,967	7,177,092	323,757	7,605,484	428,392	7,961,282	355,798	8,705,808	744,526
Other Distribution Assets													
1980 System Supervisory Equipment	1,192,609	1,490,779	298,170	1,608,987	118,208	1,719,510	110,523	1,851,539	132,029	2,003,047	151,508	2,135,404	132,357
1995 Contributions and Grants	(899,450)	(2,422,661)	(1,523,211)	(3,170,532)	(747,871)	(3,998,129)	(827,596)	(4,896,887)	(898,758)	(5,869,540)	(972,654)	(6,883,882)	(1,014,342)
Subtotal - Other Distribution Assets	293,159	(931,882)	(1,225,042)	(1,561,546)	(629,663)	(2,278,619)	(717,074)	(3,045,348)	(766,729)	(3,866,494)	(821,145)	(4,748,478)	(881,985)
GROSS ACCUMULATED DEPRECIATION TOTAL	62,151,900	77,523,158	15,371,258	83,930,906	6,407,748	90,632,779	6,701,873	97,965,764	7,332,985	105,748,291	7,782,527	112,488,866	6,740,575

WORKING CAPITAL CALCULATION

WNH presents its detailed working capital calculation by accounts in Table 2-24.

WNH has not conducted a lead lag study and has therefore opted with using the 15% approach (15% of the cost of power and controllable expenses) for the calculation of its working capital allowance.

In the Board's Decision of April 20, 2010 regarding Chatham –Kent Hydro Inc. May 1, 2010 Distribution Rates (EB-2009-0261), the Board stated:

"The Board will not direct CK Hydro to undertake a lead/lag study in preparation for its next cost of service rebasing application. As the Board communicated in its decision on Burlington Hydro' Inc.'s 2010 distribution rates application referenced above, the Board expects that it will undertake further work to review the working capital methodology. The Board would encourage CK Hydro to participate and be informed by the outcomes of any such work."

WNH has thus, applied the existing 15% approach. If a generic decision is rendered, prior to final rates being set, WNH will change this filing to reflect such decision.

Table 2-24
Calculation of Working Capital Allowance

Expense Description	2006 Actual	Allowance for Working Capital	2007 Actual	Allowance for Working Capital	2008 Actual	Allowance for Working Capital	2009 Actual	Allowance for Working Capital	2010 Bridge	Allowance for Working Capital	2011 Test	Allowance for Working Capital
Cost of Power												
4705-Power Purchased	74,187,482	11,128,122	76,380,085	11,457,013	76,036,378	11,405,457	62,269,812	9,340,472	97,756,591	14,663,489	96,243,729	14,436,559
4708-WMS	8,581,159	1,287,174	7,099,751	1,064,963	8,269,939	1,240,491	8,464,974	1,269,746	9,331,888	1,399,783	9,289,687	1,393,453
4714-NW	7,510,949	1,126,642	7,527,397	1,129,110	6,187,681	928,152	6,514,485	977,173	7,343,286	1,101,493	7,285,670	1,092,851
4716-CN	3,812,819	571,923	2,707,083	406,063	2,383,435	357,515	2,615,293	392,294	2,449,480	367,422	2,430,261	364,539
4750-LV Charges	75,115	11,267	111,721	16,758	117,199	17,580	114,317	17,148	153,000	22,950	165,000	24,750
Subtotal - Cost of Power	94,167,524	14,125,129	93,826,037	14,073,906	92,994,631	13,949,195	79,978,881	11,996,832	117,034,245	17,555,137	115,414,347	17,312,152
Distribution - Operation												
5010-Load Dispatching	843,791	126,569	962,687	144,403	1,047,310	157,097	987,610	148,141	1,133,603	170,040	1,252,456	187,868
5012-Station Buildings and Fixtures Expense	408,157	61,224	430,232	64,535	457,953	68,693	419,551	62,933	424,108	63,616	434,630	65,195
5014-Transformer Station Equipment - Operation Labour	149,544	22,432	113,269	16,990	149,488	22,423	93,249	13,987	76,279	11,442	122,155	18,323
5015-Transformer Station Equipment - Operation Supplies and Expenses	56,832	8,525	39,595	5,939	60,647	9,097	37,041	5,556	70,668	10,600	78,613	11,792
5016-Distribution Station Equipment - Operation Labour	84,090	12,614	113,409	17,011	176,698	26,505	177,503	26,625	112,153	16,823	123,042	18,456
5017-Distribution Station Equipment - Operation Supplies and Expenses	32,347	4,852	66,150	9,922	67,202	10,080	92,946	13,942	80,591	12,089	81,766	12,265
5020-Overhead Distribution Lines and Feeders - Operation Labour	542,982	81,447	533,172	79,976	676,820	101,523	844,746	126,712	562,569	84,385	574,591	86,189
5025-Overhead Distribution Lines and Feeders - Operation Supplies and Expenses	208,059	31,209	278,914	41,837	248,020	37,203	273,540	41,031	396,692	59,504	392,386	58,588
5035-Overhead Distribution Transformers - Operation	-	-	-	-	-	-	3,269	490	5,159	774	5,014	752
5040-Underground Distribution Lines and Feeders - Operation Labour	67,455	10,118	134,662	20,199	99,684	14,953	26,768	4,015	63,775	9,566	65,092	9,764
5045-Underground Distribution Lines and Feeders - Operation Supplies and Expenses	41,917	6,288	66,362	9,954	77,344	11,602	8,877	1,332	25,820	3,873	25,005	3,751
5055-Underground Distribution Transformers - Operation	66	10	-	-	-	-	10,515	1,577	11,028	1,654	10,796	1,619
5065-Meter Expense	349,700	52,455	410,333	61,550	322,022	48,303	236,090	35,414	213,174	31,976	405,255	60,788
5085-Miscellaneous Distribution Expense	294,626	44,194	231,479	34,722	255,094	38,264	262,281	39,342	304,452	45,668	306,733	46,010
Subtotal - Distribution - Operation	3,079,565	461,935	3,380,262	507,039	3,638,282	545,742	3,473,986	521,098	3,480,071	522,011	3,877,534	581,630
Distribution - Maintenance												
5105-Maintenance Supervision and Engineering	189,322	28,398	-	-	-	-	-	-	-	-	-	-
5110-Maintenance of Structures	29,763	4,464	45,236	6,785	62,755	9,413	48,022	7,203	65,692	9,854	55,468	8,320
5112-Maintenance of Transformer Station Equipment	114,169	17,125	35,045	5,257	110,352	16,553	83,893	12,584	78,988	11,848	36,473	5,471
5114-Maintenance of Distribution Station Equipment	76,510	11,476	127,355	19,103	114,238	17,136	166,363	24,954	88,340	13,251	77,262	11,589
5120-Maintenance of Poles, Towers and Fixtures	449,429	67,414	406,736	61,010	366,819	55,023	133,113	19,967	198,155	29,723	225,985	33,898
5125-Maintenance of Overhead Conductors and Devices	134,879	20,232	158,509	23,776	159,150	23,873	248,807	37,321	312,160	46,824	322,983	48,447
5130-Maintenance of Overhead Services	43,921	6,588	13,688	2,053	8,765	1,315	30,590	4,589	-	-	35,204	5,281
5135-Overhead Distribution Lines and Feeders - Right of Way	448,802	67,320	550,532	82,580	535,739	80,361	430,580	64,587	475,593	71,339	445,716	66,857
5145-Maintenance of Underground Conduit	8,037	1,205	308	46	-	-	-	-	-	-	-	-
5150-Maintenance of Underground Conductors and Devices	21,615	3,242	9,953	1,493	14,970	2,245	6,645	997	13,964	2,095	14,012	2,102
5155-Maintenance of Underground Services	129,060	19,359	69,693	10,454	156,402	23,460	140,929	21,139	174,484	26,173	174,972	26,246
5160-Maintenance of Line Transformers	69,840	10,476	87,650	13,147	174,224	26,134	86,876	13,031	146,324	21,949	160,395	24,059
5175-Maintenance of Meters	3,843	577	18,596	2,789	26,874	4,031	8,833	1,325	10,556	1,583	10,711	1,607
Subtotal - Distribution - Maintenance	1,719,190	257,879	1,523,299	228,495	1,730,289	259,543	1,384,651	207,698	1,564,256	234,638	1,559,180	233,877
Billing and Collections												
5305-Supervision	91,687	13,753	116,569	17,485	106,573	15,986	113,434	17,015	111,069	16,660	117,462	17,619
5310-Meter Reading Expense	285,926	42,889	246,673	37,001	241,803	36,270	259,260	38,889	289,676	43,451	260,318	39,048
5315-Customer Billing	696,308	104,446	727,243	109,086	668,799	100,320	726,373	108,956	1,155,109	173,266	1,207,472	181,121
5320-Collecting	329,214	49,382	339,961	50,994	347,902	52,185	384,899	57,735	601,141	90,171	581,187	87,178
5325-Collecting - Cash Over and Short	13	2	81	12	2,393	359	253	38	-	-	-	-
5330-Collection Charges	(92,320)	(13,848)	(87,180)	(13,077)	(66,917)	(10,038)	(74,948)	(11,242)	(77,500)	(11,625)	(77,500)	(11,625)
5335-Bad Debt Expense	51,410	7,711	129,321	19,398	295,004	44,251	189,953	28,493	100,000	15,000	100,000	15,000
Subtotal - Billing and Collections	1,362,238	204,336	1,472,667	220,900	1,595,556	239,333	1,599,224	239,884	2,179,495	326,924	2,188,939	328,341

Table 2-24
Calculation of Working Capital Allowance

Expense Description	2006 Actual	Allowance for Working Capital	2007 Actual	Allowance for Working Capital	2008 Actual	Allowance for Working Capital	2009 Actual	Allowance for Working Capital	2010 Bridge	Allowance for Working Capital	2011 Test	Allowance for Working Capital
Community Relations												
5405-Supervision	38,688	5,803	-	-	-	-	-	-	-	-	-	-
5410-Community Relations - Sundry	129,582	19,437	80,898	12,135	65,692	9,854	66,458	9,969	138,071	20,711	163,663	24,549
5415-Energy Conservation	387,338	58,101	205,935	30,890	25,703	3,855	30,847	4,627	50,000	7,500	50,000	7,500
5420-Community Safety Program	27,335	4,100	23,951	3,593	28,302	4,245	24,314	3,647	33,089	4,963	33,114	4,967
Subtotal - Community Relations	582,943	87,441	310,784	46,618	119,696	17,954	121,619	18,243	221,160	33,174	246,777	37,017
Administrative and General Expenses												
5605-Executive Salaries and Expenses	515,160	77,274	490,417	73,563	486,500	72,975	474,131	71,120	460,707	69,106	464,036	69,605
5615-General Administrative Salaries and Expenses	1,149,125	172,369	1,011,759	151,764	1,005,375	150,806	1,274,834	191,225	1,431,285	214,693	1,453,695	218,054
5625-Administrative Expense Transferred-Credit	(507,832)	(76,175)	(349,783)	(52,467)	(463,386)	(69,508)	(376,582)	(56,487)	(384,784)	(57,718)	(499,705)	(74,956)
5630-Outside Services Employed	177,884	26,683	94,047	14,107	83,113	12,467	121,337	18,201	90,300	13,545	90,300	13,545
5640-Injuries and Damages	116,780	17,517	142,929	21,439	135,898	20,385	109,923	16,488	113,850	17,078	115,300	17,295
5645-Employee Pensions and Benefits	(203,942)	(30,591)	-	-	-	-	-	-	-	-	-	-
5655-Regulatory Expenses	312,703	46,905	398,144	59,722	377,610	56,641	393,922	59,088	431,430	64,715	471,686	70,753
5665-Miscellaneous Expenses	220,879	33,132	219,082	32,862	232,766	34,915	226,261	33,939	220,313	33,047	216,095	32,414
Subtotal - Administrative and General Expenses	1,780,756	267,113	2,006,595	300,989	1,857,875	278,681	2,223,826	333,574	2,363,101	354,465	2,311,407	346,711
Taxes Other than Income Taxes												
6105-Taxes Other Than Income Taxes	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal - Taxes Other than Income Taxes	-	-	-	-	-	-	-	-	-	-	-	-
Total	102,692,215	15,403,832	102,519,646	15,377,947	101,936,330	15,290,450	88,782,187	13,317,328	126,842,329	19,026,349	125,598,185	18,839,728

CAPITAL PROJECT DESCRIPTION:

This Schedule sets out WNH's significant capital projects in the years 2005 through 2009 together with the budgeted projects in the 2010 bridge year and the 2011 test year. WNH has chosen a materiality level of \$125,000 in its variance analysis of capital projects, a level which is slightly below its calculated materiality level of \$144,903 as detailed in Table 2-20. In addition, this materiality level assists in providing variance analysis for a greater range of projects.

Each capital project that is in excess of the materiality level chosen of \$125,000 has a detailed Business Case Analysis that describes the project, including the attributes of the category of work, the alternatives considered, the consequences of not proceeding with the project, the project details/scope and the expected benefits. The Business Case Analyses are provided in Appendix C, for each year, except for Table 2-31.45 which is presented below. Tables 2-25 through 2-31 provide a summary of the Business Case Analyses presented in Appendix C. WNH has presented the information in the format of the Board's Appendix 2-A.

WNH notes that it transferred the balance of its Wholesale Meters from USoA 1860 to USoA 1820 in 2006 in order to be consistent with the APH. This has resulted in a credit balance in USoA 1860.

Table 25
2005 Summary of Capital Projects in excess of \$125,000

USoA	Description	Projects in excess of materiality threshold of \$125,000 **							
		2-25.01 WO 183	2-25.02 WO 404	2-25.03 WO 408	2-25.04 WO 411	2-25.05 WO 420	2-25.06 WO 484	2-25.07 WO 486	2-25.08 WO 503
1805	Land								
1806	Land Rights								
1808	Building and Fixtures								
1815	Transformer Station Equipment								
1820	Distribution System Equipment								
1830	OH - Poles, Towers and Fixtures								54,700
1835	OH - Conductors and Devices								148,672
1840	UG - Conduit		25,810	52,739	19,190				
1845	UG - Conductors and Devices		92,486	184,586	27,414				
1850	Line Transformers		94,637	202,166	89,096				37,460
1855	Services	308,048							
1860	Meters					164,052			
1915	Office Equipment								
1920	Computer Hardware							306,684	
1925	Computer Software						175,099		
1930	Transportation Equipment								
1935	Stores Equipment								
1940	Tools, Shop and Garage Equipment								
1945	Measurement and Testing Equipment								
1955	Communication Equipment								
1960	Miscellaneous Equipment								
1980	System Supervisory Equipment								
Total of Project		308,048	212,932	439,491	135,700	164,052	175,099	306,684	240,832

** All projects in excess of \$125,000 have a detailed Business Case Analysis sheets in Appendix C

Table 25
2005 Summary of Capital Projects in excess of \$125,000

USoA	Description	Projects in excess of materiality threshold of \$125,000 **										2005 Projects < \$125,000	Total 2005 Additions
		2-25.09 WO 504	2-25.10 WO 572	2-25.11 WO 573	2-25.12 WO 598	2-25.13 WO 744	2-25.14 WO 753	2-25.15 WO 773	2-25.16 WO 831	2-25.17 WO 17645	Subtotal		
1805	Land										-	-	-
1806	Land Rights		2,510								2,510	2,906	5,416
1808	Building and Fixtures										-	138,803	138,803
1815	Transformer Station Equipment										-	5,048	5,048
1820	Distribution System Equipment										-	-	-
1830	OH - Poles, Towers and Fixtures	159,069	2,510			133,232	87,721				437,232	1,183,956	1,621,188
1835	OH - Conductors and Devices	123,711				362,117	49,247				683,746	555,760	1,239,506
1840	UG - Conduit		17,570	16,580				20,032	28,556		180,478	201,911	382,389
1845	UG - Conductors and Devices		67,770	60,794				64,104	100,699		597,853	603,503	1,201,356
1850	Line Transformers	148,622	36,395	59,412		91,240	16,929	49,413	21,042		846,411	1,232,227	2,078,638
1855	Services	531									308,579	525,892	834,471
1860	Meters										164,052	239,098	403,149
1915	Office Equipment										-	55,241	55,241
1920	Computer Hardware									116,702	306,684	193,729	500,413
1925	Computer Software										175,099	340,616	515,715
1930	Transportation Equipment				309,397						309,397	112,931	422,328
1935	Stores Equipment										-	1,782	1,782
1940	Tools, Shop and Garage Equipment										-	41,179	41,179
1945	Measurement and Testing Equipment										-	31,867	31,867
1955	Communication Equipment										-	6,376	6,376
1960	Miscellaneous Equipment										-	45,143	45,143
1980	System Supervisory Equipment										-	42,456	42,456
												-	
Total of Project		431,932	126,756	136,786	309,397	586,589	153,896	133,550	150,297	116,702	4,012,041	5,560,424	9,572,465

** All projects in excess of \$125,000 have a detailed Business Case Analysis sheets in Appendix C

Table 26
2006 Summary of Capital Projects in excess of \$125,000

USoA	Description	Projects in excess of materiality threshold of \$125,000 **										
		2-26.01 WO 1108	2-26.02 WO 1109	2-26.03 WO 1112	2-26.04 WO 1115	2-26.05 WO 1116	2-26.06 WO 1118	2-26.07 WO 1120	2-26.08 WO 1121	2-26.09 WO 1129	2-26.10 WO 1134	2-26.11 WO 1150
1805	Land											
1806	Land Rights											
1808	Building and Fixtures				860,546							
1815	Transformer Station Equipment						717,502					
1820	Distribution System Equipment											
1830	OH - Poles, Towers and Fixtures			108,686								
1835	OH - Conductors and Devices			58,797								
1840	UG - Conduit											
1845	UG - Conductors and Devices											
1850	Line Transformers			10,690					139,233			4,188
1855	Services					147,409		183,118				414,636
1860	Meters									135,389	135,389	
1915	Office Equipment											
1920	Computer Hardware											
1925	Computer Software	184,180	179,740									
1930	Transportation Equipment											
1935	Stores Equipment											
1940	Tools, Shop and Garage Equipment											
1945	Measurement and Testing Equipment											
1955	Communication Equipment											
1960	Miscellaneous Equipment											
1980	System Supervisory Equipment											
	Total of Project	184,180	179,740	178,174	860,546	147,409	717,502	183,118	139,233	135,389	135,389	418,824

** All projects in excess of \$125,000 have a detailed Business Case Analysis sheets in Appendix C

Table 26
2006 Summary of Capital Projects in excess of \$125,000

USoA	Description	Projects in excess of materiality threshold of \$125,000 **										
		2-26.12 WO 1160	2-26.13 WO 1167	2-26.14 WO 1187	2-26.15 WO 1195	2-26.16 WO 1199	2-26.17 WO 1224	2-26.18 WO 1228	2-26.19 WO 1282	2-26.20 WO 1302	2-26.21 WO 1303	2-26.22 WO 1311
1805	Land											
1806	Land Rights											
1808	Building and Fixtures											
1815	Transformer Station Equipment											
1820	Distribution System Equipment											
1830	OH - Poles, Towers and Fixtures				236,992	143,330	122,030					
1835	OH - Conductors and Devices				128,209	79,343	61,015					
1840	UG - Conduit	21,595	31,215	138,493			2,034	30,541	48,066	44,959	35,956	25,616
1845	UG - Conductors and Devices	75,584	110,293	76,171			8,135	41,647	68,665	159,086	124,647	87,096
1850	Line Transformers	57,073	66,592	16,158	23,311	30,714	10,169	66,635	112,153	141,794	79,103	58,064
1855	Services											
1860	Meters											
1915	Office Equipment											
1920	Computer Hardware											
1925	Computer Software											
1930	Transportation Equipment											
1935	Stores Equipment											
1940	Tools, Shop and Garage Equipment											
1945	Measurement and Testing Equipment											
1955	Communication Equipment											
1960	Miscellaneous Equipment											
1980	System Supervisory Equipment											
Total of Project		154,252	208,100	230,822	388,512	253,386	203,383	138,822	228,883	345,839	239,705	170,776

** All projects in excess of \$125,000 have a detailed Business Case Analysis sheets in Appendix C

Table 26
2006 Summary of Capital Projects in excess of \$125,000

USoA	Description	Projects in excess of materiality threshold of \$125,000 **						Projects < \$125,000	Total Additions
		2-26.23 WO 1371	2-26.24 WO 1372	2-26.25 WO 1386	2-26.26 WO 1422	2-26.27 WO 1545	Subtotal		
1805	Land						-	17,783	17,783
1806	Land Rights						-	6,455	6,455
1808	Building and Fixtures						860,546	59,075	919,621
1815	Transformer Station Equipment	323,288	643,434				1,684,223	268,742	1,952,965
1820	Distribution System Equipment						-	502,762	502,762
1830	OH - Poles, Towers and Fixtures			6,526	102,680		720,244	560,723	1,280,967
1835	OH - Conductors and Devices			19,579	55,289		402,233	309,442	711,675
1840	UG - Conduit			17,948		32,975	429,398	151,722	581,120
1845	UG - Conductors and Devices			58,737		131,901	941,962	417,849	1,359,811
1850	Line Transformers			60,369			876,245	942,773	1,819,018
1855	Services						745,163	63,675	808,838
1860	Meters						283,679	(441,976)	(158,297)
1915	Office Equipment						-	113,142	113,142
1920	Computer Hardware						-	144,767	144,767
1925	Computer Software						363,919	41,992	405,911
1930	Transportation Equipment						-	260,432	260,432
1935	Stores Equipment						-	-	-
1940	Tools, Shop and Garage Equipment						-	-	-
1945	Measurement and Testing Equipment						-	29,230	29,230
1955	Communication Equipment						-	17,942	17,942
1960	Miscellaneous Equipment						-	1,167	1,167
1980	System Supervisory Equipment						-	81,576	81,576
								-	
Total of Project		323,288	643,434	163,160	157,969	164,876	7,307,611	3,549,274	10,856,885

** All projects in excess of \$125,000 have a detailed Business Case Analysis sheets in Appendix C

Table 27
2007 Summary of Capital Projects in excess of \$125,000

USoA	Description	Projects in excess of materiality threshold of \$125,000**										
		2-27.01 WO 1184	2-27.02 WO 1191	2-27.03 WO 1198	2-27.04 WO 1213	2-27.05 WO 1271	2-27.06 WO 1568	2-27.07 WO 1608	2-27.08 WO 1609	2-27.09 WO 1639	2-27.10 WO 1671	2-27.11 WO 1672
1805	Land											
1806	Land Rights											
1808	Building and Fixtures											
1815	Transformer Station Equipment											
1820	Distribution System Equipment											
1830	OH - Poles, Towers and Fixtures	262,191	557,954	313,927	106,666						98,086	230,436
1835	OH - Conductors and Devices	141,180	293,162	173,781	60,540						53,851	124,362
1840	UG - Conduit						23,885	96,088	46,654	18,616		
1845	UG - Conductors and Devices						78,025	137,866	69,980	71,805		
1850	Line Transformers		94,568	72,876	123,963		57,324	183,821	77,756	42,551	40,388	10,973
1855	Services											
1860	Meters											
1915	Office Equipment											
1920	Computer Hardware											
1925	Computer Software											
1930	Transportation Equipment					210,417						
1935	Stores Equipment											
1940	Tools, Shop and Garage Equipment											
1945	Measurement and Testing Equipment											
1955	Communication Equipment											
1960	Miscellaneous Equipment											
1980	System Supervisory Equipment											
Total of Project		403,370	945,685	560,584	291,169	210,417	159,234	417,775	194,390	132,972	192,325	365,771

** All projects in excess of \$125,000 have a detailed Business Case Analysis sheets in Appendix C

Table 27
2007 Summary of Capital Projects in excess of \$125,000

USoA	Description	Projects in excess of materiality threshold of \$125,000**										
		2-27.11 WO 1672	2-27.12 WO 1696	2-27.13 WO 1785	2-27.14 WO 1822	2-27.15 WO 1844	2-27.16 WO 1866	2-27.17 WO 1872	2-27.18 WO 1874	2-27.19 WO 1875	2-27.20 WO 1901	2-27.21 WO 1912
1805	Land											
1806	Land Rights											
1808	Building and Fixtures											
1815	Transformer Station Equipment											
1820	Distribution System Equipment											
1830	OH - Poles, Towers and Fixtures	230,436	275,651	119,261	106,975			95,985				
1835	OH - Conductors and Devices	124,362	149,123	65,221	54,336			49,912				
1840	UG - Conduit											
1845	UG - Conductors and Devices											
1850	Line Transformers	10,973	27,113	1,863	8,490			46,073	11,501	22,557		
1855	Services								152,802	150,960	385,059	
1860	Meters											174,160
1915	Office Equipment											
1920	Computer Hardware						160,484					
1925	Computer Software					188,260						
1930	Transportation Equipment											
1935	Stores Equipment											
1940	Tools, Shop and Garage Equipment											
1945	Measurement and Testing Equipment											
1955	Communication Equipment											
1960	Miscellaneous Equipment											
1980	System Supervisory Equipment											
Total of Project		365,771	451,888	186,345	169,801	188,260	160,484	191,971	164,303	173,517	385,059	174,160

** All projects in excess of \$125,000 have a detailed Business Case Analysis sheets in Appendix C

Table 27
2007 Summary of Capital Projects in excess of \$125,000

USoA	Description	Projects in excess of materiality threshold of \$125,000**											Subtotal	Projects < \$125,000	Total Additions
		2-27.22 WO 1933	2-27.23 WO 1949	2-27.24 WO 1954	2-27.25 WO 1955	2-27.26 WO 2008	2-27.27 WO 2052	2-27.28 WO 2054	2-27.29 WO 2095	2-27.30 WO 2222	2-27.31 WO 2539	2-27.32 WO 1433			
1805	Land												-	-	-
1806	Land Rights												-	90,888	90,888
1808	Building and Fixtures	550,212											550,212	114,552	664,764
1815	Transformer Station Equipment												-	(12,165)	(12,165)
1820	Distribution System Equipment												-	11,114	11,114
1830	OH - Poles, Towers and Fixtures			78,395	177,596		132,390		78,143	210,676		87,770	2,844,331	1,763,309	4,607,640
1835	OH - Conductors and Devices			43,117	96,871		71,621		41,203	115,213		48,921	1,533,493	946,639	2,480,132
1840	UG - Conduit		152,054			35,468		17,984					390,749	421,417	812,166
1845	UG - Conductors and Devices		231,387			54,679		69,367					713,109	485,802	1,198,911
1850	Line Transformers		277,664	9,146	48,435	57,635	13,022	41,106	22,733	3,292		7,194	1,294,852	878,364	2,173,216
1855	Services												688,821	165,770	854,591
1860	Meters												174,160	273,972	448,132
1915	Office Equipment												-	54,173	54,173
1920	Computer Hardware												160,484	-	160,484
1925	Computer Software												188,260	145,235	333,495
1930	Transportation Equipment														
1935	Stores Equipment														
1940	Tools, Shop and Garage Equipment														
1945	Measurement and Testing Equipment														
1955	Communication Equipment														
1960	Miscellaneous Equipment														
1980	System Supervisory Equipment														
	Total of Project	550,212	661,105	130,659	322,902	147,782	217,033	128,458	142,078	329,181	179,242	143,886	8,928,130	5,842,064	14,770,193

** All projects in excess of \$125,000 have a detailed Business Case Analysis sheets in Appendix C

Table 28
2008 Summary of Capital Projects in excess of \$125,000

USoA	Description	Projects in excess of materiality threshold of \$125,000 **						
		2-28.01 WO 1610	2-28.02 WO 1956	2-28.03 WO 1996	2-28.04 WO 2010	2-28.05 WO 2070	2-28.06 WO 2223	2-28.07 WO 2371
1805	Land							
1806	Land Rights							
1808	Building and Fixtures							
1815	Transformer Station Equipment							
1820	Distribution System Equipment							
1830	OH - Poles, Towers and Fixtures	2,798	242,333		731,054	375,273	118,454	
1835	OH - Conductors and Devices		128,984		384,765	205,227	62,929	
1840	UG - Conduit	61,565		98,153				66,396
1845	UG - Conductors and Devices	95,146		160,614				107,499
1850	Line Transformers	120,332	19,543	187,384	166,732	5,864	3,702	142,278
1855	Services							
1860	Meters							
1915	Office Equipment							
1920	Computer Hardware							
1925	Computer Software							
1930	Transportation Equipment							
1935	Stores Equipment							
1940	Tools, Shop and Garage Equipment							
1945	Measurement and Testing Equipment							
1955	Communication Equipment							
1960	Miscellaneous Equipment							
1980	System Supervisory Equipment							
Total of Project		279,843	390,860	446,151	1,282,551	586,364	185,085	316,174

** All projects in excess of \$125,000 have a detailed Business Case Analysis sheets in Appendix C

Table 28
2008 Summary of Capital Projects in excess of \$125,000

USoA	Description	Projects in excess of materiality threshold of \$125,000 **									
		2-28.08 WO 2394	2-28.09 WO 2487	2-28.10 WO 2532	2-28.11 WO 2546	2-28.12 WO 2550	2-28.13 WO 2551	2-28.14 WO 2555	2-28.15 WO 2561	2-28.16 WO 2565	2-28.17 WO 2577
1805	Land				240,656						
1806	Land Rights										
1808	Building and Fixtures										
1815	Transformer Station Equipment										
1820	Distribution System Equipment										
1830	OH - Poles, Towers and Fixtures	225,235		421,702		4,451					194,247
1835	OH - Conductors and Devices	120,125		224,908							106,229
1840	UG - Conduit		74,623								
1845	UG - Conductors and Devices		266,511								
1850	Line Transformers	26,277	197,218	56,227		22,256	200,247				3,035
1855	Services					195,852		535,067			
1860	Meters								275,629		
1915	Office Equipment										
1920	Computer Hardware										
1925	Computer Software									127,959	
1930	Transportation Equipment										
1935	Stores Equipment										
1940	Tools, Shop and Garage Equipment										
1945	Measurement and Testing Equipment										
1955	Communication Equipment										
1960	Miscellaneous Equipment										
1980	System Supervisory Equipment										
Total of Project		371,638	538,352	702,837	240,656	222,559	200,247	535,067	275,629	127,959	303,511

** All projects in excess of \$125,000 have a detailed Business Case Analysis sheets in Appendix C

Table 28
2008 Summary of Capital Projects in excess of \$125,000

USoA	Description	Projects in excess of materiality threshold of \$125,000 **						Projects < \$125,000	Total Additions
		2-28.18 WO 2581	2-28.19 WO 2665	2-28.20 WO 2731	2-28.21 WO 2734	2-28.22 WO 2922	Subtotal		
1805	Land						240,656	7,743	248,399
1806	Land Rights						-	35,659	35,659
1808	Building and Fixtures						-	5,752	5,752
1815	Transformer Station Equipment						-	778,737	778,737
1820	Distribution System Equipment						-	35,856	35,856
1830	OH - Poles, Towers and Fixtures	260,532	80,719	65,848	102,457	260,361	3,085,465	288,426	3,373,891
1835	OH - Conductors and Devices	138,408	43,632	34,492	55,169	140,512	1,645,380	229,974	1,875,354
1840	UG - Conduit						300,738	(90,517)	210,221
1845	UG - Conductors and Devices						629,771	938,409	1,568,180
1850	Line Transformers	8,142	95,990	56,441		12,398	1,324,065	1,058,465	2,382,530
1855	Services						730,918	529,238	1,260,156
1860	Meters						275,629	91,434	367,063
1915	Office Equipment						-	7,050	7,050
1920	Computer Hardware						-	91,002	91,002
1925	Computer Software						127,959	103,085	231,044
1930	Transportation Equipment						-	316,057	316,057
1935	Stores Equipment						-	99,191	99,191
1940	Tools, Shop and Garage Equipment						-	114,754	114,754
1945	Measurement and Testing Equipment						-	14,066	14,066
1955	Communication Equipment						-	216,739	216,739
1960	Miscellaneous Equipment						-	25,550	25,550
1980	System Supervisory Equipment						-	-	-
Total of Project		407,081	220,340	156,781	157,626	413,271	8,360,580	4,896,671	13,257,251

** All projects in excess of \$125,000 have a detailed Business Case Analysis sheets in Appendix C

Table 29
2009 Summary of Capital Projects in excess of \$125,000

USoA	Description	Projects in excess of materiality threshold of \$125,000 **										
		2-29.12 WO 2752	2-29.13 WO 2777	2-29.14 WO 2807	2-29.15 WO 2812	2-29.16 WO 2855	2-29.17 WO 2931	2-29.18 WO 3048	2-29.19 WO 3117	2-29.20 WO 3126	2-29.21 WO 3150	2-29.22 WO 3155
1805	Land											
1806	Land Rights											
1808	Building and Fixtures											
1815	Transformer Station Equipment											
1820	Distribution System Equipment											
1830	OH - Poles, Towers and Fixtures			48,153	331,099		256,445	219,696			82,472	189,678
1835	OH - Conductors and Devices			25,677	173,967		137,936	115,530		10,578	44,731	101,539
1840	UG - Conduit	30,882				25,543				72,733	12,580	
1845	UG - Conductors and Devices	106,243				88,550				245,239		
1850	Line Transformers	50,153		101,081	56,118	56,195	12,030	43,560		297,379		158,470
1855	Services											
1860	Meters											
1915	Office Equipment											
1920	Computer Hardware											
1925	Computer Software											
1930	Transportation Equipment		470,413						267,040			
1935	Stores Equipment											
1940	Tools, Shop and Garage Equipment											
1945	Measurement and Testing Equipment											
1955	Communication Equipment											
1960	Miscellaneous Equipment											
1980	System Supervisory Equipment											
Total of Project		187,279	470,413	174,911	561,184	170,289	406,411	378,786	267,040	625,929	139,783	449,687

** All projects in excess of \$125,000 have a detailed Business Case Analysis sheets in Appendix C

Table 29
2009 Summary of Capital Projects in excess of \$125,000

USoA	Description	Projects in excess of materiality threshold of \$125,000 **										
		2-29.23 WO 3218	2-29.24 WO 3220	2-29.25 WO 3232	2-29.26 WO 3233	2-29.27 WO 3237	2-29.28 WO 3243	2-29.29 WO 3244	2-29.30 WO 3260	2-29.31 WO 3376	2-29.32 WO 3389	2-29.33 WO 3398
1805	Land											
1806	Land Rights											
1808	Building and Fixtures											
1815	Transformer Station Equipment										175,485	
1820	Distribution System Equipment											
1830	OH - Poles, Towers and Fixtures	238,393	120,838				192,718					
1835	OH - Conductors and Devices	129,653	64,775				103,802					
1840	UG - Conduit							6,824				92,279
1845	UG - Conductors and Devices							10,255				144,172
1850	Line Transformers	50,188	25,311	38,662	152,819		11,041	168,360				179,031
1855	Services			151,697	220,913	347,859						
1860	Meters									205,619		
1915	Office Equipment											
1920	Computer Hardware											
1925	Computer Software								215,747			
1930	Transportation Equipment											
1935	Stores Equipment											
1940	Tools, Shop and Garage Equipment											
1945	Measurement and Testing Equipment											
1955	Communication Equipment											
1960	Miscellaneous Equipment											
1980	System Supervisory Equipment											
Total of Project		418,234	210,924	190,359	373,731	347,859	307,561	185,438	215,747	205,619	175,485	415,482

** All projects in excess of \$125,000 have a detailed Business Case Analysis sheets in Appendix C

Table 29
2009 Summary of Capital Projects in excess of \$125,000

USoA	Description	Projects in excess of materiality threshold of \$125,000 **								Projects < \$125,000	Total Additions
		2-29.34 WO 3402	2-29.35 WO 3457	2-29.36 WO 3575	2-29.37 WO 3576	2-29.38 WO 3582	2-29.39 WO 3606	2-29.40 WO 3637	Subtotal		
									-	-	-
1805	Land								-	-	-
1806	Land Rights								-	15,448	15,448
1808	Building and Fixtures								-	42,847	42,847
1815	Transformer Station Equipment								1,394,552	(747,347)	647,205
1820	Distribution System Equipment								-	31,527	31,527
1830	OH - Poles, Towers and Fixtures	190,831	38,357	234,722	195,817	80,745	93,682	53,340	3,411,763	741,605	4,153,368
1835	OH - Conductors and Devices	102,307	20,516	126,389	101,674	43,602	50,444	71,989	2,005,944	273,777	2,279,721
1840	UG - Conduit								404,365	81,436	485,801
1845	UG - Conductors and Devices								989,322	135,517	1,124,839
1850	Line Transformers	102,941	67,926		79,080	37,143			2,091,831	1,478,859	3,570,690
1855	Services								720,469	560,818	1,281,287
1860	Meters								205,619	34,526	240,145
1915	Office Equipment								-	18,821	18,821
1920	Computer Hardware								-	152,428	152,428
1925	Computer Software								215,747	148,355	364,102
1930	Transportation Equipment								737,453	61,632	799,085
1935	Stores Equipment								-	2,811	2,811
1940	Tools, Shop and Garage Equipment								-	25,417	25,417
1945	Measurement and Testing Equipment								-	33,434	33,434
1955	Communication Equipment								-	74,139	74,139
1960	Miscellaneous Equipment								-	11,983	11,983
1980	System Supervisory Equipment								373,467	61,230	434,697
										-	
Total of Project		396,078	126,798	361,110	376,571	161,491	144,127	125,328	12,550,530	3,239,265	15,789,795

** All projects in excess of \$125,000 have a detailed Business Case Analysis sheets in Appendix C

Table 30
2010 Summary of Capital Projects in excess of \$125,000

USoA	Description	Projects in excess of materiality threshold of \$125,000 **										
		2-30.01 06EN04 W03369	2-30.02 06EN04 W03805	2-30.03 06EN04 W03807	2-30.04 06EN04 W03808	2-30.05 06EN04 1	2-30.06 06EN04 3	2-30.07 06EN04 4	2-30.08 06EN04 5	2-30.09 06EN04 7	2-30.10 06EN04 14	2-30.11 06EN04 47
1805	Land											
1806	Land Rights											
1808	Building and Fixtures											
1815	Transformer Station Equipment											
1820	Distribution System Equipment											
1830	OH - Poles, Towers and Fixtures	86,221	229,526	176,188	141,050		103,138	133,693	355,620	64,977	87,652	75,000
1835	OH - Conductors and Devices	46,559	123,944	95,141	76,167	233,032	55,694	72,194	192,035	35,088	47,332	40,500
1840	UG - Conduit											
1845	UG - Conductors and Devices											
1850	Line Transformers	39,662	105,582	81,046	64,883		47,443	61,499	163,585	29,889	40,320	34,500
1855	Services											
1860	Meters											
1915	Office Equipment											
1920	Computer Hardware											
1925	Computer Software											
1930	Transportation Equipment											
1935	Stores Equipment											
1940	Tools, Shop and Garage Equipment											
1945	Measurement and Testing Equipment											
1955	Communication Equipment											
1960	Miscellaneous Equipment											
1980	System Supervisory Equipment											
Total of Project		172,442	459,051	352,375	282,100	233,032	206,275	267,385	711,240	129,954	175,303	150,000

** All projects in excess of \$125,000 have a detailed Business Case Analysis sheets in Appendix C

Table 30
2010 Summary of Capital Projects in excess of \$125,000

USoA	Description	Projects in excess of materiality threshold of \$125,000 **										
		2-30.12 06EN04 48	2-30.13 06EN04 15	2-30.14 06EN04 19	2-13.15 06EN04 20	2-30.16 06EN04 23	2-30.17 06EN04 38	2-30.18 06EN04 41	2-30.19 06EN04 43	2-30.20 06EN05 2	2-30.21 06EN05 4	2-30.22 06EN06 WO3537
1805	Land											
1806	Land Rights											
1808	Building and Fixtures											
1815	Transformer Station Equipment											
1820	Distribution System Equipment											
1830	OH - Poles, Towers and Fixtures	140,000	170,320	190,063	150,063	159,092	70,000	70,000	70,000	86,800	93,000	142,369
1835	OH - Conductors and Devices	75,600	91,973	102,634	81,034		37,800	37,800	37,800	43,400	46,500	77,429
1840	UG - Conduit											
1845	UG - Conductors and Devices											
1850	Line Transformers	64,400	78,347	87,429	69,029		32,200	32,200	32,200	9,800	10,500	29,972
1855	Services											
1860	Meters											
1915	Office Equipment											
1920	Computer Hardware											
1925	Computer Software											
1930	Transportation Equipment											
1935	Stores Equipment											
1940	Tools, Shop and Garage Equipment											
1945	Measurement and Testing Equipment											
1955	Communication Equipment											
1960	Miscellaneous Equipment											
1980	System Supervisory Equipment											
Total of Project		280,000	340,640	380,126	300,126	159,092	140,000	140,000	140,000	140,000	150,000	249,770

** All projects in excess of \$125,000 have a detailed Business Case Analysis sheets in Appendix C

Table 30
2010 Summary of Capital Projects in excess of \$125,000

USoA	Description	Projects in excess of materiality threshold of \$125,000 **										
		2-30.23 06EN06 WO3705	2-30.24 06EN06 WO3859	2-30.25 06EN06 6	2-30.26 06EN07 1	2-30.27 06EN08 WO2918	2-30.28 06EN08 1	2-30.29 06EN08 4	2-30.30 06EN09 WO3368	2-30.31 06EN09 WO3508	2-30.32 06EN09 1	2-30.33 06EN09 2
1805	Land											
1806	Land Rights											
1808	Building and Fixtures											
1815	Transformer Station Equipment											
1820	Distribution System Equipment											
1830	OH - Poles, Towers and Fixtures	301,903	185,172	79,800								
1835	OH - Conductors and Devices	164,193	100,707	43,400								
1840	UG - Conduit								26,124	114,000	52,200	45,000
1845	UG - Conductors and Devices					445,879	484,542	454,121	44,411	193,800	88,740	76,500
1850	Line Transformers	63,559	38,984	16,800					60,086	262,200	120,060	103,500
1855	Services				905,700							
1860	Meters											
1915	Office Equipment											
1920	Computer Hardware											
1925	Computer Software											
1930	Transportation Equipment											
1935	Stores Equipment											
1940	Tools, Shop and Garage Equipment											
1945	Measurement and Testing Equipment											
1955	Communication Equipment											
1960	Miscellaneous Equipment											
1980	System Supervisory Equipment											
Total of Project		529,655	324,863	140,000	905,700	445,879	484,542	454,121	130,622	570,000	261,000	225,000

** All projects in excess of \$125,000 have a detailed Business Case Analysis sheets in Appendix C

Table 30
2010 Summary of Capital Projects in excess of \$125,000

USoA	Description	Projects in excess of materiality threshold of \$125,000 **										
		2-30.34 06EN09 3	2-30.35 06EN09 7	2-30.36 06EN09 12	2-30.37 06EN10 WO3292	2-30.38 06EN10 11	2-30.39 06EN10 WO 3956	2-30.40 06EN10 13	2-30.41 06EN11 1	2-30.42 06SN02 1	2-30.43 06SN04 4	2-30.44 06SN04 6
1805	Land											
1806	Land Rights											
1808	Building and Fixtures									1,131,796		
1815	Transformer Station Equipment										3,229,322	289,033
1820	Distribution System Equipment											
1830	OH - Poles, Towers and Fixtures											
1835	OH - Conductors and Devices											
1840	UG - Conduit	29,090	67,200		41,809	34,680	43,958	54,393				
1845	UG - Conductors and Devices	49,455	114,240	132,679	127,887	106,080	134,460	166,379				
1850	Line Transformers	66,909	154,560		76,240	63,240	80,159	9,918				
1855	Services								903,446			
1860	Meters											
1915	Office Equipment											
1920	Computer Hardware											
1925	Computer Software											
1930	Transportation Equipment											
1935	Stores Equipment											
1940	Tools, Shop and Garage Equipment											
1945	Measurement and Testing Equipment											
1955	Communication Equipment											
1960	Miscellaneous Equipment											
1980	System Supervisory Equipment											
Total of Project		145,454	336,000	132,679	245,937	204,000	258,577	319,960	903,446	1,131,796	3,229,322	289,033

** All projects in excess of \$125,000 have a detailed Business Case Analysis sheets in Appendix C

Table 30
2010 Summary of Capital Projects in excess of \$125,000

USoA	Description	Projects in excess of materiality threshold of \$125,000 **											Projects < \$125,000	Total Additions
		2-30.45 06SN04 7	2-30.46 06SN04 9	2-30.47 06SN04 WO 2315	2-30.48 06OH01 1	2-30.49 07OU01-1	2-30.50 06MT02 1	2-30.51 06EN13 1	2-30.52 06FL02 1	2-30.53 06SS03 2	2-30.54 06SN05 2	Subtotal		
1805	Land											-	-	-
1806	Land Rights											-	15,805	15,805
1808	Building and Fixtures											1,131,796	157,206	1,289,002
1815	Transformer Station Equipment	240,717	195,360	1,518,825								5,473,257	162,877	5,636,134
1820	Distribution System Equipment											-	59,882	59,882
1830	OH - Poles, Towers and Fixtures				264,722							3,626,367	666,355	4,292,721
1835	OH - Conductors and Devices				148,227							2,106,183	432,081	2,538,264
1840	UG - Conduit					70,934						588,236	40,367	628,603
1845	UG - Conductors and Devices					192,537						2,838,772	91,688	2,930,459
1850	Line Transformers				4,235	74,314						2,414,652	451,442	2,866,093
1855	Services											1,809,146	5,544	1,814,690
1860	Meters						386,860					386,860	-	386,860
1915	Office Equipment											-	6,500	6,500
1920	Computer Hardware											-	137,339	137,339
1925	Computer Software							156,116		395,026		551,142	78,341	629,483
1930	Transportation Equipment								621,743			621,743	10,000	631,743
1935	Stores Equipment											-	-	-
1940	Tools, Shop and Garage Equipment											-	187,888	187,888
1945	Measurement and Testing Equipment											-	16,600	16,600
1955	Communication Equipment											-	-	-
1960	Miscellaneous Equipment											-	-	-
1980	System Supervisory Equipment										147,459	147,459	-	147,459
												-	-	-
Total of Project		240,717	195,360	1,518,825	417,184	337,785	386,860	156,116	621,743	395,026	147,459	21,695,612	2,519,914	24,215,526

** All projects in excess of \$125,000 have a detailed Business Case Analysis sheets in Appendix C

Table 31
2011 Summary of Capital Projects in excess of \$125,000

USoA	Description	Projects in excess of materiality threshold of \$125,000 **										
		2-31.01 06EN04 10-16	2-31.02 06EN04 10-17	2-31.03 06EN04 10-18	2-31.04 06EN04 10-21	2-31.05 06EN04 10-22	2-31.06 06EN04 10-38	2-31.07 06EN04 10-39	2-31.08 06EN04 1	2-31.09 06EN04 3	2-31.10 06EN04 4	2-31.11 06EN04 5
1805	Land											
1806	Land Rights											
1808	Building and Fixtures											
1815	Transformer Station Equipment											
1820	Distribution System Equipment											
1830	OH - Poles, Towers and Fixtures	165,208	157,313	130,923	215,504	115,802	145,809	148,239		140,382	66,584	352,648
1835	OH - Conductors and Devices	89,212	84,949	70,698	116,372	62,533	78,737	80,049	630,586	75,806	35,955	190,430
1840	UG - Conduit											
1845	UG - Conductors and Devices											
1850	Line Transformers	75,996	72,364	60,224	99,132	53,269	67,072	68,190		64,576	30,629	162,218
1855	Services											
1860	Meters											
1915	Office Equipment											
1920	Computer Hardware											
1925	Computer Software											
1930	Transportation Equipment											
1935	Stores Equipment											
1940	Tools, Shop and Garage Equipment											
1945	Measurement and Testing Equipment											
1955	Communication Equipment											
1960	Miscellaneous Equipment											
1980	System Supervisory Equipment											
Total of Project		330,416	314,625	261,845	431,008	231,603	291,618	296,478	630,586	280,765	133,168	705,296

** All projects in excess of \$125,000 have a detailed Business Case Analysis sheets in Appendix C

Table 31
2011 Summary of Capital Projects in excess of \$125,000

USoA	Description	Projects in excess of materiality threshold of \$125,000 **										
		2-31.12 06EN04 6	2-31.13 06EN04 7	2-31.14 06EN04 8	2-31.15 06EN04 9	2-31.16 06EN04 10	2-31.17 06EN04 11	2-31.18 06EN05 1	2-31.19 06EN05 10-5	2-31.20 06EN06 10-8	2-31.21 06EN06 10-1	2-31.22 06EN06 1
1805	Land											
1806	Land Rights											
1808	Building and Fixtures											
1815	Transformer Station Equipment											
1820	Distribution System Equipment											
1830	OH - Poles, Towers and Fixtures	206,598	232,960	79,901	199,525	96,908	129,456	181,897	165,736	116,355	180,129	254,396
1835	OH - Conductors and Devices	111,563	125,798	43,146	107,743	52,330	69,906	90,948	82,868	63,281	97,965	138,355
1840	UG - Conduit											
1845	UG - Conductors and Devices											
1850	Line Transformers	95,035	107,161	36,754	91,781	44,577	59,550	20,537	18,712	24,496	37,922	53,557
1855	Services											
1860	Meters											
1915	Office Equipment											
1920	Computer Hardware											
1925	Computer Software											
1930	Transportation Equipment											
1935	Stores Equipment											
1940	Tools, Shop and Garage Equipment											
1945	Measurement and Testing Equipment											
1955	Communication Equipment											
1960	Miscellaneous Equipment											
1980	System Supervisory Equipment											
Total of Project		413,195	465,919	159,801	399,049	193,815	258,913	293,382	267,316	204,132	316,016	446,308

** All projects in excess of \$125,000 have a detailed Business Case Analysis sheets in Appendix C

Table 31
2011 Summary of Capital Projects in excess of \$125,000

USoA	Description	Projects in excess of materiality threshold of \$125,000 **										
		2-31.23 06EN06 2	2-31.24 06EN06 4	2-31.25 06EN07 1	2-31.26 06EN08 3	2-31.27 06EN08 4	2-31.28 06EN09 1	2-31.29 06EN09 10-15	2-31.30 06EN09 10-16	2-31.31 06EN09 3	2-31.32 06EN09 12	2-31.33 06EN10 1
1805	Land											
1806	Land Rights											
1808	Building and Fixtures											
1815	Transformer Station Equipment											
1820	Distribution System Equipment											
1830	OH - Poles, Towers and Fixtures	91,208	77,570	95,045								
1835	OH - Conductors and Devices	49,604	42,187									
1840	UG - Conduit					50,154	90,441	89,332	110,335	25,224	25,030	58,533
1845	UG - Conductors and Devices				640,439	284,205	153,751	151,864	187,569	42,881	42,550	179,041
1850	Line Transformers	19,202	16,331	449,302			208,015	205,463	253,770	58,015	57,568	106,736
1855	Services			319,696								
1860	Meters											
1915	Office Equipment											
1920	Computer Hardware											
1925	Computer Software											
1930	Transportation Equipment											
1935	Stores Equipment											
1940	Tools, Shop and Garage Equipment											
1945	Measurement and Testing Equipment											
1955	Communication Equipment											
1960	Miscellaneous Equipment											
1980	System Supervisory Equipment											
Total of Project		160,014	136,088	864,042	640,439	334,359	452,207	446,658	551,674	126,119	125,148	344,309

** All projects in excess of \$125,000 have a detailed Business Case Analysis sheets in Appendix C

Table 31
2011 Summary of Capital Projects in excess of \$125,000

USoA	Description	Projects in excess of materiality threshold of \$125,000 **									
		2-31.34 06EN10 3	2-31.35 06EN10 4	2-31.36 06EN10 10	2-31.37 06EN10 10-5	2-31.38 06EN10 10-6	2-31.39 06EN10 10-7	2-31.40 06EN11 1	2-31.41 06MT02 1	2-31.42 06OH01 1	2-31.43 06SN04 6
1805	Land										
1806	Land Rights										
1808	Building and Fixtures										
1815	Transformer Station Equipment										153,862
1820	Distribution System Equipment										
1830	OH - Poles, Towers and Fixtures									286,649	
1835	OH - Conductors and Devices									156,761	
1840	UG - Conduit	50,336	58,533	58,533	28,822	43,646	29,398				
1845	UG - Conductors and Devices	153,969	179,041	179,041	88,163	133,505	89,923				
1850	Line Transformers	91,789	106,736	106,736	52,559	79,590	53,608	513,887		4,479	
1855	Services							357,108			
1860	Meters								315,250		
1915	Office Equipment										
1920	Computer Hardware										
1925	Computer Software										
1930	Transportation Equipment										
1935	Stores Equipment										
1940	Tools, Shop and Garage Equipment										
1945	Measurement and Testing Equipment										
1955	Communication Equipment										
1960	Miscellaneous Equipment										
1980	System Supervisory Equipment										
Total of Project		296,094	344,309	344,309	169,544	256,741	172,928	870,995	315,250	447,889	153,862

** All projects in excess of \$125,000 have a detailed Business Case Analysis sheets in Appendix C

Table 31
2011 Summary of Capital Projects in excess of \$125,000

USoA	Description	Projects in excess of \$125,000								Projects < \$125,000	Total Additions
		2-31.44 07OU01 1	2-31.45 09GM03 1	2-31.46 06EN13 1	2-31.47 06FL02 1	2-31.48 06PS01 1	2-31.49 06SN05 4	2-31.50 06SS02 1	Subtotal		
1805	Land		2,038,000						2,038,000	-	2,038,000
1806	Land Rights								-	16,350	16,350
1808	Building and Fixtures		22,738,961						22,738,961	59,156	22,798,117
1815	Transformer Station Equipment								153,862	112,009	265,871
1820	Distribution System Equipment								-	15,171	15,171
1830	OH - Poles, Towers and Fixtures								4,032,743	245,758	4,278,501
1835	OH - Conductors and Devices								2,747,787	205,500	2,953,287
1840	UG - Conduit	68,473							786,788	33,274	820,062
1845	UG - Conductors and Devices	185,856							2,691,796	56,566	2,748,362
1850	Line Transformers	71,734							3,799,270	454,396	4,253,666
1855	Services								676,804	-	676,804
1860	Meters								315,250	-	315,250
1915	Office Equipment		1,700,000						1,700,000	10,204	1,710,204
1920	Computer Hardware							225,000	225,000	124,544	349,544
1925	Computer Software			166,752					166,752	480,863	647,615
1930	Transportation Equipment				285,000				285,000	285,468	570,468
1935	Stores Equipment					275,000			275,000	(221,500)	53,500
1940	Tools, Shop and Garage Equipment								-	162,037	162,037
1945	Measurement and Testing Equipment								-	115,278	115,278
1955	Communication Equipment								-	-	-
1960	Miscellaneous Equipment								-	-	-
1980	System Supervisory Equipment						834,356		834,356	214,076	1,048,432
									-	-	-
Total of Project		326,063	26,476,961	166,752	285,000	275,000	834,356	225,000	43,467,369	2,369,150	45,836,519

** All projects in excess of \$125,000 have a detailed Business Case Analysis sheets in Appendix C

TABLE 2-31.45

09GM02 – 2011 - Waterloo North Hydro Administration Building and Service Centre

History of the current facility

Waterloo North Hydro (WNH) was created in 1978 as a result of Bill 55 and the formation of the Region of Waterloo. Waterloo PUC and four other utilities were amalgamated creating the largest service territory in the province at the time (outside of Ontario Hydro) at 672 sq. km.

Following the amalgamation, plans were made to construct a new administrative building and service center to house the newly formed utility. That building which WNH continues to occupy to this day was constructed in 1981-82 at a time when WNH serviced 22,000 customers. In 1988 an expansion of 9,000 sq. ft. increased the building size from 39,000 sq. ft. to 48,000 sq. ft. In subsequent years interior renovations were completed to maximize the use of the existing building space.

Needs Analysis

In 2007, after almost 20 years of customer growth without a major building expansion, WNH staff recognized that a significant shortage of building space in all parts of the business needed to be addressed. Options to meet the business needs of the utility were developed over a one year process with the assistance of Totten Sims Hubicki Associates, Architects (TSHA)

The need for expansion came from all parts of the business as discussed below, including fleet, stores, staffing increases and support facilities.

The major increase in square footage from WNH's current building/service centre came from fleet which had changed substantially since 1982. The size of the individual vehicles and the fleet as a whole had increased since 1988, as a result of improved labour saving practices, more stringent Health and Safety practices and an increased capital program work.

The Stores Warehouse also requires a significant increase to accommodate the increased activity in the capital program. In addition there was an opportunity for efficiency improvements as materials and equipment stored off site from the Service Centre at some of WNH's municipal substations could be accommodated in one central facility. This will also facilitate the eventual disposal of surplus substation properties.

As WNH's customer base grew to 51,000, and work activities increased, as did the need for staffing which has grown to 117 staff in full-time positions in 2010 with additional staff from temporary agencies, contract staff and co-op students. Succession plans for an aging workforce has also contributed to the increased hiring of new staff as discussed in Exhibit 4. The need to accommodate the growing workforce has increased space needs in engineering, customer service, information technologies, system control room, washroom and locker room facilities, meeting rooms and vehicle repair.

The space needs analysis identified an increase in gross building floor area to approximately 104,000 ft sq. This included space to accommodate growth in staff up to 10 years (record) after construction.

Options

Options and estimates of construction costs were developed by TSHA. The following four options were considered:

Option 1	Renovate existing space; add new space to current building standards	\$18.2 million
Option 2	Renovate existing space; add new space to LEED standards (new space only)	\$19.8 million
Option 3	Build new building to current building standards	\$21.6 million
Option 4	Build new building to LEED standards	\$23.6 million

- LEED is the acronym for Leadership in Energy and Environmental Design.
- These estimates included applicable fees (building permits, development charges, architects, consulting), allowances for new furnishings and fittings where required and taxes.

1 Through investigation it was determined that the existing space did not lend itself well to
2 renovations. Structurally, the building has three distinct levels. The central hall divides the
3 building and in some cases divides departments. Many of the internal walls are load-bearing
4 walls that cannot be moved for renovations limiting efficient design. Also considered was the
5 significant operational implications and negative cost of renovating existing spaces while
6 attempting to maintain normal business operations, and the realization that approximately 50%
7 of the major components of the new building would be 30 years old by the time construction was
8 completed. In addition a renovation of the existing building would require major upgrades to
9 comply with current building code standards.

10
11 Given the nature of an LDC's role in the community as an energy provider, and the climate of
12 conservation in the province, WNH also had a strong desire to demonstrate leadership in the
13 community in energy efficiency. A facility constructed to the principles of LEED became a
14 necessary component of any option chosen. Through discussions with consultants, the
15 recommendation was that the existing facility did not lend itself well to renovation let alone to
16 achieving a LEED standard.

17
18 In reviewing the cost options, WNH determined that from a business perspective when
19 considering the costs of renovating the existing building, where one-half of the building would be
20 30 years old, as compared to constructing a new building, the benefits of a new building
21 outweighed the costs. The costs of constructing a new building to LEED standards were not
22 much higher than renovation of the existing space and the benefits gained are numerous in
23 lower operating costs and energy leadership in the community.

1 **Action Plan**

2
3 On August 16, 2007, the Board of Waterloo North Hydro Inc. was asked to give approval for the
4 concept of a new Administration Building and Service Centre with a LEED component to be
5 further developed as part of the 2008 budget. The four options were presented with Option #4
6 being selected and approved by the Board of Directors.
7

8 Throughout 2008 and 2009 a search was initiated for professional project management services
9 and a Project Manager was hired. Coldwell Banker, a commercial real estate firm was engaged
10 to execute a search for a site on which to locate the new facility. The search concluded in early
11 2009 with the purchase of thirty-five (35) acres of land. Twenty (20) acres were designated for
12 the Waterloo North Hydro Administration and Service Centre, ten acres were designated for
13 future location of a 230 kV transformer station (TS#5) and five (5) acres of a naturally forested
14 buffer area were retained to protect against future erosion damage on the site.
15

16 On February 19, 2009 after a qualification and tendering process, McCallum Sather Architects
17 were selected as the Prime Consultant for the new Administration Building and Service Centre.
18 Detailed design and costing occurred through the remainder of 2009 and early into 2010.
19

20 On May 27, 2010 after a pre-qualification and tendering process, Melloul Blamey Construction
21 was selected as the General Contractor for the new Administration Building and Service Centre.
22

23 Construction is proceeding and it is scheduled that construction will be completed October 31,
24 2011, after which a one-month "air out" process is required for the LEED standard, with an
25 occupancy date of December 1, 2011.
26

27 The projected cost is detailed below.
28
29
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31
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33
34

TABLE 2-31.45 - Continued

Projected Costs of New Administration Building and Service Centre	
Description	Cost
Land	2,038,000
Building Costs	19,564,000
Capitalized Interest on Building	264,961
Architectural Fees, Project Management	1,960,000
Building Permits, Development Charges	950,000
Furnishings and Equipment (see breakdown below)	1,700,000
Total	26,476,961
Allocated as follows:	
USoA 1805 Land	2,038,000
USoA 1808 Building and Fixtures	22,738,961
USoA 1915 Furniture and Equipment	1,700,000
Total	26,476,961
Furniture and Equipment Breakdown as follows¹:	
Furniture	640,000
Control Room Consoles	100,000
AV Equipment	180,000
Radio Equipment	100,000
Racking for Stores	100,000
Pole Bunks and Materials Support	280,000
General Equipment	150,000
Telephone System	150,000
Total	1,700,000
<i>1 WNH has had an assessment performed and is retaining any furniture and equipment that is suitable and has remaining useful life.</i>	

TABLE 2-31.45 - Continued

AFUDC – Capitalized Interest

WNH commenced capitalizing interest (AFUDC) on its new Administration Building and Service Centre which commenced construction in 2010 and it is scheduled that construction will be completed October 31, 2011, with an occupancy date of December 1, 2011. Details are provided on the AFUDC – Capitalized Interest below:

AFUDC Added to New Administration Building and Service Centre

Month	Accumulated Loan	Interest @ 1.2%	Loan Balance	Interest Capitalized	USoA 1808
August 2010	4,634,981	4,635	4,639,616		
September	5,444,374	4,640	5,449,013		
October	7,710,997	5,449	7,716,446		
November	10,295,556	7,716	10,303,273		
December	12,424,316	10,303	12,434,619		
January	14,038,225	12,435	14,050,660		
February	15,448,104	14,051	15,462,154		
March	16,563,982	15,462	16,579,445		
April	17,610,361	16,579	17,626,940		
May	18,753,240	17,627	18,770,867		
June	19,995,618	18,771	20,014,389		
July	21,272,497	20,014	21,292,511		
August	22,307,376	21,293	22,328,668		
September	23,156,254	22,329	23,178,583		
October	24,665,258	23,179	24,688,436		
November	25,766,000	24,688	25,790,688		
December	26,300,000	25,791	26,325,791	264,961	264,961
Cost of Administration Building and Service Centre before Capitalized Interest					22,474,000
Total					22,738,961

Table 2-32
Capital Projects Table – 2010 Bridge Year – Sub-table A1

					USoA					
					1805	1806	1808	1815	1820	1830
Project # / Sub-code		Project Description	Expected Start Date	Expected In-Service Date	Land	Land Rights	Buildings & Fixtures	Transformer Station Equipment > 50 kV	Municipal Station Equipment	Poles, Towers & Fixtures
Land Rights	06EN03-1	Land Rights				15,805				
Overhead Rebuild Lines	06EN04 W02596	Tavrida Recloser Purchase								42,150
	06EN04 W03369	Lexington & Bridge (Colonial Acres) - Conv	12-Nov-09	15-Jan-10						86,221
	06EN04 W03426	Distribution Fuse Co ordination Study	Ongoing							9,117
	06EN04 W03796	Herrgott Road, Ament Line to Boomer Line,	20-Jun-10	10-Jul-10						22,132
	06EN04 W03805	Fountain St., Menno St. to Kossuth Rd., Co	20-Mar-10	1-May-10						229,526
	06EN04 W03807	Weimar Line Overhead Rebuild Ph3	30-Jan-10	30-Apr-10						176,188
	06EN04 W03808	Kossuth Pole Line Rebuild	1-Sep-09	15-Jan-10						141,050
	06EN04 W03814	Park Ave. E., Elmira Pole Line Rebuild								612
	06EN04 W03878	Samuel Street and Area Reconstruction	10-Apr-10	30-Apr-10						29,553
	06EN04 W03890	2010 Designated Danger Poles	Ongoing							3,417
	06EN04 W03908	Rear of Winfield Ave Carter to Bellehave	7-Apr-10	1-May-10						32,532
	06EN04 1	2010 Distribution Automation	Ongoing							
	06EN04 2	2010 Loadbreak Switches/Ties	Ongoing							
	06EN04 3	TS HS New 13.8 kV Feeder Weber, Dutton to Parkside	15-Nov-10	31-Dec-10						103,138
	06EN04 4	King St Bridge to Expwy Rebuild Line	20-Sep-10	12-Nov-10						133,693
	06EN04 5	Reconductoring at Fountain St., Breslau	25-Mar-10	20-Aug-10						355,620
	06EN04 7	City #6 Conductor Replacement 2. Somerset Backlot	1-Nov-09	15-Jan-10						64,977
	06EN04 8	Elmira #6 Conductor Replacement 1a. - Map 19	1-Sep-10	30-Sep-10						51,901
	06EN04 9	Elmira #6 Conductor Replacement 2a. - Map 20	15-Sep-10	15-Oct-10						39,052
	06EN04 10	Elmira #6 Conductor Replacement 3. Wyatt St, Map 16	15-Sep-10	10-Oct-10						4,384
	06EN04 11	Elmira #6 Conductor Replacement 4. University/college - Map 17	15-Oct-10	30-Oct-10						24,290
	06EN04 12	Elmira #6 Conductor Replacement 5. College - Map 17	30-Oct-10	15-Nov-10						12,166
	06EN04 14	MS6/10 Overhead Conversions - Amos Ave only	1-Jun-10	9-Jul-10						87,652
	06EN04 47	Churchill St (10 poles, facilitate underground conversions)	15-Mar-10	26-May-10						75,000
	06EN04 48	McDougall 4 kV coversion (facillitate underground project)	8-Jul-10	3-Sep-10						140,000
	06EN04 15	Erb. st. Erbsville Rd to Landfill Conversion	20-Jul-10	25-Sep-10						170,320

Continued on Table 2-32 – Sub-table A2

Table 2-32
Capital Projects Table – 2010 Bridge Year – Sub-table A2

					USoA						Total
Project # / Sub-code		Project Description	Expected Start Date	Expected In-Service Date	Overhead Conductors & Devices	Underground Conduit	Underground Conductor & Devices	Line Transformers	Services	Meters	
Land Rights	06EN03-1	Land Rights									15,805
Overhead Rebuild Lines	06EN04 W02596	Tavrida Recloser Purchase			22,761			19,389			84,299
	06EN04 W03369	Lexington & Bridge (Colonial Acres) - Conv	12-Nov-09	15-Jan-10	46,559			39,662			172,442
	06EN04 W03426	Distribution Fuse Co ordination Study	Ongoing		4,923			4,194			18,233
	06EN04 W03796	Herrgott Road, Ament Line to Boomer Line.	20-Jun-10	10-Jul-10	11,951			10,180			44,263
	06EN04 W03805	Fountain St., Menno St. to Kossuth Rd., Co	20-Mar-10	1-May-10	123,944			105,582			459,051
	06EN04 W03807	Weimar Line Overhead Rebuild Ph3	30-Jan-10	30-Apr-10	95,141			81,046			352,375
	06EN04 W03808	Kossuth Pole Line Rebuild	1-Sep-09	15-Jan-10	76,167			64,883			282,100
	06EN04 W03814	Park Ave. E., Elmira Pole Line Rebuild			330			282			1,224
	06EN04 W03878	Samuel Street and Area Reconstruction	10-Apr-10	30-Apr-10	15,959			13,594			59,106
	06EN04 W03890	2010 Designated Danger Poles	Ongoing		1,845			1,572			6,833
	06EN04 W03908	Rear of Winfield Ave Carter to Bellehave	7-Apr-10	1-May-10	17,475			14,887			64,894
	06EN04 1	2010 Distribution Automation	Ongoing		233,032						233,032
	06EN04 2	2010 Loadbreak Switches/Ties	Ongoing		74,357						74,357
	06EN04 3	TS HS New 13.8 kV Feeder Weber, Dutton to Parkside	15-Nov-10	31-Dec-10	55,694			47,443			206,275
	06EN04 4	King St Bridge to Expwy Rebuild Line	20-Sep-10	12-Nov-10	72,194			61,499			267,385
	06EN04 5	Reconductoring at Fountain St., Breslau	25-Mar-10	20-Aug-10	192,035			163,585			711,240
	06EN04 7	City #6 Conductor Replacement 2. Somerset Backlot	1-Nov-09	15-Jan-10	35,088			29,889			129,954
	06EN04 8	Elmira #6 Conductor Replacement 1a. - Map 19	1-Sep-10	30-Sep-10	28,027			23,874			103,802
	06EN04 9	Elmira #6 Conductor Replacement 2a. - Map 20	15-Sep-10	15-Oct-10	21,088			17,964			78,104
	06EN04 10	Elmira #6 Conductor Replacement 3. Wyatt St. Map 16	15-Sep-10	10-Oct-10	2,367			2,017			8,768
	06EN04 11	Elmira #6 Conductor Replacement 4. University/college - Map 17	15-Oct-10	30-Oct-10	13,117			11,173			48,580
	06EN04 12	Elmira #6 Conductor Replacement 5. College - Map 17	30-Oct-10	15-Nov-10	6,569			5,596			24,331
	06EN04 14	MS6/10 Overhead Conversions - Amos Ave only	1-Jun-10	9-Jul-10	47,332			40,320			175,303
	06EN04 47	Churchill St (10 poles, facilitate underground conversions)	15-Mar-10	26-May-10	40,500			34,500			150,000
	06EN04 48	McDougall 4 kV coversion (facillitate underground project)	8-Jul-10	3-Sep-10	75,600			64,400			280,000
	06EN04 15	Erb. st. Erbsville Rd to Landfill Conversion	20-Jul-10	25-Sep-10	91,973			78,347			340,640

Table 2-32
Capital Projects Table – 2010 Bridge Year – Sub-table B1

					USoA					
Project # / Sub-code		Project Description	Expected Start Date	Expected In-Service Date	1805	1806	1808	1815	1820	1830
					Land	Land Rights	Buildings & Fixtures	Transformer Station Equipment > 50 kV	Municipal Station Equipment	Poles, Towers & Fixtures
Overhead Rebuild Lines	06EN04 19	27.6 kV to Wellesley Hessen Strasss, Hergott to Moser Young 1 of 2	1-Jan-10	15-Mar-10						190,063
	06EN04 20	27.6 kV to Wellesley Moser Young, Hessen Strasse to Weimar Line 2 of 2	17-Jul-10	8-Sep-10						150,063
	06EN04 23	Install reclosers		Ongoing						159,092
	06EN04 24	Long Term System Planning		Ongoing						23,435
	06EN04 25	Small Capital		Ongoing						29,627
	06EN04 35	Contract design services		Ongoing						41,893
	06EN04 38	Avondale - Operations	7-May-10	28-May-10						70,000
	06EN04 39	Hergott Rd. - Ament Line to Boomer Line Conversion	15-Jul-10	22-Jul-10						35,000
	06EN04 40	Sandy Hills Dr - remove 44 kV - Hydro One	7-May-10	28-May-10						12,500
	06EN04 41	Columbia St., Weber to Marsland - Rebuild	21-May-10	17-Jun-10						70,000
Overhead Relocate Lines	06EN04 42	Depreciated Poles		Ongoing						35,000
	06EN04 43	2010 Pole Testing Replacements		Ongoing						70,000
	06EN05 2	Bearinger City Pole Relocations	15-Nov-09	22-Jan-10						86,800
	06EN05 3	Samuel Area (Elmira) Roadwork Relocations	10-Apr-10	30-Apr-10						65,100
Overhead New Feeders	06EN05 4	University Ave, Lexington to Bridge, City Relocations	27-Sep-10	15-Nov-10						93,000
	06EN06 WO2847	Donway Court, Elmira Pole Line Extension	15-Apr-10	30-Apr-10						11,954
	06EN06 WO3537	Ira Needles - Erb St. to University Ave.	7-Mar-10	7-May-10						142,369
	06EN06 WO3592	Crowsfoot Rd., E. of St. Charles St. E. Li	1-Jun-10	30-Jun-10						2,313
	06EN06 WO3664	Moser-Young Rd - Hessen Strasse to Weimar	20-Jul-10	10-Sep-10						22,295
	06EN06 WO3705	Erbville Road - Columbia Street to Erb St	25-Nov-09	22-Feb-10						301,903
	06EN06 WO3859	Hessen Strasse - Willow Way to Moser-young	1-Jan-10	14-Mar-10						185,172
	06EN06 WO4013	Chalmers-Forrest Rd, Deborah-Glaister Line	1-Jun-10	20-Jun-10						44,676
	06EN06 WO4020	Weimar Line - Moser- Young to Maplewood Dr.	5-Sep-10	5-Nov-10						941
	06EN06 4	LTLT Crowsfoot Rd - Hydro One work	12-Jul-10	30-Nov-10						47,519
Overhead New Services	06EN06 6	Chalmers Forest Rd - S. of Deb. Glas. Line	16-Jul-10	4-Aug-10						79,800
	06EN06 7	Maryhill Rd. - New Line for Service	1-Aug-10	20-Aug-10						22,800
	06EN07 WO3523	50 Erb St. W. Knox Church	1-May-09	22-Jan-10						
	06EN07 WO3893	Farm Stray Voltage Testing - 1496 Tillman	1-Nov-09	17-Jan-10						
Underground New Feeders	06EN07 WO3993	2010 - Overhead Commercial Services		Ongoing						
	06EN07 1	New Overhead Service Connections/Upgrades		Ongoing						
	06EN08 WO2918	TS HS17 Feeder Egress - Conestoga Parkway to Dutton Drive	13-Jul-10	31-Dec-10						
	06EN08 WO3555	New U/G Feeder - Father David Drive from E	3-Aug-10	29-Oct-10						
Underground Cable Replacement	06EN08 1	Balsillie School - F.D. Bauer Dr.	3-Aug-10	29-Oct-10						
	06EN08 4	TS HSA New Feeder Cable	13-Jul-10	31-Dec-10						
	06EN09 WO3368	Karen Walk Underground Cable Replacement	23-Jan-09	17-Jan-10						
	06EN09 WO3397	121 University Ave Townhouses Underground	1-Aug-10	13-Sep-10						
	06EN09 WO3508	Area 27 - Carter Willowdale 4 KV U/G Rebuild	1-Mar-10	30-Jun-10						
	06EN09 WO3711	Keatsway Cable Replacements Various Locations	15-Jan-10	5-May-10						
	06EN09 WO4021	Churchill St U/G Cable Replacement	27-Jun-10	30-Jul-10						

Continued on Table 2-32 – Sub-table B2

Table 2-32
Capital Projects Table – 2010 Bridge Year – Sub-table B2

			USoA						Total
			1835	1840	1845	1850	1855	1860	
Project # / Sub-code	Project Description		Overhead Conductors & Devices	Underground Conduit	Underground Conductor & Devices	Line Transformers	Services	Meters	
Overhead Rebuild Lines	06EN04 19	27.6 kV to Wellesley Hessen Strasss, Hergott to Moser Young 1 of 2	102,634			87,429			380,126
	06EN04 20	27.6 kV to Wellesley Moser Young, Hessen Strasse to Weimar Line 2 of 2	81,034			69,029			300,126
	06EN04 23	Install reclosers							159,092
	06EN04 24	Long Term System Planning	12,655			10,780			46,869
	06EN04 25	Small Capital	15,999			13,628			59,254
	06EN04 35	Contract design services	22,622			19,271			83,785
	06EN04 38	Avondale - Operations	37,800			32,200			140,000
	06EN04 39	Hergott Rd. - Ament Line to Boomer Line Conversion	18,900			16,100			70,000
	06EN04 40	Sandy Hills Dr - remove 44 kV - Hydro One	6,750			5,750			25,000
	06EN04 41	Columbia St., Weber to Marsland - Rebuild	37,800			32,200			140,000
Overhead Relocate Lines	06EN04 42	Depreciated Poles	18,900			16,100			70,000
	06EN04 43	2010 Pole Testing Replacements	37,800			32,200			140,000
	06EN05 2	Bearinger City Pole Relocations	43,400			9,800			140,000
	06EN05 3	Samuel Area (Elmira) Roadwork Relocations	32,550			7,350			105,000
Overhead New Feeders	06EN05 4	University Ave, Lexington to Bridge, City Relocations	46,500			10,500			150,000
	06EN06 WO2847	Donway Court, Elmira Pole Line Extension	6,501			2,517			20,972
	06EN06 WO3537	Ira Needles - Erb St. to University Ave.	77,429			29,972			249,770
	06EN06 WO3592	Crowsfoot Rd., E. of St. Charles St. E, Li	1,258			487			4,058
	06EN06 WO3664	Moser-Young Rd - Hessen Strasse to Weimar	12,125			4,694			39,113
	06EN06 WO3705	Erbville Road - Columbia Street to Erb St	164,193			63,559			529,655
	06EN06 WO3859	Hessen Strasse - Willow Way to Moser-young	100,707			38,984			324,863
	06EN06 WO4013	Chalmers-Forrest Rd, Deborah-Glaister Line	24,297			9,405			78,379
	06EN06 WO4020	Weimar Line - Moser- Young to Maplewood Dr,	512			198			1,651
	06EN06 4	LTLT Crowsfoot Rd - Hydro One work	25,843			10,004			83,366
Overhead New Services	06EN06 6	Chalmers Forest Rd - S. of Deb. Glas. Line	43,400			16,800			140,000
	06EN06 7	Maryhill Rd. - New Line for Service	12,400			4,800			40,000
	06EN07 WO3523	50 Erb St. W. Knox Church					124		124
	06EN07 WO3893	Farm Stray Voltage Testing - 1496 Tillman					1,106		1,106
	06EN07 WO3993	2010 - Overhead Commercial Services					4,286		4,286
Underground New Feeders	06EN07 1	New Overhead Service Connections/Upgrades					905,700		905,700
	06EN08 WO2918	TS HS17 Feeder Egress - Conestoga Parkway to Dutton Drive			445,879				445,879
	06EN08 WO3555	New U/G Feeder - Father David Drive from E			31,621				31,621
	06EN08 1	Balsillie School - F.D. Bauer Dr.			484,542				484,542
Underground Cable Replacement	06EN08 4	TS HSA New Feeder Cable			454,121				454,121
	06EN09 WO3368	Karen Walk Underground Cable Replacement		25,834	43,918	59,418			129,170
	06EN09 WO3397	121 University Ave Townhouses Underground		3,300	5,611	7,591			16,502
	06EN09 WO3508	Area 27 - Carter Willowdale 4 KV U/G Rebuild		114,000	193,800	262,200			570,000
	06EN09 WO3711	Keatsway Cable Replacements Various Locations		3,373	5,734	7,758			16,866
	06EN09 WO4021	Churchill St U/G Cable Replacement		80	136	183			399

Table 2-32
Capital Projects Table – 2010 Bridge Year – Sub-table C1

					USoA					
Project # / Sub-code		Project Description	Expected Start Date	Expected In Service Date	1805	1806	1808	1815	1820	1830
					Land	Land Rights	Buildings & Fixtures	Transformer Station Equipment > 50 kV	Municipal Station Equipment	Poles, Towers & Fixtures
Underground Cable Replacement	06EN09 1	Area 15 - Glenburn Dr., Keats Way Pl., Keats Walk	15-Jan-10	5-May-10						
	06EN09 2	Area 14 - Churchill St. Townhouses	27-Jun-10	30-Jul-10						
	06EN09 3	Westcourt Place Secondary - Ph 1 -54 units	1-Nov-10	1-Dec-10						
	06EN09 4	Area 15 - McDougall Townhouses	10-Oct-10	31-Oct-10						
	06EN09 5	Area 15 - Keatsway Public School	15-Jan-10	5-May-10						
	06EN09 7	Area 28 - 121 University Ave.	1-Aug-10	13-Sep-10						
	06EN09 10	Submersible Transformer Replacements	Ongoing							
	06EN09 11	Submersible Transformer Lid Replacement	Ongoing							
	06EN09 12	PMH Switchgear Replacements	Ongoing							
	06EN09 14	Kraus Drive under HONI 230 kV	9-Aug-10	17-Sep-10						
	06EN09 18	High St / Weber St. - Secondary Replacement	1-Oct-10	1-Nov-10						
Underground Residential Subdivisions	06EN10 WO1495	Hopewell Heights Townhouse	16-Dec-09	9-May-10						
	06EN10 WO2798	555 Chablis Dr	5-Jul-10	14-Jul-10						
	06EN10 WO3292	Gies Westvale Stg 2, Thornhill Dr./ApplegaTE	13-Jun-10	30-Jun						
	06EN10 WO3712	Avery Cres	10-Nov-09	8-Jan-10						
	06EN10 WO3956	Empire Comm. Riverland Sub, Stg 2A	3-Aug-10	10-Sep-10						
	06EN10 11	Hopewell Heights Phase 3C	14-Sep-10	22-Oct-10						
	06EN10 13	Carriage Crossing	16-Oct-10	30-Nov-10						
	06EN10 14	Orville Court	6-Jul-10	14-Jul-10						
Underground New Services	06EN11 WO4010	2010 UG Residential Services	Ongoing							
	06EN11 1	New UG Services	Ongoing							
TS Building Upgrade	06SN02 1	TS ERTS Switchyard Upgrades	7-Apr-10	24-Dec-10			1,131,796			
	06SN02 2	New Relay Room Floor	6-Sep-10	31-Dec-10			100,753			
TS Equipment Upgrade	06SN04 4 WO7315	TS ERTS Transformers	5-Jan-09	30-Nov-10				3,229,322		
	06SN04 5 WO3969	TS ERTS Regulatory Filings	Ongoing					4,710		
	06SN04 6 WO4023	TS ERTS Protection Upgrades	7-Apr-10	30-Nov-10				289,033		
	06SN04 7 WO4143	TS ERTS Transfer Trip Changes	Ongoing					240,717		
	06SN04-8 WO4156	Dutton Driver Feeders	12-Jul-10	31-Dec-10				105,265		
	06SN04 9 WO4158	TS ERTS HV Yard Upgrades	1-Apr-10	30-Nov-10				195,360		
	06SN04 WO2315	TS ERTS Rehabilitation Transformers	5-Jan-09	30-Nov-10				1,518,825		
	06SN04 WO3392	Transfer Tripto Detweiler						619		
	06SN04 WO3393	TS HSA Rehabilitation - Replace xxxx						51,337		
	06SN04 WO3969	TS ERTS Rehabilitation - Regulatory						945		
Overhead Capital Operations	06OH01 1	Overhead Capital Operations Department	Ongoing							264,722
			Ongoing							
Underground Capital Operations	07OU01-1	Underground Capital Operations Department	Ongoing							
			Ongoing							
Meters Commercial	06MT02 1	Meters Commercial (>50kW)	Ongoing							
			Ongoing							
Meters Wholesale	06MT03-1	Meters Wholesale	Ongoing						59,882	
			Ongoing							
Service Centre	06GM02 1	Service Centre (existing)	Ongoing				56,453			
			Ongoing							

Continued on Table 2-32 – Sub-table C2

Table 2-32
Capital Projects Table – 2010 Bridge Year – Sub-table C2

					USoA						Total
Project # / Sub-code		Project Description	Expected Start Date	Expected In-Service Date	Overhead Conductors & Devices	Underground Conduit	Underground Conductor & Devices	Line Transformers	Services	Meters	
Underground Cable Replacement	06EN09 1	Area 15 - Glenburn Dr., Keats Way Pl., Keats Walk	15-Jan-10	5-May-10		52,200	88,740	120,060			261,000
	06EN09 2	Area 14 - Churchill St. Townhouses	27-Jun-10	30-Jul-10		45,000	76,500	103,500			225,000
	06EN09 3	Westcourt Place Secondary - Ph 1 -54 units	1-Nov-10	1-Dec-10		29,090	49,455	66,909			145,454
	06EN09 4	Area 15 - McDougall Townhouses	10-Oct-10	31-Oct-10		12,400	21,080	28,520			62,000
	06EN09 5	Area 15 - Keatsway Public School	15-Jan-10	5-May-10		1,800	3,061	4,141			9,002
	06EN09 7	Area 28 - 121 University Ave.	1-Aug-10	13-Sep-10		67,200	114,240	154,560			336,000
	06EN09 10	Submersible Transformer Replacements	Ongoing					79,584			79,584
	06EN09 11	Submersible Transformer Lid Replacement	Ongoing					30,209			30,209
	06EN09 12	PMH Switchgear Replacements	Ongoing				132,679				132,679
	06EN09 14	Kraus Drive under HONI 230 kV	9-Aug-10	17-Sep-10		16,000	27,200	36,800			80,000
06EN09 18	High St / Weber St. - Secondary Replacement	1-Oct-10	1-Nov-10		10,000	17,000	23,000			50,000	
	06EN10 WO3292	Gies Westvale Stg 2, Thornhill Dr./ApplegaTE	13-Jun-10	30-Jun		41,809	127,887	76,240			245,937
	06EN10 WO3956	Empire Comm. Riverland Sub, Stg 2A	3-Aug-10	10-Sep-10		43,958	134,460	80,159			258,577
	06EN10 11	Hopewell Heights Phase 3C	14-Sep-10	22-Oct-10		34,680	106,080	63,240			204,000
	06EN10 13	Carriage Crossing	16-Oct-10	30-Nov-10		54,393	166,379	99,188			319,960
	06EN10 14	Orville Court	6-Jul-10	14-Jul-10		2,550	7,800	4,650			15,000
Underground New Services	06EN11 WO4010	2010 UG Residential Services	Ongoing						28		28
	06EN11 1	New UG Services	Ongoing						903,446		903,446
TS Building Upgrade	06SN02 1	TS ERTS Switchyard Upgrades	7-Apr-10	24-Dec-10							1,131,796
	06SN02 2	New Relay Room Floor	6-Sep-10	31-Dec-10							100,753
TS Equipment Upgrade	06SN04 4 WO7315	TS ERTS Transformers	5-Jan-09	30-Nov-10							3,229,322
	06SN04 5 WO3969	TS ERTS Regulatory Filings	Ongoing								4,710
	06SN04 6 WO4023	TS ERTS Protection Upgrades	7-Apr-10	30-Nov-10							289,033
	06SN04 7 WO4143	TS ERTS Transfer Trip Changes	Ongoing								240,717
	06SN04-8 WO4156	Dutton Driver Feeders	12-Jul-10	31-Dec-10							105,265
	06SN04 9 WO4158	TS ERTS HV Yard Upgrades	1-Apr-10	30-Nov-10							195,360
	06SN04 WO2315	TS ERTS Rehabilitation Transformers	5-Jan-09	30-Nov-10							1,518,825
	06SN04 WO3392	Transfer Tripto Detweiler									619
	06SN04 WO3393	TS HSA Rehabilitation - Replace xxxx									51,337
	06SN04 WO3969	TS ERTS Rehabilitation - Regulatory									945
Overhead Capital Operations	06OH01 1	Overhead Capital Operations Department	Ongoing		148,227			4,235			417,184
			Ongoing								-
Underground Capital Operations	07OU01-1	Underground Capital Operations Department	Ongoing			70,934	192,537	74,314			337,785
			Ongoing								-
Meters Commercial	06MT02 1	Meters Commercial (>50kW)	Ongoing							386,860	386,860
			Ongoing								-
Meters Wholesale	06MT03-1	Meters Wholesale	Ongoing								59,882
			Ongoing								-
Service Centre	06GM02 1	Service Centre (existing)	Ongoing								56,453
			Ongoing								-

Table 2-32
Capital Projects Table – 2010 Bridge Year – Sub-table D1

Project # / Sub-code		Project Description	Expected Start Date	Expected In-Service Date	USoA					
					1915	1920	1925	1930	1935	1940
					Office Furniture & Equipment	Computer Hardware	Computer Software	Transportation Equipment	Stores Equipment	Tools, Shop & Garage Equipment
GIS Mapping	06EN13 1	GIS - Mapping	Ongoing				156,116			
Equipment Garage	06FL01 1	Battery Cutters	Ongoing							22,000
		Battery Press	Ongoing							19,600
		Bin/Cage, Burndy Press, Huskey 14.4 v Press, Load Spotter, Tool crib, Other	Ongoing							17,150
		CSA Dies, Complete Sets	Ongoing							5,000
		RBD Equipment	Ongoing							10,000
		Installed Radios in Vehicles - new & replacement vehicles	Ongoing							10,000
		Road Work Signage, Volt meter, UG Pulling Ropes	Ongoing							8,020
		Tingle Voltage Investigation Equipment in Vehicle	Ongoing							35,000
		Capital Refurbishment to Major Equipment	Ongoing							15,000
		Capital Repairs to Major Equipment	Ongoing							25,000
Vehicles	06FL02 1	Additional cabinet modifications	Ongoing							21,118
		Refurbish 1 flat bed trailer	1-Jul-10	31-Jul-10				10,000		
		Vehicle modifications to improve load security	Ongoing					25,000		
		60' RBD and Body - Rear Centre Mount Digger	1-May-09	24-Jul-10				446,133		
		Material Trailer	1-Feb-10	1-Apr-10				45,000		
		10 Ford Escape	9-Apr-10	23-Apr-10				77,500		
		Mini Van	1-Oct-10	1-Dec-10						
		2010 GMC Savana Cargo Van	1-Nov-09	1-Jan-10				28,110		
Furniture & Equipment Fleet	06MT04 1	Power Analyzer & Socket Voltage Recorders	1-Oct-09	1-Feb-10						
SCADA Equipment	06SN05 2	TS ERTS New RTU and Fibre LAN	10-Feb-10	30-Nov-10						
Furniture & Equipment	06SN07 1	Fluke meter case, accessories & Shelving Tools	1-Sep-10	1-Oct-10						
System Hardware	06SS02 1	Hardware - 5 year LT Replacement	Ongoing			35,100				
		5 Year PC Replacement	Ongoing			24,300				
		IP 295 Firewall Upgrade	Ongoing			4,855				
		Laptops IT (2)	Ongoing			5,400				
		Monitors Control Room, Supervisor (3) including quad setup	Ongoing			3,672				
		PC Network Operating Supervisor (1)	Ongoing			1,620				
		Printer Accounting(1)	Ongoing			14,256				
		Tivoli Disk Expansion (450gb)	Ongoing			2,160				
		UPS Battery Replacement	Ongoing			14,580				
		Video Card for Control Room	Ongoing			756				
	06SS02 2	Online Document Management - Scanner (1), PC (2)	Ongoing			6,880				
	06SS02 3	Server for ODS	Ongoing			10,800				
	06SS02 4	Business Intelligence & KPI Disk	Ongoing			2,160				
System Software	06SS02 5	Hardware Infrastructure - Departmental	Ongoing			10,800				
	06SS03 1	P.I.T Upgrades & Development	Ongoing				36,108			
	06SS03 2	ODS Software Costs	Ongoing				205,110			
	06SS03 3	Business Intelligence & KPI (Software, Licence Fees, Other)	Ongoing				55,160			
	06SS03 4	New Budgeting Software	Ongoing				26,635			
	06SS03 6	eBusiness Implementation Software and Programming	Ongoing				30,000			
	06SS03 7	Naviline, Daffron, FWorker Enhancements	Ongoing				55,000			
	06SS03 8	EDRMS Phase 1 Implementation of EDRMS Policies & Related eMail Management	Ongoing				20,000			
	06SS03 9	Lotus Notes Client Licence and Windows 2008 User CAL	Ongoing				11,297			
	06SS03 11	GIS - Tivoli Backups and Licences	Ongoing				4,789			
	06SS03 12	Software Infrastructure - Departmental	Ongoing				10,800			
	06SS03 13	Online Document Management (Software and Licences)	Ongoing				18,468			
Furniture & Equip Engineering	06EN01-1	Furniture & Equip Engineering	Ongoing		6,500					

Continued on Table 2-32 – Sub-table D2

Table 2-32
Capital Projects Table – 2010 Bridge Year – Sub-table D2

					USoA					Total	
Project # / Sub-code		Project Description	Expected Start Date	Expected In-Service Date	1945 Measurement & Testing Equipment	1955 Communication Equipment	1960 Miscellaneous Equipment	1980 System Supervisory Equipment	1995 Contributions and Grants		
GIS Mapping	06EN13 1	GIS - Mapping		Ongoing						156,116	
Equipment Garage	06FL01 1	Battery Cutters		Ongoing						22,000	
		Battery Press		Ongoing						19,600	
		Bin/Cage, Burndy Press, Huskey 14.4 v Press, Load Spotter, Tool crib, Other		Ongoing						17,150	
		CSA Dies, Complete Sets		Ongoing						5,000	
		RBD Equipment		Ongoing						10,000	
		Installed Radios in Vehicles - new & replacement vehicles		Ongoing						10,000	
		Road Work Signage, Volt meter, UG Pulling Ropes		Ongoing						8,020	
		Tingle Voltage Investigation Equipment in Vehicle		Ongoing						35,000	
		Capital Refurbishment to Major Equipment		Ongoing						15,000	
		Capital Repairs to Major Equipment		Ongoing						25,000	
		Additional cabinet modifications		Ongoing						21,118	
Vehicles	06FL02 1	Refurbish 1 flat bed trailer	1-Jul-10	31-Jul-10						10,000	
		Vehicle modifications to improve load security		Ongoing						25,000	
		60' RBD and Body - Rear Centre Mount Digger	1-May-09	24-Jul-10						446,133	
		Material Trailer	1-Feb-10	1-Apr-10						45,000	
		10 Ford Escape	9-Apr-10	23-Apr-10						77,500	
		Mini Van	1-Oct-10	1-Dec-10							
		2010 GMC Savana Cargo Van	1-Nov-09	1-Jan-10						28,110	
Furniture & Equipment Fleet	06MT04 1	Power Analyzer & Socket Voltage Recorders	1-Oct-09	1-Feb-10	13,500					13,500	
SCADA Equipment	06SN05 2	TS ERTS New RTU and Fibre LAN	10-Feb-10	30-Nov-10				147,459		147,459	
Furniture & Equipment	06SN07 1	Fluke meter case, accessories & Shelving Tools	1-Sep-10	1-Oct-10	3,100					3,100	
System Hardware	06SS02 1	Hardware - 5 year LT Replacement		Ongoing						35,100	
		5 Year PC Replacement		Ongoing						24,300	
		IP 295 Firewall Upgrade		Ongoing						4,855	
		Laptops IT (2)		Ongoing						5,400	
		Monitors Control Room, Supervisor (3) including quad setup		Ongoing						3,672	
		PC Network Operating Supervisor (1)		Ongoing						1,620	
		Printer Accounting(1)		Ongoing						14,256	
		Tivoli Disk Expansion (450gb)		Ongoing						2,160	
		UPS Battery Replacement		Ongoing						14,580	
	Video Card for Control Room		Ongoing						756		
	06SS02 2	Online Document Management - Scanner (1), PC (2)		Ongoing						6,880	
	06SS02 3	Server for ODS		Ongoing						10,800	
	06SS02 4	Business Intelligence & KPI Disk		Ongoing						2,160	
06SS02 5	Hardware Infrastructure - Departmental		Ongoing						10,800		
System Software	06SS03 1	P.I.T Upgrades & Development		Ongoing						36,108	
	06SS03 2	ODS Software Costs		Ongoing						205,110	
	06SS03 3	Business Intelligence & KPI (Software, Licence Fees, Other)		Ongoing						55,160	
	06SS03 4	New Budgeting Software		Ongoing						26,635	
	06SS03 6	eBusiness Implementation Software and Programming		Ongoing						30,000	
	06SS03 7	Naviline, Daffron, FWorker Enhancements		Ongoing						55,000	
	06SS03 8	EDRMS Phase 1 Implementation of EDRMS Policies & Related eMail Management		Ongoing						20,000	
	06SS03 9	Lotus Notes Client Licence and Windows 2008 User CAL		Ongoing						11,297	
	06SS03 11	GIS - Tivoli Backups and Licences		Ongoing						4,789	
	06SS03 12	Software Infrastructure - Departmental		Ongoing						10,800	
	06SS03 13	Online Document Management (Software and Licences)		Ongoing						18,468	
	Furniture & Equip Engineering	06EN01-1	Furniture & Equip Engineering		Ongoing						6,500
	2010 Total				Ongoing						24,215,525

Table 2-33
Capital Projects Table – 2011 Test Year – Sub-table E1

					USoA					
					1805	1806	1808	1815	1820	1830
Project # / Sub-code		Project Description	Expected Start Date	Expected In-Service Date	Land	Land Rights	Buildings & Fixtures	Transformer Station Equipment > 50 kV	Municipal Station Equipment	Poles, Towers & Fixtures
Land Rights	06EN03 1	Land Rights	Ongoing			16,350				
Overhead Rebuild Lines	10-06EN04 13	Elmira # 6 Conductor Replacement 6 - Kildeer, Map 18	1-Jan-11	17-Jan-11						39,407
	10-06EN04 16	HS New 13.8 kV Feeder 3. - Parkside, Weber - Bearinger	17-Jan-11	26-Mar-11						165,208
	10-06EN04 17	HS New 13.8 kV Feeder 4 - Quiet Pl., Parkside to Albert	26-Mar-11	30-May-11						157,313
	10-06EN04 18	HS New 13.8 kV Feeder 5 - Albert, Quiet PI to Columbia	30-May-11	25-Jul-11						130,923
	10-06EN04 21	Conestoga Rd Rebuild - 1 of 2 stage	25-Jul-11	22-Oct-11						215,504
	10-06EN04 22	Greenwood Hill Rd, Gerber Rd to 2.1 km N.	22-Oct-11	11-Dec-11						115,802
	10-06EN04 38	Greenwood Hill Rd, N of Weimar Line # 4 rep. 2	29-Jan-11	30-Mar-11						145,809
	10-06EN04 39	27.6kV to Wellesley-Weimar Line-Moser Young to Bamburg Limits	30-Mar-11	30-May-11						148,239
	10-06EN04 40	Conv-27.6kV to Wellesley-Weimar Line-Moser Young to Hutichson	30-May-11	14-Jun-11						36,452
	06EN04 1	2011 Distribution Automation	Ongoing							
	06EN04 2	2011 Loadbreak Switches/Ties	Ongoing							
	06EN04 3	44 kV Circuit 1b. 27.6 Snyders Flats to Bloomingdale DS	1-Jan-11	26-Apr-11						140,382
	06EN04 4	Allens T., Railway to Devitt incl 3 pole S. on Moore	26-Apr-11	24-May-11						66,584
	06EN04 5	Reid Woods Dr. - Rebuild, Elmira TS to Northfield 1 of 2	24-May-11	16-Oct-11						352,648
	06EN04 6	44kV Ckt Rebuild, Bloomingdale to Zubers	1-Jan-11	20-Jun-11						206,598
	06EN04 7	2011 Overhead 4kV Conversions	20-Jun-11	25-Sep-11						232,960
	06EN04 8	Country Squire Road	25-Sep-11	28-Oct-11						79,901
	06EN04 9	2011 Elmira #6 Conductor Replacement	1-Jan-11	14-Mar-11						199,525
	06EN04 10	2011 City of Waterloo #6/4 Replacement	14-Mar-11	3-May-11						96,908
	06EN04 11	27.6 kV tie-Woolwich 1-Victoria St., Breslau Stn to 2 km E.	3-May-11	3-Jul-11						129,456
	06EN04 12	2011 Rabbit Tx Purchase/Install	Ongoing							
	06EN04 24	10 Year System Plan	Ongoing							45,664
	06EN04 25	Small Capital	Ongoing							28,685
Overhead Rebuild	06EN04 35	Contract Design Services	Ongoing							41,924
	06EN04 37	ERTS (TS) Switchyard Upgrades Ph II	Ongoing							8,089
Overhead Relocate	06EN05 1	Road Relocation Projects	Ongoing							181,897
	10-06EN05 5	Park St. - City Rebuild (subject to City approval) 1.2	1-Aug-10	15-Dec-11						165,736
Overhead New Feeders	10-06EN06 8	Cober Rd - New line for Airport supply (design only) 1	24-Jul-11	4-Sep-11						116,355
	10-06EN06 1	Columbia St. Extension - Rhine Fall Dr. to Wilmot Line	4-Sep-11	8-Nov-11						180,129
	06EN06 1	Conestoga Rd Feeder Egress/rebuild 2 of 2	28-Oct-11	29-Dec-11						254,396
	06EN06 2	HS New 13.8 kV Feeder University Ave., King to Albert	7-Nov-11	10-Dec-11						91,208
	06EN06 3	HS 13.8kV - Phillip St., Columbia S. to existing 4kV	10-Dec-11	26-Dec-11						45,538
	06EN06 4	190 University 2nd feed - 2011 2/4 Const. Water Treatment	25-Mar-11	10-May-11						77,570

Continued on Table 2-32 – Sub-table E2

Table 2-33
Capital Projects Table – 2011 Test Year – Sub-table E2

					USoA						Total
Project # / Sub-code		Project Description	Expected Start Date	Expected In-Service Date	Overhead Conductors & Devices	Underground Conduit	Underground Conductor & Devices	Line Transformers	Services	Meters	
Land Rights	06EN03 1	Land Rights	Ongoing								16,350
Overhead Rebuild Lines	10-06EN04 13	Elmira # 6 Conductor Replacement 6 - Kildeer, Map 18	1-Jan-11	17-Jan-11	21,280			18,127			78,813
	10-06EN04 16	HS New 13.8 kV Feeder 3. - Parkside, Weber - Bearinger	17-Jan-11	26-Mar-11	89,212			75,996			330,416
	10-06EN04 17	HS New 13.8 kV Feeder 4 - Quiet Pl., Parkside to Albert	26-Mar-11	30-May-11	84,949			72,364			314,625
	10-06EN04 18	HS New 13.8 kV Feeder 5 - Albert, Quiet Pl to Columbia	30-May-11	25-Jul-11	70,698			60,224			261,845
	10-06EN04 21	Conestoga Rd Rebuild - 1 of 2 stage	25-Jul-11	22-Oct-11	116,372			99,132			431,008
	10-06EN04 22	Greenwood Hill Rd, Gerber Rd to 2.1 km N.	22-Oct-11	11-Dec-11	62,533			53,269			231,603
	10-06EN04 38	Greenwood Hill Rd, N of Weimar Line # 4 rep. 2	29-Jan-11	30-Mar-11	78,737			67,072			291,618
	10-06EN04 39	27.6kV to Wellesley-Weimar Line-Moser Young to Bamburg Limits	30-Mar-11	30-May-11	80,049			68,190			296,478
	10-06EN04 40	Conv-27.6kV to Wellesley-Weimar Line-Moser Young to Hutichson	30-May-11	14-Jun-11	19,684			16,768			72,904
	06EN04 1	2011 Distribution Automation	Ongoing		630,586						630,586
	06EN04 2	2011 Loadbreak Switches/Ties	Ongoing		72,615						72,615
	06EN04 3	44 kV Circuit 1b. 27.6 Snyders Flats to Bloomingdale DS	1-Jan-11	26-Apr-11	75,806			64,576			280,765
	06EN04 4	Allens T., Railway to Devitt incl 3 pole S. on Moore	26-Apr-11	24-May-11	35,955			30,629			133,168
	06EN04 5	Reid Woods Dr. - Rebuild, Elmira TS to Northfield 1 of 2	24-May-11	16-Oct-11	190,430			162,218			705,296
	06EN04 6	44kV Ckt Rebuild, Bloomingdale to Zubers	1-Jan-11	20-Jun-11	111,563			95,035			413,195
	06EN04 7	2011 Overhead 4kV Conversions	20-Jun-11	25-Sep-11	125,798			107,161			465,919
	06EN04 8	Country Squire Road	25-Sep-11	28-Oct-11	43,146			36,754			159,801
	06EN04 9	2011 Elmira #6 Conductor Replacement	1-Jan-11	14-Mar-11	107,743			91,781			399,049
	06EN04 10	2011 City of Waterloo #6/4 Replacement	14-Mar-11	3-May-11	52,330			44,577			193,815
	06EN04 11	27.6 kV tie-Woolwich 1-Victoria St., Breslau Stn to 2 km E.	3-May-11	3-Jul-11	69,906			59,550			258,913
	06EN04 12	2011 Rabbit Tx Purchase/Install	Ongoing					48,400			48,400
	06EN04 24	10 Year System Plan	Ongoing		24,658			21,005			91,327
	06EN04 25	Small Capital	Ongoing		15,490			13,195			57,370
Overhead Rebuild	06EN04 35	Contract Design Services	Ongoing		22,639			19,285			83,847
	06EN04 37	ERTS (TS) Switchyard Upgrades Ph II	Ongoing		4,368			3,721			16,177
Overhead Relocate	06EN05 1	Road Relocation Projects	Ongoing		90,948			20,537			293,382
	10-06EN05 5	Park St. - City Rebuild (subject to City approval) 1.2	1-Aug-10	15-Dec-11	82,868			18,712			267,316
Overhead New Feeders	10-06EN06 8	Cober Rd - New line for Airport supply (design only) 1	24-Jul-11	4-Sep-11	63,281			24,496			204,132
	10-06EN06 1	Columbia St. Extension - Rhine Fall Dr. to Wilmot Line	4-Sep-11	8-Nov-11	97,965			37,922			316,016
	06EN06 1	Conestoga Rd Feeder Egress/rebuild 2 of 2	28-Oct-11	29-Dec-11	138,355			53,557			446,308
	06EN06 2	HS New 13.8 kV Feeder University Ave., King to Albert	7-Nov-11	10-Dec-11	49,604			19,202			160,014
	06EN06 3	HS 13.8kV - Phillip St., Columbia S. to existing 4kV	10-Dec-11	26-Dec-11	24,766			9,587			79,891
	06EN06 4	190 University 2nd feed - 2011 2/4 Const. Water Treatment	25-Mar-11	10-May-11	42,187			16,331			136,088

Table 2-33
Capital Projects Table – 2011 Test Year – Sub-table F1

					USoA					
					1805	1806	1808	1815	1820	1830
Project # / Sub-code		Project Description	Expected Start Date	Expected In-Service Date	Land	Land Rights	Buildings & Fixtures	Transformer Station Equipment > 50 kV	Municipal Station Equipment	Poles, Towers & Fixtures
Overhead New Services	06EN07 1	New Overhead Service Connections/Upgrades	Ongoing							95,045
Underground New Feeders	06EN08 3	Barrel Yards - F.D. Bauer Dr.	1-Dec-10	15-May-11						
	06EN08 4	HAS (TS) New Feeder Cable Installation	1-Apr-11	1-Jun-11						
Underground Cable Replacement	06EN09 1	Bluevale T.H. Phase 1	23-Apr-11	30-Jun-11						
	10-06EN09 15	Heidelberg - Wellesley Side	4-Jan-11	27-Feb-11						
	10-06EN09 16	Heidelberg - Woolwich Side	2-Mar-11	20-Apr-11						
	10-06EN09 17	Sunset Ct., Elmira	1-May-11	21-May-11						
	06EN09 3	Westcourt Place Secundare - Ph 2 - 45 Units	3-Jul-11	10-Aug-11						
	06EN09 9	Small Capital Projects UG Y2	Ongoing							
	06EN09 10	Submersible Transformer Replacements	Ongoing							
	06EN09 11	Submersible Transformer Replacements Y2	15-Jun-11	30-Jul-11						
Underground Residential Subdivisions	06EN09 12	PMH Switchgear Replacements Y2	3-Aug-11	15-Sep-11						
	10-06EN10 4	Greyerbiehl - Wilmot Line	15-May-11	20-Jun-11						
	06EN10 1	Vista Hills - Wilmot Line	15-Apr-11	30-May-11						
Underground Residential Subdivisions	06EN10 3	Galantai - Cook Homes - Woolwich St.	18-Sep-11	23-Oct-11						
	06EN10 4	Greyerbiehl Ph 2 - Wilmot Line	15-Jun-11	30-Jul-11						
	06EN10 10	Lunor Lands - Church St. - Elmira	3-Aug-11	15-Sep-11						
	10-06EN10 5	Owen - Wideman Rd.	18-Sep-11	23-Oct-11						
	10-06EN10 6	Activa - Rural East	25-Oct-11	20-Dec-11						
	10-06EN10 7	Woolwich Estates - Kraus	25-Oct-11	20-Dec-11						
Underground New Services	06EN11 1	New Underground Services	Ongoing							
	06EN11 2	Transformer Replacements - Vault Rooms	Ongoing							
Meters Commercial	06MT02 1	Meters Commercial (>50kW)	Ongoing							
Meters Wholesale	06MT03 1	Wholesale Metering	Ongoing						15,171	
			Ongoing							
Overhead Capital Operations	06OH01 1	Overhead Capital Operations Department	Ongoing							286,649
			Ongoing							
TS Building Upgrade	06SN02 3	HS A (TS) Duct Banks	10-Sep-11	30-Nov-11			59,156			
TS Equipment Upgrade	06SN04 5	ERTS (TS) Regulatory Filings	Ongoing					3,966		
	06SN04 6	ERTS (TS) Protection Upgrades	1-Jan-11	30-Nov-11				153,862		
	06SN04 7	ERTS (TS) As Built Drawings	4-Jan-11	31-Jan-11				22,002		
	06SN04 8	HS B (TS) Feeders	1-Feb-11	22-Dec-11				86,041		
Underground Capital	07OU01 1	Underground Capital Operations Department	Ongoing							
Building/ Service Centre	09GM03 1	New Building / Service Centre - Land, Building	1-Jul-10	1-Dec-11	2,038,000		22,738,961			

Continued on Table 2-32 – Sub-table F2

Table 2-33
Capital Projects Table – 2011 Test Year – Sub-table F2

					USoA						Total
					1835	1840	1845	1850	1855	1860	
Project # / Sub-code		Project Description	Expected Start Date	Expected In-Service Date	Overhead Conductors & Devices	Underground Conduit	Underground Conductor & Devices	Line Transformers	Services	Meters	
Overhead New Services	06EN07 1	New Overhead Service Connections/Upgrades	Ongoing					449,302	319,696		864,042
											-
Underground New Feeders	06EN08 3	Barrel Yards - F.D. Bauer Dr.	1-Dec-10	15-May-11			640,439				640,439
	06EN08 4	HAS (TS) New Feeder Cable Installation	1-Apr-11	1-Jun-11		50,154	284,205				334,359
Underground Cable Replacement	06EN09 1	Bluevale T.H. Phase 1	23-Apr-11	30-Jun-11		90,441	153,751	208,015			452,207
	10-06EN09 15	Heidelberg - Wellesley Side	4-Jan-11	27-Feb-11		89,332	151,864	205,463			446,658
	10-06EN09 16	Heidelberg - Woolwich Side	2-Mar-11	20-Apr-11		110,335	187,569	253,770			551,674
	10-06EN09 17	Sunset Ct., Elmira	1-May-11	21-May-11		23,928	40,677	55,034			119,639
	06EN09 3	Westcourt Place Secundare - Ph 2 - 45 Units	3-Jul-11	10-Aug-11		25,224	42,881	58,015			126,119
	06EN09 9	Small Capital Projects UG Y2	Ongoing			9,347	15,889	21,497			46,733
	06EN09 10	Submersible Transformer Replacements	Ongoing					76,764			76,764
	06EN09 11	Submersible Transformer Replacements Y2	15-Jun-11	30-Jul-11				30,245			30,245
	06EN09 12	PMH Switchgear Replacements Y2	3-Aug-11	15-Sep-11		25,030	42,550	57,568			125,148
Underground Residential Subdivisions	10-06EN10 4	Greyerbiehl - Wilmot Line	15-May-11	20-Jun-11		-	-	-			-
	06EN10 1	Vista Hills - Wilmot Line	15-Apr-11	30-May-11		58,533	179,041	106,736			344,309
Underground Residential Subdivisions	06EN10 3	Galantai - Cook Homes - Woolwich St.	18-Sep-11	23-Oct-11		50,336	153,969	91,789			296,094
	06EN10 4	Greyerbiehl Ph 2 - Wilmot Line	15-Jun-11	30-Jul-11		58,533	179,041	106,736			344,309
	06EN10 10	Lunor Lands - Church St. - Elmira	3-Aug-11	15-Sep-11		58,533	179,041	106,736			344,309
	10-06EN10 5	Owen - Wideman Rd.	18-Sep-11	23-Oct-11		28,822	88,163	52,559			169,544
	10-06EN10 6	Activa - Rural East	25-Oct-11	20-Dec-11		43,646	133,505	79,590			256,741
	10-06EN10 7	Woolwich Estates - Kraus	25-Oct-11	20-Dec-11		29,398	89,923	53,608			172,928
Underground New Services	06EN11 1	New Underground Services	Ongoing					513,887	357,108		870,995
	06EN11 2	Transformer Replacements - Vault Rooms	Ongoing					120,769			120,769
Meters Commercial	06MT02 1	Meters Commercial (>50kW)	Ongoing							315,250	315,250
			Ongoing							-	
Meters Wholesale	06MT03 1	Wholesale Metering	Ongoing								15,171
			Ongoing							-	
Overhead Capital Operations	06OH01 1	Overhead Capital Operations Department	Ongoing		156,761			4,479			447,889
			Ongoing							-	
TS Building Upgrade	06SN02 3	HS A (TS) Duct Banks	10-Sep-11	30-Nov-11							59,156
										-	
TS Equipment Upgrade	06SN04 5	ERTS (TS) Regulatory Filings	Ongoing								3,966
	06SN04 6	ERTS (TS) Protection Upgrades	1-Jan-11	30-Nov-11							153,862
	06SN04 7	ERTS (TS) As Built Drawings	4-Jan-11	31-Jan-11							22,002
	06SN04 8	HS B (TS) Feeders	1-Feb-11	22-Dec-11							86,041
Underground Capital	07OU01 1	Underground Capital Operations Department	Ongoing			68,473	185,856	71,734			326,063
										-	
Building/ Service Centre	09GM03 1	New Building / Service Centre - Land, Building	1-Jul-10	1-Dec-11							24,776,961
										-	

Table 2-33
Capital Projects Table – 2011 Test Year – Sub-table G1

					USoA					
Project #		Project Description	Expected Start Date	Expected In-Service Date	Office Furniture & Equipment	Computer Hardware	Computer Software	Transportation Equipment	Stores Equipment	Tools, Shop & Garage Equipment
Furniture & Equip Engineering	06EN01 1	Replacement Survey Equipment	1-Feb-11	31-Mar-11	6,500					
GIS Mapping	06EN13 1	GIS - Mapping Software / Upgrades	Ongoing				166,752			
Garage	06LFL01 1	Capital Truck Tools:	Ongoing							
		Equipment installed in vehicles- Radios / Volt Meters	Ongoing							42,593
		Major Tool Purchases	Ongoing							69,444
		Equipment Modifications	Ongoing							50,000
Vehicles	06FL02 1	Vehicle Additions	1-Jul-10	1-May-11						
		50' single bucket material handling Posi-Plus boom	1-Jul-10	1-May-11				340,560		
		Heavt Duty Pickup with Workbody	1-Nov-10	1-Aug-11				87,963		
		2 galvanized service reel trailers	1-Sep-10	1-Feb-11				69,444		
		GM Cargo Van & Mini Van	1-Jan-11	1-Jul-11				72,500		
Equipment & Furniture Metering	06MT04 1	Filing Cabinet	1-Jan-11	1-Dec-11	3,704					
		Meter Storage Racks	1-Jan-11	31-Oct-11						
		Power Analyzer	1-Jan-11	31-Oct-11						
		DRA Replacements, Halo Ammeter	1-Jan-11	31-Oct-11						
		Meter Warm Up Stand & Metering Storage Shelving	1-Jan-11	31-Oct-11						
Stores Equipment	06PS01 1	Forklift	1-May-11	1-Nov-11					50,000	
		Outside Scale	1-Jun-11	1-Oct-11					3,500	
Equipment Stations	06SN07 2	Relay Test System	1-Jan-11	31-Oct-11						
SCADA Equipment	06SN05 1	SCADA for new HSB (TS) Feeders	4-Jan-11	3-Mar-11						
	06SN05 2	ERTS (TS) New RTU and Fibre LAN	1-Apr-11	30-Nov-11						
	06SN05 3	SCADA for Distributed Automation	Ongoing							
	06SN05 4	New SCADA System	10-Jan-11	31-Dec-11						

Continued on Table 2-32 – Sub-table G2

Table 2-33
Capital Projects Table – 2011 Test Year - Sub-table G2

					USoA					Total
					1945	1955	1960	1980	1995	
	Project #	Project Description	Expected Start Date	Expected In-Service Date	Measurement & Testing Equipment	Communication Equipment	Miscellaneous Equipment	System Supervisory Equipment	Contributions and Grants	
Furniture & Equip Engineering	06EN01 1	Replacement Survey Equipment	1-Feb-11	31-Mar-11						6,500
										-
GIS Mapping	06EN13 1	GIS - Mapping Software / Upgrades	Ongoing							166,752
										-
Garage	06LFL01 1	Capital Truck Tools:	Ongoing							-
		Equipment installed in vehicles- Radios / Volt Meters	Ongoing							42,593
		Major Tool Purchases	Ongoing							69,444
		Equipment Modifications	Ongoing							50,000
										-
Vehicles	06FL02 1	Vehicle Additions	1-Jul-10	1-May-11						-
		50' single bucket material handling Posi-Plus boom	1-Jul-10	1-May-11						340,560
		Heavt Duty Pickup with Workbody	1-Nov-10	1-Aug-11						87,963
		2 galvanized service reel trailers	1-Sep-10	1-Feb-11						69,444
		GM Cargo Van & Mini Van	1-Jan-11	1-Jul-11						72,500
Equipment & Furniture Metering	06MT04 1									-
		Filing Cabinet	1-Jan-11	1-Dec-11						3,704
		Meter Storage Racks	1-Jan-11	31-Oct-11	13,889					13,889
		Power Analyzer	1-Jan-11	31-Oct-11	23,148					23,148
		DRA Replacements, Halo Ammeter	1-Jan-11	31-Oct-11	5,093					5,093
Stores Equipment	06PS01 1	Meter Warm Up Stand & Metering Storage Shelving	1-Jan-11	31-Oct-11	8,333					8,333
Equipment Stations	06SN07 2	Forklift	1-May-11	1-Nov-11						50,000
		Outside Scale	1-Jun-11	1-Oct-11						3,500
SCADA Equipment	06SN05 1	Relay Test System	1-Jan-11	31-Oct-11	64,815					64,815
										-
	06SN05 2	SCADA for new HSB (TS) Feeders	4-Jan-11	3-Mar-11				43,128		43,128
	06SN05 3	ERTS (TS) New RTU and Fibre LAN	1-Apr-11	30-Nov-11				77,792		77,792
	06SN05 4	SCADA for Distributed Automation	Ongoing					93,156		93,156
		New SCADA System	10-Jan-11	31-Dec-11				834,356		834,356

Table 2-33
Capital Projects Table – 2011 Test Year - Sub-table H1

					USoA					
Project #		Project Description	Expected Start Date	Expected In-Service Date	Office Furniture & Equipment	Computer Hardware	Computer Software	Transportation Equipment	Stores Equipment	Tools, Shop & Garage Equipment
System Hardware	06SS02 1	Corporate Server Upgrade for ERP/CIS/Billing Legacy Systems	15-Oct-11	15-Dec-11		225,000				
		Monitors - Control Room, Stations, Operations	Ongoing			13,100				
		PC - Control Room, Operations, Replacements	Ongoing			26,000				
		Printers - Engineering, Metering, Operations	Ongoing			39,000				
		PRTCOMPR Replacement, Tivoli Disk Expansion	Ongoing			8,000				
		SCADA Server and Hardware Infrastructure - Corporate	Ongoing			16,259				
	06SS02 2	Online Document Management - Scanner/PC	Ongoing			3,185				
	06SS02 4	Business Intelligence/KPIs Disk	Ongoing			2,000				
System Software	06SS02 5	Hardware Infrastructure - Departmental	Ongoing			10,000				
	06SS02 7	SCADA Server	Ongoing			7,000				
	06SS03 1	Power Interruption Tracking Programming & Licences	Ongoing				12,574			
	06SS03 2	ODS Software	Ongoing				46,297			
	06SS03 3	Business Intelligence/KPIs Servers, Licences,	Ongoing				80,113			
	06SS03 4	New Budgeting Software - further enhancements	Ongoing				15,000			
	06SS03 6	eBusiness Enhancements	Ongoing				20,000			
	06SS03 7	Naviline/Daffron/FWorker Enhancements	Ongoing				71,700			
	06SS03 8	EDRMS Extended Phase 1	Ongoing				20,000			
	06SS03 9	Corporate Budgeting Software - Inquiry/Processing/Reporting Enhancements	Ongoing				15,000			
	06SS03 10	Health, Safety & Environment Software & Licences	Ongoing				36,994			
	06SS03 11	Tivoli Backup Licences	Ongoing				4,537			
	06SS03 12	Software Infrastructure - Departmental	Ongoing				15,000			
	06SS03 13	Online Document Management Licences	Ongoing				7,222			
	06SS03 14	SCADA Software	Ongoing				6,500			
	06SS03 16	MS Office Upgrades	Ongoing				84,370			
	06SS03 17	Business Process Software	Ongoing				15,000			
	06SS03 18	Barcoding Application	Ongoing				30,556			
Building/ Service Centre	09GM03	New Building / Service Centre - Furniture	1-Jan-11	1-Dec-11	1,700,000					

Continued on Table 2-32 – Sub-table H2

Table 2-33
Capital Projects Table – 2011 Test Year - Sub-table H2

					USoA					Total	
					1945	1955	1960	1980	1995		
Project #	Project Description			Expected Start Date	Expected In-Service Date	Measurement & Testing Equipment	Communication Equipment	Miscellaneous Equipment	System Supervisory Equipment		Contributions and Grants
System Hardware	06SS02 1	Corporate Server Upgrade for ERP/CIS/Billing Legacy Systems			15-Oct-11	15-Dec-11					225,000
		Monitors - Control Room, Stations, Operations			Ongoing						13,100
		PC - Control Room, Operations, Replacements			Ongoing						26,000
		Printers - Engineering, Metering, Operations			Ongoing						39,000
		PRTCOMPR Replacement, Tivoli Disk Expansion			Ongoing						8,000
		SCADA Server and Hardware Infrastructure - Corporate			Ongoing					16,259	
	06SS02 2	Online Document Management - Scanner/PC			Ongoing					3,185	
	06SS02 4	Business Intelligence/KPIs Disk			Ongoing					2,000	
06SS02 5	Hardware Infrastructure - Departmental			Ongoing					10,000		
06SS02 7	SCADA Server			Ongoing					7,000		
System Software	06SS03 1	Power Interruption Tracking Programming & Licences			Ongoing					12,574	
	06SS03 2	ODS Software			Ongoing					46,297	
	06SS03 3	Business Intelligence/KPIs Servers, Licences,			Ongoing					80,113	
	06SS03 4	New Budgeting Software - further enhancements			Ongoing					15,000	
	06SS03 6	eBusiness Enhancements			Ongoing					20,000	
	06SS03 7	Naviline/Daffron/FWorker Enhancements			Ongoing					71,700	
	06SS03 8	EDRMS Extended Phase 1			Ongoing					20,000	
	06SS03 9	Corporate Budgeting Software - Inquiry/Processing/Reporting Enhancements			Ongoing					15,000	
	06SS03 10	Health, Safety & Environment Software & Licences			Ongoing					36,994	
	06SS03 11	Tivoli Backup Licences			Ongoing					4,537	
	06SS03 12	Software Infrastructure - Departmental			Ongoing					15,000	
	06SS03 13	Online Document Management Licences			Ongoing					7,222	
	06SS03 14	SCADA Software			Ongoing					6,500	
	06SS03 16	MS Office Upgrades			Ongoing					84,370	
	06SS03 17	Business Process Software			Ongoing					15,000	
	06SS03 18	Barcoding Application			Ongoing					30,556	
	Building/ Service Centre	09GM03	New Building / Service Centre - Furniture			1-Jan-11	1-Dec-11				1,700,000
	2011 Total	45,836,519									

VARIANCE ANALYSIS ON RATE BASE

As shown in Table 2-20, WNH's materiality threshold for variance analysis is \$144,903, which is 0.5% of WNH's Distribution Revenue requirement. The Gross Fixed Asset Variance analysis for those variances is highlighted in Table 2-23.

The 2006 Board Approved amounts for each account were calculated as the average of the 2003 and 2004 actual amounts in accordance with the 2006 EDR rate model. As such, the amount for 2006 Actual includes the difference between the 2004 actual and the 2006 Board Approved amounts as well as 2005 normal investments.

WNH has detailed for the years 2005 through 2011 in Tables 2-25 through 2-31 (summary), and in Appendix C (Business Case Analyses), the annual capital expenditures by project exceeding the materiality threshold chosen by WNH. The project expenditure summary provides the dollars spent by USoA account, as well as the project total.

2006 Actual vs. 2006 Board Approved

WNH has provided in Tables 2-25 and 2-26 the annual capital expenditures by project schedules for 2005 and 2006 respectively. The project expenditure summary provides the dollars spent by USoA account, as well as the project total. Every project that is in excess of \$125,000 has a detailed Business Case Analysis provided in Appendix C. Each Business Case Analysis describes the project including the attributes of the category of work, the alternatives considered, the consequences of not proceeding with the project, the project details/scope and the expected benefits.

WNH notes that the increase in capital expenditures in 2006 was primarily due to the refurbishment of one of its Transformer Stations. The capital projects, exceeding the materiality threshold, associated with these expenditures are detailed in Tables 2-26.04, 2-26.06, 2-26.23 and 2-26.24.

2007 Actual vs. 2006 Actual

WNNH has provided in Tables 2-26 and 2-27 the annual capital expenditures by project schedules for 2006 and 2007 respectively. The project expenditure summary provides the dollars spent by USOA account, as well as the project total. Every project that is in excess of \$125,000 has a detailed Business Case Analysis provided in Appendix C. Each Business Case Analysis describes the project including the attributes of the category of work, the alternatives considered, the consequences of not proceeding with the project, the project details/scope and the expected benefits.

WNNH notes that the increase in capital expenditures in 2007 was primarily due to the implementation of a formalized pole replacement program, thus, increasing the Poles, Towers and Fixtures costs, as well as the associated Overhead Conductors and Devices. There are sixteen capital projects that exceed the materiality threshold, the summary of which is detailed in Table 27.

2008 Actual vs. 2007 Actual

WNNH has provided in Tables 2-27 and 2-28 the annual capital expenditures by project schedules for 2007 and 2008 respectively. The project expenditure summary provides the dollars spent by USOA account, as well as the project total. Every project that is in excess of \$125,000 has a detailed Business Case Analysis provided in Appendix C. Each Business Case Analysis describes the project including the attributes of the category of work, the alternatives considered, the consequences of not proceeding with the project, the project details/scope and the expected benefits.

There was a decrease in the capital expenditures in 2008 as compared to 2007, primarily due to decreased activity in the pole replacement program. This decrease occurred in 2008 only, as the 2009 actual expenditures through to the 2013 projected expenditures revert to approximately the 2007 level of spending.

2009 Actual vs. 2008 Actual

WNN has provided in Tables 2-28 and 2-29 the annual capital expenditures by project schedules for 2008 and 2009 respectively. The project expenditure summary provides the dollars spent by USOA account, as well as the project total. Every project that is in excess of \$125,000 has a detailed Business Case Analysis provided in Appendix C. Each Business Case Analysis describes the project including the attributes of the category of work, the alternatives considered, the consequences of not proceeding with the project, the project details/scope and the expected benefits.

The increase in 2009 capital expenditures as compared to 2008, is primarily due to the pole replacement program reverting to its 2007 levels and increased transformer costs resulting from an increase in the demand for larger transformers to supply new industrial and commercial developments. In addition WNN's voltage conversion program included the conversion of a large number of low voltage lines from 8.3 kV to 27.6 kV in the rural areas. This required the installation of new distribution transformers along these line segments.

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4 **2010 Bridge vs. 2009 Actual**
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6 WNH has provided in Tables 2-29 and 2-30 the annual capital expenditures by project
7 schedules for 2009 and 2010 respectively. The project expenditure summary provides the
8 dollars spent by USoA account, as well as the project total. Every project that is in excess of
9 \$125,000 has a detailed Business Case Analysis provided in Appendix C. Each Business Case
10 Analysis describes the project including the attributes of the category of work, the alternatives
11 considered, the consequences of not proceeding with the project, the project details/scope and
12 the expected benefits.
13

14 The increase in capital expenditures in 2010 is primarily due to the refurbishment of one of its
15 Transformer Stations (47 years of age), resulting in an increase in the building and transformer
16 station equipment accounts. Tables 2-30.42 through 2-30.47 provide details of projects that
17 exceed the materiality threshold, that are related to this refurbishment.
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2011 Test vs. 2010 Bridge

WNNH has provided in Tables 2-30 and 2-31 the annual capital expenditures by project schedules for 2009 and 2010 respectively. The project expenditure summary provides the dollars spent by USoA account, as well as the project total. Every project that is in excess of \$125,000 has a detailed Business Case Analysis provided in Appendix C. Each Business Case Analysis describes the project including the attributes of the category of work, the alternatives considered, the consequences of not proceeding with the project, the project details/scope and the expected benefits.

The increase in capital expenditures in 2011 is primarily due to the construction of a new Administration Building and Service Centre, as detailed in Table 2-31.45 and the installation of a new SCADA system, as detailed in Table 2-31.49.

VARIANCE ANALYSIS ON CONTRIBUTED CAPITAL

WNH tracks its contributions in aid of expansion and connections in compliance with the Distribution System Code and its balances are a direct reduction of its rate base. Details of the balances of Contributed Capital in aggregate are presented below in Table 2-34.

Table 2-34
Contributed Capital Balances

OEB Account	2004 Actual Year	2005 Actual Year	2006 Actual Year	2007 Actual Year	2008 Actual Year	2009 Actual Year	2010 Bridge Year	2011 Test Year
1995	(12,415,674)	(14,857,883)	(17,014,606)	(18,696,778)	(20,689,911)	(22,468,948)	(24,287,247)	(26,429,856)
\$ Change		(2,442,209)	(2,156,723)	(1,682,172)	(1,993,133)	(1,779,037)	(1,818,299)	(2,142,609)
% Change		19.7%	14.5%	9.9%	10.7%	8.6%	8.1%	8.8%

WNH tracks its Contributed Capital by the OEB account to which the contribution pertains. Details of the Contributed Capital are presented in Table 2-35.

Additional details in dollar and percentage change year over year are presented in Tables 2-36 & 2-37.

WNH's service territory resides within the Region of Waterloo, which is one of the fastest growing communities in Canada. The Region of Waterloo boasts a growth rate between 2001 – 2006 of 8.9% on its website. This growth has put pressure on WNH's infrastructure resources but, at the same time, has led to year over year increases in Contributed Capital.

Capital contributions of \$1.8M received in 2009, represents an 8.6% increase over 2008, however it is lower than previous years' percentage change of 19.7% in 2005, 14.5% in 2006, 9.9% in 2007 and 10.7% in 2008.

In the estimation of its 2010 Bridge and 2011 Test Year Contributed Capital Amounts, WNH budgeted by specific project and the amount was based on WNH's Economic Evaluation Model. The 2011 Contributed Capital was adjusted for any HST impact if applicable.

Capital Expenditures and Contributed Capital

WNH budgets its capital expenditures each year basing its decisions on numerous factors including but not limited to:

- Expected growth
- Reliability statistics
- Previous years' experience
- Working capital availability

While the collection of Contributed Capital is considered to be a source of working capital and therefore reduces the overall cash required for its capital expenditures program, WNH's capital expenditures program is not driven by the amount of Contributed Capital that it expects to collect in any given year. Capital expenditures are thus driven by the factors listed above (and more), rather than by Contributed Capital.

Table 2-35
Contributed Capital Balances by USoA Account

USoA Account	Description	Balance at					
		2004	2005	2006	2007	2008	2009
1806	Land Rights	(1,437)	(3,970)	(3,970)	(136,896)	(136,896)	(136,896)
1808	Buildings and Fixtures	-	-	-	(6,790)	(6,790)	(6,790)
1815	Transformer Station Equipment - above 50 kV	-	-	-	(150,000)	(150,000)	(150,000)
1830	Poles, Towers and Fixtures	(851,659)	(1,023,715)	(1,200,608)	(1,419,563)	(1,614,180)	(1,910,410)
1835	Overhead Conductors and Devices	(455,511)	(560,271)	(667,486)	(784,282)	(882,498)	(1,111,921)
1840	Underground Conduit	(1,321,150)	(1,581,261)	(1,788,086)	(1,884,545)	(2,089,687)	(2,212,032)
1845	Underground Conductors and Devices	(6,015,008)	(7,009,010)	(7,727,497)	(8,040,511)	(8,789,270)	(9,185,564)
1850	Line Transformers	(3,725,747)	(4,518,656)	(5,288,595)	(5,673,770)	(6,204,761)	(6,689,066)
1855	Services	(33,900)	(117,189)	(294,551)	(556,609)	(744,088)	(993,472)
1860	Meters	(11,264)	(43,812)	(43,812)	(43,812)	(71,739)	(72,796)
		(12,415,674)	(14,857,883)	(17,014,606)	(18,696,778)	(20,689,911)	(22,468,948)

Table 2-36
Contributed Capital Annual \$ Change

USoA Account	Description	2005	2006	2007	2008	2009
1806	Land Rights	(2,533)	-	(132,926)	-	-
1808	Buildings and Fixtures	-	-	(6,790)	-	-
1815	Transformer Station Equipment - above 50 kV	-	-	(150,000)	-	-
1830	Poles, Towers and Fixtures	(172,056)	(176,893)	(218,955)	(194,617)	(296,230)
1835	Overhead Conductors and Devices	(104,761)	(107,215)	(116,796)	(98,216)	(229,422)
1840	Underground Conduit	(260,111)	(206,826)	(96,458)	(205,142)	(122,345)
1845	Underground Conductors and Devices	(994,002)	(718,487)	(313,014)	(748,759)	(396,294)
1850	Line Transformers	(792,909)	(769,939)	(385,175)	(530,991)	(484,305)
1855	Services	(83,289)	(177,363)	(262,058)	(187,480)	(249,384)
1860	Meters	(32,548)	-	-	(27,928)	(1,057)
		(2,442,209)	(2,156,723)	(1,682,172)	(1,993,133)	(1,779,037)

Table 2-37
Contributed Capital Annual % Change

USoA Account	Description	2005	2006	2007	2008	2009
1806	Land Rights	176%	0%	3348%	0%	0%
1808	Buildings and Fixtures	0%	0%	0%	0%	0%
1815	Transformer Station Equipment - above 50 kV	0%	0%	0%	0%	0%
1830	Poles, Towers and Fixtures	20%	17%	18%	14%	18%
1835	Overhead Conductors and Devices	23%	19%	17%	13%	26%
1840	Underground Conduit	20%	13%	5%	11%	6%
1845	Underground Conductors and Devices	17%	10%	4%	9%	5%
1850	Line Transformers	21%	17%	7%	9%	8%
1855	Services	246%	151%	89%	34%	34%
1860	Meters	289%	0%	0%	64%	1%

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Appendix A

5 Year Capital Expenditures Forecast 2011 - 2015

APPENDIX A: 5 YEAR CAPITAL EXPENDITURES FORECAST 2011-2015

WNH has presented the 5 Year Capital Expenditure Forecast in two formats, one by Activity Driver (Appendix A-1) and one by USoA Account (Appendix A-2).

Capital Expenditure Levels for 2012 through 2014 will revert back to the levels of WNH's investment prior to 2009, prior to WNH refurbishing its Transformer Stations and the construction of a new Administration Building and Service Centre.

In 2014 and 2015 on Appendix A-1 expenditures for TS New Building and TS New Equipment have been shown. WNH will commence constructing its TS#4 in 2015, for energization in 2016. The costs reflected do not capture the full TS Cost, however, as a TS takes up to 24 months to construct, payments are made during the construction period. The expenditures forecast would be carried in WIP until such time as the TS is energized and then would be transferred to the appropriate asset account.

The \$500,000 in Land cost in 2015 is the cost of land preparation, including grading, excavating, storm sewers, water hookups for TS#4.

Appendix A-1

5 Year Capital Forecast by Activity Driver

Project #	Project Description	2011 Forecast	2012 Forecast	2013 Forecast	2014 Forecast	2015 Forecast
06EN02	Land	-	12,500	5,000	-	500,000
06EN03	Land Rights	16,350	16,000	16,000	16,000	16,000
09GM03	New Service Centre	26,476,961	-	-	-	-
06SN08	MS/DS Disposal Costs	-	-	-	-	-
06SN02	TS Building Upgrade	59,156	15,000	15,000	15,000	15,000
06SN02	TS Building New	-	-	-	100,000	800,000
06SN04	TS Equipment Upgrade	265,871	900,000	600,000	-	400,000
06SN04	TS Equipment New	-	-	-	1,500,000	4,000,000
06EN04	Overhead - Rebuild Lines	6,319,556	5,500,000	5,500,000	5,500,000	5,500,000
06EN05	Overhead - Relocate Lines	560,698	625,000	625,000	625,000	625,000
06EN06	Overhead - New Feeders	1,342,450	1,200,000	1,200,000	1,200,000	1,200,000
06OH01	Overhead - Operations Dept Capital	447,889	455,000	465,000	475,000	485,000
06EN08	Underground - New Feeders	974,798	500,000	500,000	500,000	500,000
06EN09	Underground - Cable Replacement	1,975,187	1,600,000	950,000	500,000	500,000
06EN10	Underground - Residential Sub-Divisions	1,928,234	500,000	500,000	500,000	500,000
07OU01	Underground - Operations Dept Capital	326,063	335,000	340,000	345,000	350,000
06EN07	Services - Overhead	864,042	750,000	750,000	750,000	750,000
06EN11	Services - Underground	991,764	550,000	550,000	650,000	650,000
06MT02	Meters - Commercial	315,250	-	-	-	-
06MT03	Meters - Wholesale	15,171	2,000	2,000	2,000	102,000
08MT05	Meters - Smart ("regular" meters in future)*	-	500,000	500,000	500,000	500,000
06SS02	Systems Hardware	349,544	280,000	200,000	210,000	210,000
06SS03	Systems Software	480,863	700,000	500,000	500,000	500,000
06EN13	GIS - Mapping	166,752	175,000	180,000	185,000	190,000
06FL02	Vehicles	570,468	607,500	562,500	615,000	555,000
06FL01	Equipment - Fleet	162,037	180,000	180,000	175,000	190,000
06EN01	Furniture & Equipment - Engineering	6,500	2,500	2,500	2,500	2,500
06GM02	Service Centre - Existing	-	-	-	-	-
06MT04	Equipment - Metering	54,167	5,000	5,000	5,000	5,000
06OA01	Furniture & Equipment - Operations	-	-	-	-	-
06GM01	Furniture & Equipment - General Maintenance	-	5,000	5,000	5,000	5,000
06PS01	Equipment - Stores	53,500	-	-	-	-
06SN07	Equipment - Stations	64,815	75,000	5,000	5,000	5,000
06SN05	SCADA Equipment	1,048,432	450,000	250,000	250,000	650,000
	Total before Contributed Capital	45,836,519	15,940,500	14,408,000	15,130,500	19,705,500
06EN12	Contributed Capital	(2,142,609)	(1,825,000)	(1,825,000)	(1,825,000)	(1,825,000)
	Net Capital Investment	43,693,910	14,115,500	12,583,000	13,305,500	17,880,500

* Does not include inclusion of Smart Meters, which are currently in Deferral Account 1555

Appendix A-2

5 Year Capital Forecast by USoA

USoA #	Project Description	2011 Forecast	2012 Forecast	2013 Forecast	2014 Forecast	2015 Forecast
1805	Land	2,038,000	12,500	5,000	-	500,000
1806	Land Rights	16,350	16,000	16,000	16,000	16,000
1808	Building & Fixtures	22,798,117	15,000	15,000	115,000	815,000
1815	Transformer Station Equipment > 50 kV	265,871	900,000	600,000	1,500,000	4,400,000
1820	Municipal Station Equipment	15,171	2,000	2,000	2,000	102,000
1830	Poles, Towers & Fixtures	4,278,501	4,195,200	4,201,600	4,208,000	4,214,400
1835	Overhead Conductors & Devices	2,953,287	2,210,000	2,213,500	2,217,000	2,220,500
1840	Underground Conduit	820,062	550,350	421,400	332,450	333,500
1845	Underground Conductor & Devices	2,748,362	1,419,950	1,201,800	1,051,650	1,054,500
1850	Line Transformers	4,253,666	3,136,500	2,838,700	2,691,900	2,693,100
1855	Services	676,804	503,000	503,000	544,000	544,000
1860	Meters	315,250	500,000	500,000	500,000	500,000
1915	Office Furniture & Equipment	1,710,204	7,500	7,500	7,500	7,500
1920	Computer Hardware	349,544	280,000	200,000	210,000	210,000
1925	Computer Software	647,615	875,000	680,000	685,000	690,000
1930	Transportation Equipment	570,468	607,500	562,500	615,000	555,000
1935	Stores Equipment	53,500	-	-	-	-
1940	Tools, Shop & Garage Equipment	162,037	180,000	180,000	175,000	190,000
1945	Measurement & Testing Equipment	115,278	80,000	10,000	10,000	10,000
1955	Communication Equipment	-	-	-	-	-
1960	Miscellaneous Equipment	-	-	-	-	-
1980	System Supervisory Equipment	1,048,432	450,000	250,000	250,000	650,000
	Total before Contributed Capital	45,836,519	15,940,500	14,408,000	15,130,500	19,705,500
1995	Contributions and Grants	(2,142,609)	(1,825,000)	(1,825,000)	(1,825,000)	(1,825,000)
	Net Capital Investment	43,693,910	14,115,500	12,583,000	13,305,500	17,880,500

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Appendix B

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Asset Management Strategy

Confidential

WATERLOO NORTH HYDRO INC. ASSET MANAGEMENT STRATEGY

June 2010

Prepared and Submitted By:



Contact Person:

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Waterloo North Hydro Organization Structure

Utility Overview

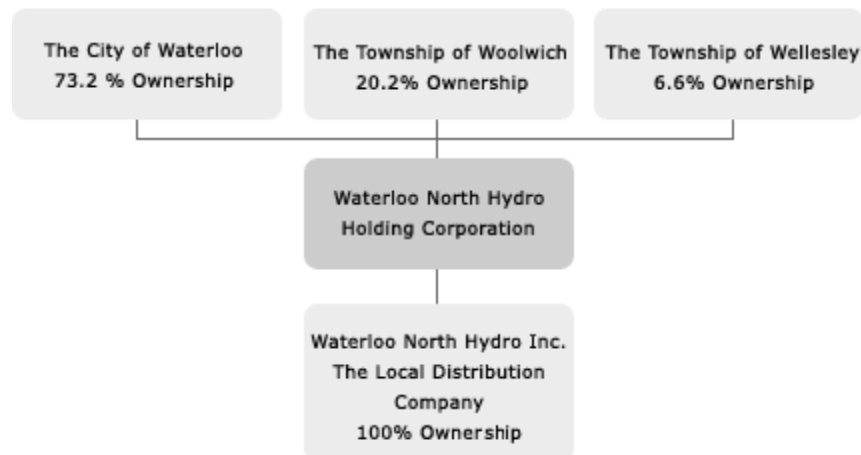
Waterloo North Hydro Inc. (WNH) is a local distribution company (LDC), regulated and licensed by the Ontario Energy Board (OEB), with a service area of approximately 672 square kilometers, \$110 million in fixed assets and a 284 MW peak demand. WNH is a medium sized LDC in the Province of Ontario and is responsible for providing all regulated electricity distribution services to over 51,000 residential and business customers in the City of Waterloo, the Township of Woolwich and the Township of Wellesley.

WNH's mandate is to create value for its customers and shareholders by providing safe and reliable electrical distribution services at competitive distribution rates.

Waterloo North Hydro Holding Corporation, incorporated under the Business Corporation Act (Ontario) is the parent holding company of Waterloo North Hydro Inc. The City of Waterloo, the Township of Woolwich and the Township of Wellesley are the shareholders of Waterloo North Hydro Holding Corporation, with ownership interests of 73.2%, 20.2% and 6.6%, respectively.

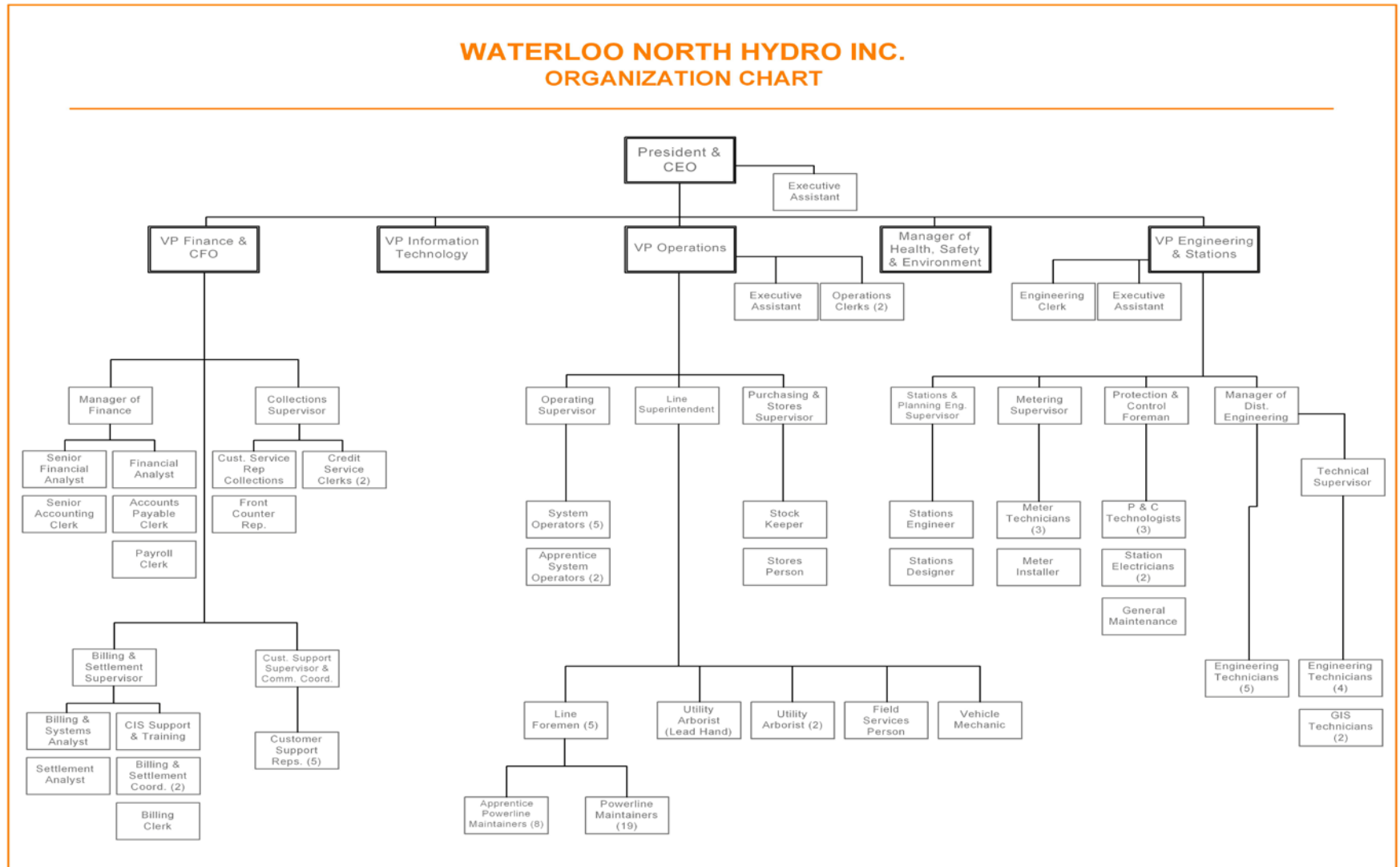
The business affairs of each corporation are managed by its respective Boards of Directors, each consisting of nine (9) Directors. The Shareholders appoint Waterloo North Hydro Holding Corporation directors. The Holding Company Board appoints directors for Waterloo North Hydro Inc.

The net assets and all employees of the former Hydro-Electric Commission of Waterloo, Wellesley & Woolwich were transferred to Waterloo North Hydro Inc. on incorporation March 1, 2000.



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Organizational Structure



Corporate Values & Strategic Imperatives

WNH has established a number of corporate values and strategic imperatives that define the organization and are considered in strategic planning:

Corporate Values

- Respect
WNH is committed to treating others with respect and dignity
- Commitment to Excellence
WNH strives for high reliability and quality through continuous improvement, leadership and excellence
- Service
WNH recognizes its commitment to be of service to customers, employees and the community and its contribution to the success of each
- Teamwork and Collaboration
WNH willingly shares information and best practices
- Safety and Environmental Stewardship
WNH is committed to its responsibility for the health and safety of employees, the protection of the public and safeguarding of the environment
- Responsible and Accountable
WNH takes responsibility for the quality, reliability and timelines of its work and the work of others

Strategic Imperatives

Each of the strategic imperatives is internally consistent with and contributes to achieving the corporate values outlined above.

- Improve Supply
- Improve Reliability
- Improve Loss Prevention
- Reduce Costs
- Improve Organizational Effectiveness
- Improve Customer Service
- Improve Esthetics of its Distribution System

Asset Management

Overview

WNH has established comprehensive inspection and maintenance programs to provide for continuous condition assessment and remediation, respectively, of assets within its distribution system. In addition to satisfying the reporting requirements of the Ontario Energy Board's (OEB) Distribution System Code (DSC) and the Independent Electricity System Operator (IESO), these programs provide for continuous system improvement and performance reliability, ensuring long term capacity, supply availability/reliability to meet customer demands. These programs further contribute to the effective and successful management of the distribution system and its assets.

Senior Engineering and Operations management have the responsibility for Asset Management at WNH. All have formal training and extensive experience in distribution systems and LDCs. It is this knowledge and experience that has led staff and management to effectively manage the WNH distribution system, facilitated by the following:

- An organized program for the inspection and condition-assessment of the overhead distribution system, underground distribution system, transformer stations and substations
- An adaptive maintenance program based on inspection findings and keeping with industry best practices
- Generally accurate and current asset and inspection records maintained within the Geographic Information System (GIS) and other electronic databases
- Development of operations budgets, maintenance budgets and capital investment plans reflecting the capacity, condition and growth of the distribution system, allowing for enhanced reliability and cost effectiveness

Considerations

To provide consistency with its corporate values and strategic imperatives WNH has to manage its assets while recognizing realistic service and performance goals. Customer expectations for the delivery of safe, reliable electricity at a reasonable price have to be respected. The following considerations are critical to WNH's strategy:

- The activities should demonstrate good stewardship in the long term up-keep and growth of the distribution system
- Service delivery should be safe, fair and consistent within all customer groups
- The performance measures should demonstrate progress towards and/or achievement of the goals within reasonable budget considerations
- Maintenance plans should be consistent with good utility practice but capture specific items from the annual assessments and any specific customer needs
- Capital budgets should justify proposed expenditures and be flexible to respond to new priorities and extended life expectancies as defined in short and long term studies
- The strategy should create opportunities for improved efficiencies
- Annual reviews of the strategies and procedures should be a priority

Risk Management

Risk management is a fundamental activity in any business, aiding in the justification, prioritization and optimization of spending. With respect to the electrical distribution industry specifically, it requires a systematic approach to assess the following attributes of each asset:

- Condition
- Age and life expectancy
- Location
- Operational data
- Maintenance
 - Reactive maintenance
 - Preventative maintenance
 - Condition-Based maintenance (CBM)

The systematic approach of inspections, condition and age assessment, data analysis and maintenance allow WNH to identify and mitigate risk to its assets, realizing such strategic imperatives as improved reliability of the distribution system and reducing costs. The details of this systematic approach are documented in the following sections.

Inspections and Condition Assessments

The Minimum Inspection Requirements of the OEB's DSC outline the minimum inspection standards and intervals required. Specifically, Table C-1 identifies the maximum intervals, in years, for visual patrols, which for most urban facilities is 3 years, rural facilities is 6 years and stations is 1 month, 6 months, 1 year or 3 years. A definition of Patrol Inspection is also included within the requirements document.

In addition, WNH has grid connected Transformer Stations which have inspection standards identified in the OEB Transmission Code.

WNH's distribution system is divided into one urban region, serving the City of Waterloo, and two rural regions, serving the Township of Wellesley and the Township of Woolwich, as illustrated in Figure 1. These regions form the basis for implementation of systematic and routine visual patrols for compliance with the OEB inspection requirements, as a minimum. The visual patrols of the major distribution facilities, noted below, are comprehensive and the level of detail is beyond the Patrol Inspection definition. In addition to fulfilling the requirements, the inspections allow for identification and documentation of condition-related deficiencies, with subsequent analysis to support maintenance and capital expenditures concerning various assets such as transformers, stations, switching cubicles, poles/supports/attachments, etc.

Overhead Systems

General Patrol & Inspection

WNH currently inspects the overhead distribution system in each region, completing approximately one-third of the urban region and one-sixth of rural regions on an annual basis, in accordance with Appendix C 'Minimum Inspection Requirements' of the DSC. The visual patrol serves as a condition-based assessment of overhead assets, including poles and their supports and attachments, pole-mount distribution transformers, switches and other protective devices, conductor, grounding and surrounding vegetation. The inspection further serves to confirm the existence of other assets on the overhead distribution system. A map of the region subject to inspection is provided to the Power Line Maintainer (PLM) or qualified PLM contractor for identification of assets during the visual patrol. Within the

inspection, PLMs identify deficiencies or concerns regarding the condition of an asset. Table 1 presents conventional deficiencies, characteristic of each asset, which may be routinely identified during the visual patrol.

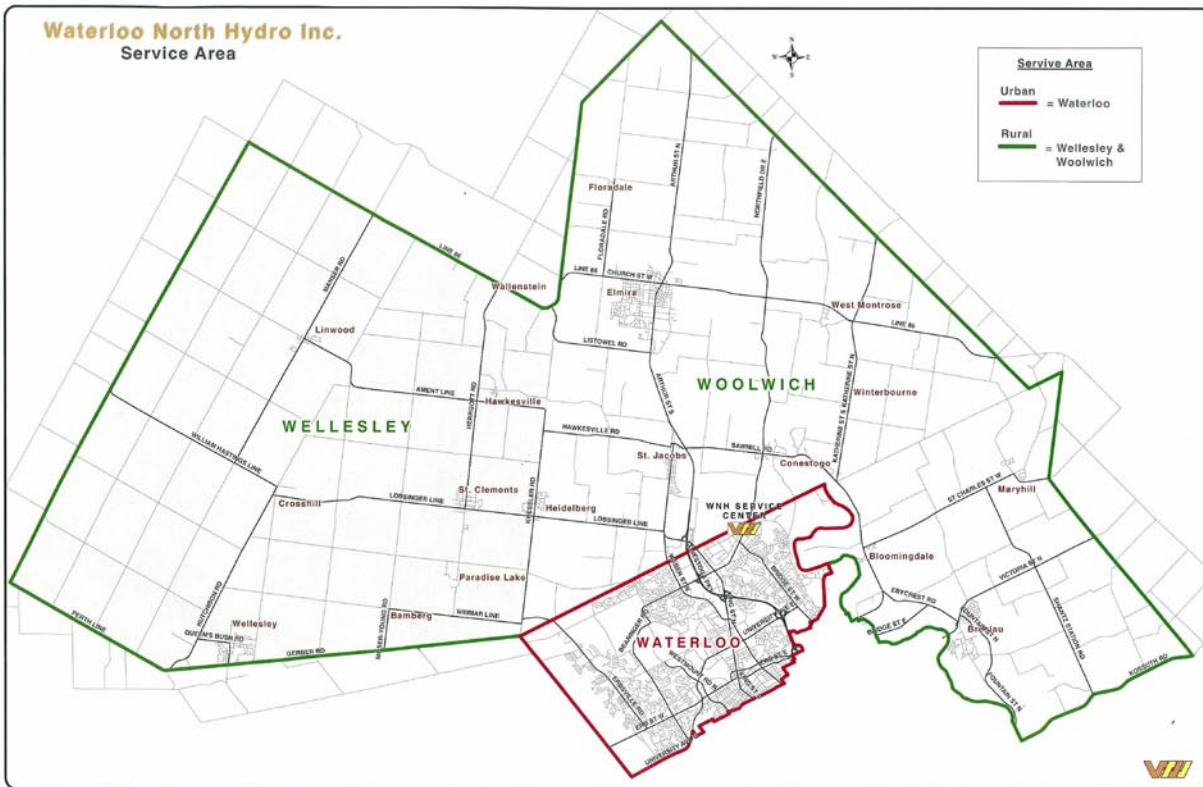


Figure 1 – WNH Service Area

ASSET	CONVENTIONAL DEFICIENCIES
Pole	Rotting, cracked, feathering, insect damage, leaning
Cross Arm	Rotting, twisted
Insulator	Flashed, broken, loose/tipped, down
Arrester	Blown, flashed
Switch	Loose, flashed, old
Grounding	Not connected, exposed ground rod
Guying	Loose, broken, damaged, anchor pulled, insulator broken
Guy Guard	Missing, cracked
Conductor	Frayed, broken, old, tie wire broken
Cable Guard	Loose, exposed conductor
Transformer	Rusted, leaking
Vegetation	Overgrown, interference

Table 1: Overhead distribution system assets and conventional deficiencies associated with each

All deficiencies are documented with a location and description; also noted is the overall condition of each asset, follow-up action (for example refurbishment, replacement or further testing) required to address the deficiency, the inspector and date of inspection.

During the inspection a hazard level is also assigned to the identified deficiency and may be indicative of the extent of the deficiency and response time. Deficiencies are categorized as one of 'none', 'low', 'medium', 'high' or 'ASAP' and addressed through preventative maintenance. Completed assessments are submitted to the Line Superintendent and data is compiled for subsequent review and analysis. Additionally, inspection data is archived within inspection databases for general documentation and reporting purposes.

Crossings

Inspection and condition assessment of all expressway, railway and river crossings is performed annually by WNH PLMs. Inspections are initiated by the Line Superintendent who provides a map of each crossing to be inspected within WNH's service area. Also provided is the 'Crossing Inspections' reporting form; this form allows for documentation of the crossing location, attributes of the pole(s), guys/anchors, insulators and cross arms, as well as the condition of each.

Provided deficiencies have not been identified during the inspection, the PLM expressly documents no such findings. Otherwise, any deficiencies, including evidence of tracking or lightning strikes, related to the attributes noted above are thoroughly documented. Furthermore, critical deficiencies presenting a risk to safety or reliability are reported immediately and addressed through preventative maintenance as described in 'Maintenance of Overhead Systems'. Completed reporting forms are returned to the Line Superintendent following completion of the inspection and condition assessment.

Parks, Playgrounds & Schoolyards

Prior to 2009 inspections were irregular in their frequency and documentation. Since then inspection of parks, playground and schoolyards is performed annually and includes identification of visible hazards such as broken ground wire, missing guy guards or inadequate signage on pad-mount transformers. Such deficiencies are documented and remediated at the time of inspection, where materials are available. Those deficiencies for which corrective action could not be immediately performed are also documented for review and prioritization by the Line Superintendent.

Capacitors

Capacitor banks are currently visually inspected on an annual basis by WNH's PLMs. However, WNH's Line Superintendent has indicated that the frequency will be increased to bi-annually to ensure adequate distribution system performance, particularly for large reactive loads. Within the visual patrol, capacitors are inspected primarily for condition and operation of fused switches and hot-line clamps. All deficiencies and corrective action performed (typically concurrent with inspections) are documented and subsequently reviewed by the Line Superintendent.

Load-Break Switches

In 2006 WNH's Load Break maintenance changed from being reactive to planned. In 2006 and 2007 WNH engaged a contractor to perform planned inspections of all load-break switches within the visual patrol of the overhead system to establish a defined cycle for future switch inspections and maintenance. Since then, all load-break switches on the WNH distribution system are inspected annually by PLMs. Within the inspection, PLMs identify switch deficiencies, but also identify the presence of porcelain insulators, as WNH has initiated a program for replacement of porcelain insulators with those of polymer composition.

All deficiencies identified during the inspection are documented and prioritized. Those deficiencies presenting risk to safety or reliability, or those affecting operations, are deemed highest priority and therefore categorized as critical; such deficiencies are also immediately reported to the Line Superintendent for corrective action.

Underground Systems

The underground distribution system spans WNH's three geographic distribution service areas, of which one is urban and two are rural. Patrols are organized by geographic zones such that one-third of the urban system and one-sixth of the rural system is scheduled for completion on an annual basis. The patrol serves as a visual inspection 'to identify obvious structural problems and hazards'¹ and to assess the condition of major distribution system assets. On the underground distribution system, these assets include distribution transformers, switching cubicles, vault rooms and vegetation surrounding these assets.

Distribution Transformers

WNH's underground distribution system incorporates numerous distribution transformers, comprised primarily of pad-mounts, but also includes a small population of submersibles. The inspection frequency of these transformers is derived from Appendix C of the DSC whereby approximately one-third of urban-positioned and one-sixth of rural-positioned transformers are scheduled to be inspected annually on a three and six year cyclical basis, respectively. Although the frequency of inspection of rural transformers has not been strictly adhered to in the past, WNH intends on inspecting these transformers in 2010, thereby allowing for a baseline schedule to be established.

In addition to the inspection frequency, WNH's condition assessment is also based on Appendix C, as reflected in the reporting form, 'Inspection of Underground Transformer and Switching Units'. This form provides a guideline for the condition assessment (for which the structure is opened) and allows for documentation of deficiencies (or lack thereof) concerning the physical condition, placement on pad, locks and locking mechanisms, grading, access changes, phasing indicators, nomenclature and internal/external apparatus, such as a cracked elbow connectors.

As with inspection of the overhead system, critical deficiencies identified during the inspection are documented, immediately reported and addressed through maintenance as described in the section 'Maintenance of Underground Systems'. Completed assessment reports, identifying both critical and non-critical deficiencies, are returned to a Line Foreman for review and scheduling of follow-up action. Assessment reports are also archived within the appropriate inspections database.

Switching Cubicles

The inspection and condition assessment of WNH's switching cubicles is performed on a three and six-year cyclical basis in urban and rural regions, respectively. As with distribution transformers, the condition assessment is based on the DSC's Minimum Inspection Requirements for switching kiosks and includes, at a minimum, identification of deficiencies concerning paint, locking mechanisms, accessibility and the structure. The full list of deficiencies for which WNH, and more generally LDCs, should be aware is available in Appendix C of the DSC. Following the general practice of deficiency identification, all deficiencies are documented and archived within the appropriate inspections database for review and scheduling of corrective action. Furthermore, critical deficiencies are both immediately reported and addressed through preventative maintenance.

Vault Rooms

Inspection of vault rooms occurs on an annual basis and in conjunction with IR thermography. Deficiencies, typically concerning accessibility, are identified, documented and submitted to the appropriate Foreman for subsequent remediation and to the GIS group for archival of data within the inspections database. It should also be noted that, while infrequent, any critical deficiencies are immediately reported to coordinate remediation as soon as possible.

¹ OEB, Distribution System Code Appendix C, 'Minimum Inspection Requirements', Section C.1, page 1

Substations

WNH owns and operates three (3) transmission grid connected Transformer Stations (TS's) operating at 230kV/115kV – 27.6kV/13.8kV. In addition WNH receives power from one (1) Hydro One 115/27.6kV TS, one (1) 44kV feeder supplied by Hydro One, and two (2) 27.6kV feeders supplied by Kitchener Wilmot Hydro and Cambridge North Dumfries Hydro. WNH also owns and operates two (2) 44kV/8kV rural Distribution Stations (DS's), seven (7) rural 27.6/8kV DS's and eight (8) 27.6kV & 13.8/4kV urban Municipal Stations (MS's).

As outlined in WNH's voltage conversion plans, there is a long-term plan to convert the 4 kV systems to higher distribution voltages to improve efficiency, replace aging infrastructure and increase circuit capacity on existing overhead lines. Only seven (7) of sixteen (16) 4kV MSs will be in service by year-end, with the remaining planned for decommissioning over the next 5 years. The 8 kV distribution system is undergoing gradual voltage conversion to 27.6kV through system expansion and rebuilding of infrastructure and is likely to remain in service for another 10-20 years.

As with the overhead and underground distribution system, WNH performs comprehensive station inspections and condition assessments as described below. WNH prepares annual detailed reports of scheduled and completed station patrols for each of its 'Urban Outdoor', 'Urban Enclosed' and 'Rural Outdoor' stations, as well as comments indicating whether compliance was achieved in that year. In addition, WNH complies with grid connected inspection and reverification standards identified in the OEB Transmission Code.

Transformer Stations

WNH incorporates the requirements of the OEB's DSC, Transmission Code and industry best practices as the basis for its TS inspection and maintenance program. Under the direction of the Protection & Control (P & C) Foreman, TS inspections incorporating several activities on a weekly, monthly and yearly basis are subsequently performed by the Substation Maintenance Electrician or the P & C Technologist. Table 2 outlines the inspection frequency at each of the three transformer stations.

TRANSFORMER STATION ITEM	FREQUENCY
Transformer Equipment	Weekly
Tap Changers	Weekly
Battery Chargers	Weekly
Miscellaneous (egg. yard, lighting, alarms)	Weekly
Station Equipment (e.g. transformer, switchgear, reclosers, fans, fencing)	Monthly
Transformer Oil Testing	Yearly
Transformer cooling fan and pump vibration analysis	Yearly
Infrared Thermography	Yearly

Table 2: TS inspection program and frequency

To facilitate inspections, guidelines have been developed by the Stations Department and elaborate on the monthly station equipment inspection and condition assessment, providing specific items to be verified. These forms are based, in part, on the OEB, Independent Electricity System Operator (IESO) guidelines, but further incorporate items specific to these stations. During the inspection, deficiencies observed are noted on the corresponding inspection form. Documented deficiencies are reviewed by the P & C Foreman and further prioritized whereby those impacting health and safety or the reliability of the system are deemed critical and subsequently scheduled for corrective action. Records of inspection and test dates are maintained electronically by the P & C Foreman while reporting forms are largely paper-based.

Distribution and Municipal Stations

Inspections of Distribution and Municipal Stations occur on a monthly or yearly basis, as scheduled by the P & C Foreman, and incorporate several activities as outlined in Table 3. As with inspections of Transformer Stations, guidelines have been developed and are based on the DSC Minimum Inspection Guidelines and industry best practices.

DISTRIBUTION AND/OR MUNICIPAL STATION ITEM	FREQUENCY
Reclosers	Monthly
Transformer Equipment	Monthly
Station Equipment (e.g. switchgear, capacitor bank, fencing, lighting, radio/RTU)	Monthly
Transformer Oil Testing	Yearly
Infrared Thermography	Yearly

Table 3: DS/MS inspection program and frequency

Deficiencies that have been identified, either pertaining to the above items or otherwise, are noted on the appropriate station deficiency reporting form and assigned a priority level, indicative of response time for remediation. These deficiencies are reviewed by the P & C Foreman, compiled into a single deficiency list and prioritized as critical or non-critical, based on impact to health/safety, system reliability or impact to equipment. Similar to documentation for TSs, records of MS/DS inspection and test dates are maintained electronically by the P & C Foreman while reporting forms are largely paper-based.

Maintenance

WNH employs three maintenance strategies:

Condition-based maintenance (CBM) – often defined as predictive maintenance, is a maintenance technique that involves testing and monitoring in order to predict end of life or failure of the asset. This technique is more often used with large value assets such as those in the stations area.

Preventative maintenance (PM) – is a proactive, time-based or scheduled-based approach for maintenance of assets before equipment or system failures occur; preventative maintenance programs may also be extended to include remediation of deficiencies identified during routine inspections and visual patrols.

Preventative maintenance generally comprises more structured and comprehensive routine maintenance activities to extend the service life of an asset. The frequency and extent to which preventative maintenance is performed varies, but generally considers available and emerging technology, best practices, manufacturer specifications, relative impact to operational safety and system reliability. Furthermore, some preventative maintenance activities (for example IR thermography) serve as a secondary visual inspection whereby the condition of an asset, or neighbouring asset, on which the maintenance activity is performed, is noted.

Reactive maintenance (RM) – often defined as ‘breakdown’ or ‘run-to-failure’ maintenance, provides for unscheduled remediation of deficiencies after a system or asset failure.

Maintenance of Overhead Systems

General Patrol & Inspection

Generally, ‘high’ hazard level deficiencies discovered during regularly scheduled inspections are corrected to remediate the deficiency either at the time of inspection, as soon as possible following inspection. If further corrective action is required, or cannot be performed concurrently with the inspection, the Line Superintendent is immediately notified to allow for the required lead-time to procure materials or coordinate with third parties. Additionally, corrective action to remediate minor or ‘low’ hazard level deficiencies may also be performed during the visual patrol. This may include replacement of broken guy guards or phase markers, for example.

Remaining deficiencies, that is those categorized as ‘low’ or ‘medium’ hazard levels, are reviewed by the Line Superintendent and prioritized for corrective action within two to three months or within the year, respectively, ensuring that ‘appropriate follow up and corrective action is taken regarding problems identified during the visual patrol’². The inspections database is subsequently updated to reflect remediation.

All maintenance performed is documented for review and analysis by the Line Superintendent and for archival within the inspections database. Through analysis of maintenance data (further elaborated below), recurring deficiencies may be identified and channeled into a capital program for asset replacement.

² OEB, Distribution System Code Appendix C, ‘Minimum Inspection Requirements’, Section C.1, page 1

Crossings

Dependent on the nature of the crossing-related deficiencies identified during inspections, corrective action to remediate the deficiency may occur either at the time of inspection, as soon as possible following inspection or within one year of the inspection.

For non-critical and critical deficiencies relating to minor equipment, such as a loose guy or cracked insulator, remediation is generally performed at the time of inspection and includes either rehabilitation or like-for-like replacement. The maintenance performed is subsequently documented on the reporting form.

Non-critical deficiencies of major equipment, for example a weathered pole, are documented on the reporting form for review by the Line Superintendent. Subsequently, the Line Superintendent consults with Engineering to determine if a rebuild of the crossing is scheduled within a year, in which case the deficiency is temporarily secured until such time. If a rebuild is not scheduled within this time frame, then remediation is scheduled and performed within one year. The temporary and/or permanent maintenance performed to address the deficiency is documented on the reporting form. It should also be noted that rebuilds are designed to the most recent and applicable design standards.

Critical deficiencies affecting either major or non-major equipment are documented and reported immediately during the inspection and condition-assessment of the crossing. Remediation, typically a rebuild, is planned and scheduled as soon as possible, allowing for coordination and approval by the appropriate authorities, such as the Ministry of Transportation. WNH ensures that the rebuild is designed to the most recent and applicable design standards. Alternatively, and if time does not permit a rebuild or governing body approval, like-for-like replacement may be performed at the time of inspection. Again, the maintenance performed to address the deficiency is documented on the reporting form.

Parks, Playgrounds & Schoolyards

Both critical and non-critical deficiencies may be remediated during the visual patrol, provided materials are on-hand and coordination is not required. For those remediated deficiencies, corrective action is documented to allow for subsequent review and/or reporting. Remaining deficiencies are also documented, reviewed by the Line Superintendent and prioritized for corrective action. Critical deficiencies are reported immediately and typically remediated within one week, allowing for coordination with appropriate parties; non-critical deficiencies may be remediated within six to eight months, allowing for coordination with other maintenance programs.

Load-Break Switches

Prior to 2009, only annual preventative maintenance of load break switches was completed as a means to preserve the equipment and mitigate risk of failure. Formerly completed by a qualified contractor, preventative maintenance included replacement of nomenclature, phase markers, arresters, porcelain insulators with composite insulators and replacement or repair of switch components; also included were cleaning, lubrication and testing of switching operation. All preventative maintenance activities were documented on the appropriate reporting form, as well as surrounding or non-related deficiencies which required corrective action.

Preventative maintenance to address critical deficiencies is typically performed within 24 hours of the inspection and entails either refurbishment or complete replacement of the switch, depending on the nature of the deficiency. Refurbishment is the preferred methodology where peripheral or secondary components to the switch are critically deficient, for example a corroded connector with the potential to burn the line. In the event of extensive damage to a switch, replacement is the preferred methodology as an informal cost/benefit analysis has revealed this to be the most cost-effective approach with respect to load-break switches.

Furthermore, replacement is generally a more proactive approach in that it is constructed to the most recent design standard, and considers replacement of the pole on which the switch is mounted or replacement of porcelain with polymer insulators, as applicable. All load-break switches that have been refurbished or replaced during maintenance are lubricated and operated to ensure satisfactory performance. Following inspection of switches, all non-critical deficiencies are reviewed by the Line Superintendent and scheduled for refurbishment within approximately six months.

Through an informal cost/benefit analysis, WNH has evaluated the benefits of performing maintenance to extend the service life versus a complete replacement of the switch, where the latter was realized to be the most cost-effective and provides the greatest reliability to operations. As such, WNH has implemented a program to annually replace a defined number of the worst performing load-break switches, as realized through inspection and maintenance activities.

Vegetation Management

Vegetation management, or tree trimming, is a preventative maintenance program scheduled on a 3- and 5-year cycle, where one of each of three urban zones and five rural zones of the distribution system is completed annually. This work represents approximately 80 % of the annual vegetation management program. This activity is executed according to the previously established Ontario Hydro guidelines and completed by in-house utility arborists and qualified contractors that have specialized knowledge of growth rates of various vegetation. As such, arborists may either trim more or less growth than as outlined by the guidelines to account for varying growth rates and in consideration of the line clearing cycle.

Approximately 20 % of the annual program is comprised of reactive line clearing work to trim or remove trees in proximity to power lines, in response to storms, customer requests or as identified by WNH staff observations. Such requests are documented via customer request sheets or work orders and prioritized following an inspection by the utility's lead arborist. Vegetation that has caused an outage is deemed critical and addressed immediately whereas tree growth with the potential to cause an outage is addressed within one week. WNH takes additional preventative maintenance initiatives in their vegetation management program including tree-trimming during the implementation of capital build/rebuild projects.

Infrared Thermography

Infrared (IR) thermography is completed annually on the overhead distribution system by a qualified contractor. This non-destructive, non-invasive condition assessment of three-phase and single-phase conductors and primary and secondary connections and tie-points at distribution equipment allows for deficiencies (thermal anomalies) to be identified. Throughout this process, severe thermal anomalies, representing dangerous overheating with potential to disrupt supply or damage equipment, are reported on a daily basis to the Line Superintendent. Critical deficiencies are generally remediated within 24 to 48 hours, allowing for customer and/or outage coordination where applicable.

A summary report, following completion of IR thermography, is prepared and outlines fault locations, severity of the fault (prioritized based on thermal anomaly) and notes and recommendations. In addition to the severe thermal anomalies previously identified, the report also identifies intermediate and minor hot spots. Maintenance to address the faults, as noted in the report, is subsequently prioritized and scheduled based on fault severity whereby intermediate anomalies are first addressed, followed by minor anomalies. However, where deficiencies of differing severities may be remediated together, for example, when in close proximity to one another, corrective action will be performed simultaneously. Generally, all anomalies are remediated within the calendar year in which they were first identified. The Line Foreman subsequently documents the date of remediation on the original summary report.

Insulator Washing

Insulator washing is typically performed annually on 27.6kV and 44kV insulators in areas known to have high salt contamination, for example at expressway crossings, as identified through previous washings and general reporting. A reduction in the frequency in which insulator washing is performed may be prompted through environmental factors, specifically following periods of heavy rain. There is no benchmark for total accumulation of precipitation required; however, in particularly rainy seasons insulator washing may be deferred to the subsequent year.

Insulator washing is performed by a qualified contractor who, during the washing, will also report general insulator concerns such as broken or damaged insulators. Because of the contractor's experience and qualifications, he/she is able to prioritize deficiencies whereby critical concerns, such as those resulting in an outage, are immediately reported to control room and internally remediated within 24 hours. Less critical damage is reported to the Line Superintendent and remediated within one week.

Pole Testing

WNH has a Pole Testing Program in place whereby currently approximately 2,400 poles are tested annually. Poles chosen for testing are determined by age, risk to public safety and potential impact on system reliability. Results are provided in an electronic database, analyzed and determinations made as to action to be taken. Poles with remaining fibre strength less than 50% are scheduled for immediate replacement. Poles with remaining fibre strength between 50% and 67 % are scheduled to be replaced in 1 - 3 years. Poles with remaining fibre strength greater than 67 % are scheduled to be retested in 5 years. During the testing procedure a detailed visual inspection is also completed. Serious observed defects may require replacement of the pole irrespective of the fibre testing results.

Along with the inspection and testing, internal and external preservative treatment as required is applied to prolong the life of existing poles that are not identified for replacement. This pole testing program is in addition to the general patrol and inspection of the overhead system previously noted. Inspection and testing data is archived in WNH's GIS database for analysis and development of future inspection programs.

Maintenance of Underground Systems

Distribution Transformers

While maintenance is performed on pad-mount and submersible distribution transformers during inspections, it is generally limited to renumbering elbow tags for visibility, installing new exterior or interior nomenclature where absent or remediation of critical deficiencies, provided this may be done at the time. Where such remediation of critical deficiencies cannot be done, due to outage coordination requirements with a customer for example, corrective action is scheduled for the earliest opportunity; until then, the distribution transformer is secured.

Outstanding remediation of non-critical deficiencies is prioritized by a Line Foreman and scheduled accordingly. Corrective action is generally performed within six to eight months from the initial condition assessment, barring access changes/vegetation concerns which are addressed within one year, following customer notification and response. All corrective action is documented and archived within the inspections database. Through analysis of maintenance data, recurring deficiencies may be identified and channeled into a capital program, as required, for asset replacement.

Switching Cubicles

Remediation of critical deficiencies may be performed at the time of inspection; this, however, is limited to rehabilitation activities and temporarily securing lids with broken hinges. Although temporary, such remediation/rehabilitation provides adequate safety and/or reliability until replacement of the unit can be coordinated, generally within one or two days. Deficiencies of a lower priority, as identified during the inspection and condition assessment, are documented and further archived within the inspections database. A report of outstanding deficiencies is subsequently prepared whereby deficiencies are categorized according to the corrective action required and channeled into maintenance programs for rehabilitation, such as painting, or into a capital program for replacement.

Vault Rooms

Deficiencies specific to vault rooms are generally limited. If identified however, deficiencies are documented and reported to a Line Foreman for remediation, typically as soon as possible (allowing for coordination/outage scheduling) or, for lower priority concerns, to coincide with planned maintenance.

Infrared Thermography

IR thermography on the underground distribution system is completed annually in conjunction with the overhead system and includes identification of thermal anomalies at transformer vault rooms, PMH pad-mounted, live-front (switching cubicle) units and termination points between the overhead and underground system.

As with the IR thermography of the overhead system, severe deficiencies presenting an immediate safety or reliability concern are reported on a daily basis to the Line Superintendent and remediated within 24 to 48 hours, or at the earliest opportune time, allowing for outage coordination where required. Following a review of the summary report outlining IR thermography activities and thermal anomalies on the overhead and underground distribution system, corrective action to remediate intermediate and minor deficiencies is prioritized and scheduled based on fault severity. Again, anomalies are remediated within the calendar year in which they were first identified and the summary report is updated to reflect such corrective action.

Dry-Ice Cleaning

Dry ice cleaning of live, pad-mounted switchgear (PMH units) is generally considered to be a good utility practice among many electrical utilities. Generally, dry ice cleaning is performed on units with exposure to dust and road salt contamination. Such contamination may contribute to eventual dielectric breakdown, causing tracking, short circuit and damage to the individual unit, potentially causing an outage and reducing system reliability³. WNH has realized the benefits of this pre-emptive practice, including prolonged service life, improved system reliability and operating safety, as it has engaged a qualified contractor to perform annual dry-ice cleaning of live, pad-mounted switchgear (PMH units).

Other rehabilitation methods may be employed by WNH between dry-ice cleanings where higher contamination levels are observed; one such method is Isopropanol cleaning.

Subsequent to dry-ice cleaning, a report is prepared by the contractor and provided to WNH summarizing cleaning activities, contamination levels and identifying deficiencies to be addressed. Urgent deficiencies, such as those affecting safety or reliability, are immediately addressed; all other deficiencies are reviewed by the Line Superintendent and scheduled by a Line Foreman for remediation within one year.

Corona Testing

Corona testing allows for a condition assessment of underground distribution system assets. The presence of corona discharge may be indicative of deficiencies not detectable through visual patrols or IR

³ Lindsay, Kristen: "Energized CO2 Dry Ice Blast Cleaning Firmly Grounded in the Canadian Electrical Industry", The Electricity Forum, 1999.

thermography, such as environmental contamination or damaged insulators, leading to insulation deterioration, shortened service life of equipment and ultimately reduced system reliability⁴.

WNH has carried out Corona testing on all PMH pad-mounted switchgear units owned by WNH. The units which tested negatively are actively being replaced with solid dielectric switchgear. Several PMH units will be refurbished and substituted for other units in service showing signs of Corona. The remainder, which shows minimal readings of Corona, will be monitored annually and maintained as necessary.

Maintenance of Substations

Deficiencies that have been identified during the inspection and condition assessment of stations are documented and categorized as critical or non-critical, whereby the former impact health/safety and reliability, and the latter have the potential to impact these items or the equipment itself. Critical or non-critical minor deficiencies may be remediated during the inspection, provided materials are on-hand or as warranted. Those not remediated at the time are subsequently reviewed by the P&C Foreman and compiled into a single deficiency list. Critical deficiencies are addressed at the earliest opportunity, accounting for material lead-times or outage coordination. Conversely, non-critical deficiencies are addressed within one year or coordinated with preventative maintenance activities for the station to mitigate outage time, if required. Following remediation, specific information about corrective action taken and the completion date is documented.

Preventative maintenance activities, comprise inspection, testing and remediation, is generally performed in like-for-like circumstances. The decision of whether corrective action is best exercised through maintenance or capital replacement is made by the Stations Foreman or Vice President, depending on spending authority and with input from Engineering department. The majority of results and actions are recorded in electronic format as technicians utilize laptops during preventative maintenance.

WNH has established comprehensive testing and condition-based maintenance programs that provide the basis for condition assessment and remediation, with respect to Transformer Stations, Distribution Stations and/or Municipal Stations. In addition to satisfying the reporting requirements of the OEB's DSC, and the application of industry best practices, the IESO mandates additional requirements for grid connected Transformer Stations that are met by the LDC.

⁴ Mayerhoff, Evan: "Corona and its Effects", High Voltage Connection, Inc., 2007.

MAINTENANCE COMPONENT	1 YEAR INTERVAL	2 YEAR INTERVAL	4 YEAR INTERVAL	5 YEAR INTERVAL	10 YEAR INTERVAL
<i>MS-DS Maintenance</i>					
Transformers & Line Switches				X	
Bus					X
Station 24/48 VDC	X				
Capacitor Banks & Switches				X	
SCADA/Local Alarms		X			
Feeders				X	
Transformer Oil Testing	X				
IR Thermography	X				
Painting					X
<i>TS Maintenance</i>					
Transformer & Line Switches			X		
Vibration Analysis (Tx oil cooling fans and pumps)	X				
Bus				X	
Transformer/Line/CBF		X			
Bus Protections		X			
Bank and Tie Breakers		X			
Feeders (breakers/cables/protections)			X		
Battery Banks	X				
Sustained Alarms		X			
Full SCADA Check		X			
IR Thermography	X				
Transformer Oil Testing	X				
Painting					X

Table 4: Condition-based maintenance activities and interval

These programs provide for continuous system improvement and performance reliability, ensuring long term capacity, supply availability/reliability to meet customer demands. These programs further contribute to the effective and successful management of these assets.

WNH maintains electronic records of past maintenance activities and future condition-based maintenance intervals for specific equipment at each of the Transformer Stations, Distribution Stations and Municipal Stations. Although WNH follows IESO mandated fixed maintenance frequencies with Transformer Station assets, the LDC also utilizes a predictive maintenance approach based on this testing and data analysis, WNH's maintenance practices in this area are also founded in industry best practices, consultation with neighbouring utilities and manufacturers. Table 4 above outlines some components and intervals of planned maintenance at TSs, DSs and MSs.

Infrared Thermography

Infrared (IR) thermography of all stations is completed annually and coordinated with thermography of the overhead and underground distribution system, following the IR processes previously described for preventative maintenance on the overhead and underground system. Following the IR thermography inspection, a report is produced outlining inspection activities, thermal anomalies and recommendations. The report is reviewed by the P & C Foreman and recommendations may be implemented for remediation of anomalies or, if more extensive, coordinated with Engineering.

Vegetation Management

Vegetation control around transformer stations, rural distribution stations and transformer enclosures is carried out annually under the direction of the P&C Foreman by WNH Stations staff or a qualified contractor. The main activities consist of the control of vegetation in the station granular material to reduce step potential hazards, the prevention of climbing access into station yards and the creation of clear sight lines along station fence lines for security reasons.

Insulator Washing

Insulator washing is typically performed on selected 27.6kV and 44kV station structures in areas known to have high salt contamination (mostly from roadway spray), as identified through previous inspections. The work is coordinated with the annual Overhead Insulator Washing program.

Vibration Monitoring

In addition to regular visual inspections, WNH performs annual vibration analysis to assess the condition of oil cooling fans and oil circulation pumps associated with grid connected transformers. Vibration analysis aids in the prediction of impending failures that can directly lead to derating of the transformers. WNH contacts this specialized work with a third party. A report is produced outlining anomalies and recommendations. The report is reviewed by the P & C Foreman and recommendations may be implemented for remediation of anomalies or, if more extensive, coordinated with Engineering.

Transformer Oil Testing

Transformer Oil condition and Dissolved Gas Analysis is performed on all power substation transformers on an annual basis. Oil sampling is coordinated by the Protection and Control Foreman using internal staff. WNH contracts the specialized work of oil testing and analysis with a third party. A report is produced outlining anomalies and recommendations. The VP of Engineering & Station reviews the report and provides direction for remediation of anomalies.

Documentation & Data Analysis

WNH's distribution system, serving the City of Waterloo, the Township of Woolwich and the Township of Wellesley, is divided into urban and rural regions, whereby the overhead and underground distribution system and substations in each region is systematically and routinely inspected and maintained by qualified employees and contractors. The following serves to describe the documentation, reporting and data analysis of findings within the inspection and maintenance programs.

Documentation

Document Management

Data gathering tools for inspection and maintenance activities are largely paper-based, whereby inspection forms, maintenance reports and work orders for internal use are issued and submitted on paper. However, this documentation is organized and archived in an electronic inspections database, residing within the Geographic Information System (GIS) and other electronic databases. Although termed 'inspections database', the database, contains records from both inspection and maintenance programs on the overhead and underground distribution system including for example, crossing inspections, park and school inspections, pole testing and dry-ice cleaning. More specifically, the database identifies, at a minimum, the date of inspection and inspection notes; the latter is inclusive of any deficiencies or remediation that may have been performed.

Although individual inspection and deficiency reporting forms for MSs, DSs and TSs are largely paper-based, the inspection and test dates are maintained electronically in various spreadsheets by the P & C Foreman. As such, inspection and maintenance intervals may be determined and scheduled electronically. Also maintained electronically are data and event logs generated by WNH's Supervisory Control and Data Acquisition (SCADA) system, as well as IR thermography reports, and inspection/deficiency reports for the overhead distribution system, formerly performed by contractors and residing within an MS Access database.

Reporting

Data from the inspections database may be compiled for various reports but primarily concern deficiency and maintenance reporting for the overhead and underground distribution system. That is, reports may be produced identifying asset-related deficiencies realized through inspections or remedied deficiencies. As this data is maintained electronically within the GIS, more specific reports may be produced based on individual assets, the nature of the deficiency or impending maintenance, all of which contribute to intelligence in scheduling and reporting. As an example, a query may be performed to identify all switching cubicles inspected in 2009 or transformers impending maintenance, specifically painting. Spatial queries and reporting may also be performed, allowing for analysis of assets and/or deficiencies with respect to geographic location and in anticipation of mitigating such deficiencies or for improved maintenance of assets.

Various internal reports are prepared within WNH and utilize data from inspection and maintenance records. One such example is a monthly report produced by a Line Foreman summarizing various activities, such as replacement or rehabilitation of deficient assets, and identifying the work order number corresponding to the OEB's USoA. Such reports are reviewed by WNH management for information purposes and/or analytical purposes. In addition to this report, a monthly technical report is prepared by Engineering and Operations for presentation to the Executive and WNH's Board of Directors. This report provides an overview of various activities relevant to the organization, specifically: Staff Complement; Health, Safety and Environment; Operations Services; Operations Line Department; System Operating Control Centre; and Engineering & Stations.

Of significance to asset management and the operation of the distribution system are the Operations, Engineering and Stations components of the technical report. Operations Services summarizes new, changed or disconnected services, capital initiatives such as rebuilds, extensions or system upgrades and reactive and preventative maintenance programs. The Engineering & Stations component of the report summarizes station initiatives, distribution projects, overhead & underground design and construction activities, smart meter progress and large service projects. Also included within the technical report is detailed outage performance data including WNH customer minutes of outage (excluding loss of supply) and total customer minutes of outage (including loss of supply). Data is presented in tabular format with the twelve month rolling average and minutes per customer month. These are also illustrated in graphical format over a two year period as monthly unplanned outage and twelve month rolling outage graphs. Outage performance data further includes an overview of individual system events contributing to the tabular and graphical data, for example electrical storms or animal interference. While data for the technical report is currently compiled manually, WNH is intending to establish a system for capturing data electronically through development of the GIS, smart meters and Operational Data Store (ODS). It is intended that the resulting system will produce more consistent and reliable data to allow for a robust measure and formal analysis of system reliability with respect to event data and inspection and maintenance activities.

Data Analysis

Inspection and maintenance records, reports and internal meetings all reflect the status of the distribution system, facilitating data analysis and contributing to WNH's comprehensive knowledge of its assets and operation of the distribution system. Data analysis principally occurs as the aforementioned records or reports are received; that is, inspection, deficiency and maintenance documentation is reviewed and informally analyzed for trends, quality and impact on reliability. A root-cause analysis may also be performed for habitual equipment defects or failures, with solutions addressed through capital expenditures for replacement or revised maintenance activities. For example, trending and analysis revealed particular areas of the distribution system were exposed to higher salt contamination; the subsequent solution implemented was a change in maintenance frequency for insulators, specifically increasing insulator washing activities to minimize flashovers or outages and ultimately improving reliability. Through similar analysis, WNH recognized less insulator washing is required in seasons of heavy precipitation. On the underground distribution system, a review of IR thermography reports revealed recurrent thermal anomalies on live-front, pad-mounted switchgear. Subsequent root-cause analysis and cost-benefit analysis was performed. WNH made a strategic decision to replace these units with dead-front units to minimize recurrence of deficiencies, provide for continuous improvement to system reliability and operational safety of its system, and with the added benefit of eliminating dry-ice cleaning of the units. The capital replacement program includes replacement of approximately two units per year over a four to five year period. Similarly, analysis of thermal anomalies (as identified through IR thermography of the overhead distribution system) identified many cracked porcelain insulators. A limited replacement program was subsequently implemented to replace these with polymer insulators during reactive maintenance activities. Once the mitigating measures have proven effective, WNH intends on developing a system-wide replacement program to be implemented over several years.

Items of concern are also generally reviewed and discussed informally between WNH Supervisors and Vice Presidents, as the latter have substantial experience with distribution systems and are formally trained in this area. Although occurring less frequently, such items and analysis may also emerge at the weekly Operations/Engineering meetings.

The systematic approach of inspections, condition and age assessment, data analysis and maintenance allow WNH to identify risk to its assets and consider these risks with respect to capital expenditures for replacement, maintenance expenditures for refurbishment and consequence of failure. This general cost/benefit analysis recognizes the established corporate values and strategic imperatives and provides justification and prioritization for spending.

Innovation & New Technology

The Green Energy and Green Economy Act (GEGEA) offers opportunities for increased innovation and new technologies within the development of a Smart Grid. WNH has strong foundations in its established SCADA, radio and fibre communications and GIS systems. These systems would be leveraged in combined systems with an Operational Data Store and Smart Meter communications to introduce enhancements such as Outage Management Systems (OMS) and the introduction of increased numbers of distributed generators.

Supervisory Control and Data Acquisition (SCADA)

WNH first introduced an Open VMS-based Quindar (Survalent) SCADA system in 1987 for control and telemetering of components of its transformer and distribution stations. Expanded to include a number of switching points on the distribution system, SCADA provides real-time analog and status data. Alarm reporting and events (such as feeder and station values) are logged into a historical data file every 15 minutes; WNH currently has data archived from 2000 and onwards. In addition to data acquisition, the system allows for control of feeder breakers, main and tie breakers, reclosers and tap changers.

The dual-redundant system allows for a seamless transition of data to a back-up system without affecting the continuity of system operation, thus providing a high level of system reliability and availability. The current system is planned for replacement due to obsolescence of hardware and software components.

Distribution Automation

Distribution automation provides for remote monitoring and control of the distribution system through the use of equipment such as automated switches/reclosers. Additionally, distribution automation may significantly improve loss prevention and reliability through improved System Average Interruption Duration Index (SAIDI), System Average Interruption Frequency Index (SAIFI) and Customer Average Interruption Duration Index (CAIDI) values.

While currently operating with manual fault indicators, WNH is investigating fault indicators with communication to allow for the remote interrogation of equipment to determine fault location. WNH currently has four remotely controlled reclosers integrated within its distribution system, with an additional 4 locations planned for installation in 2009-2010. WNH also has a future objective for the installation of an additional two to three automated switches/reclosers per year.

WNH has three (3) transformer stations with full substation automation that includes a substation LAN and modern Intelligent Electronic Devices (IED). There are approximately 600 analog and 600 status points per station transmitted to the SCADA system, allowing Engineering to directly access each IED via Local Area Network connections between the head office and substations. In addition WNH has fifteen (15) MS's & DS's with full SCADA monitoring and control of switching breakers/reclosers.

Geographic Information System (GIS)

First implemented in 2006, WNH's GIS is primarily utilized as a platform for mapping the land base of its distribution service area and WNH-owned or operated assets with respect to this land base. WNH also intends on identifying distributed generation sites and WNH easements. Table 5 below outlines assets currently maintained within the GIS.

Arrestors	Reclosers
Capacitors	Secondary Spider Diagrams
Conductor (Overhead/Underground Primary/Secondary)	Substations
Distribution Transformers	Substation Breakers
Elbows	Substation Buses
Fault Current Indicators	Switches
Meters	Switching Cubicles
Power Transformers	Vaults
Poles	Voltage Regulators

Table 5: WNH-owned assets currently maintained within the GIS

Asset attributes/characteristics relevant to the operation of the distribution system are also maintained within the GIS, serving as a repository for this data. Attributes may include, but are not limited to, object identification number, equipment size/material, voltage, installation date, height, class or phase, depending on applicability to the asset.

Although not fully implemented, WNH is migrating inspection and maintenance data to the GIS. Currently, inspection and maintenance data in the GIS is recorded either manually or electronically and resides in inspection databases within the GIS. Data from the former is obtained via paper maps or reporting forms used to document deficiencies, inspection and maintenance dates. For the latter, WNH has developed a program whereby inspection and maintenance data for pad-mount transformers and switching cubicles is captured electronically through the use of a tablet computer. WNH is expanding this functionality to include inspection and maintenance data of all assets and for electronic scheduling of inspections and maintenance for the overhead and underground distribution system. It is anticipated that the functionality will reduce the effort required, as compared to paper-based inspection/maintenance documents, and further allow for relative ease in retrieving and producing outstanding deficiency or maintenance lists for initiating corrective action.

Engineering Software Tools

WNH maintains a number of engineering software tools used to perform analysis and assist in design and operational decisions. A connectivity model of the entire distribution system is maintained and together are used to

- reduce line losses through optimal capacitor placement
- reduce line voltage problems
- develop optimal system switching configurations
- develop optimal settings for protective devices
- assist with system planning

WNH also intends on improving the efficiency of utilizing these tools by developing the GIS to support the automatic updating of the connectivity model of its distribution system.

Workforce Management System (WMS)

In 2009, WNH first implemented a Workforce Management System (WMS) to efficiently schedule and capture new and replacement meter data in a paperless format. Although initially utilized for smart meter installations, WNH intends on extending the functionality of this electronic handheld system for performing and documenting inspection and maintenance activities, providing broader capabilities than the existing system used for underground applications within the GIS. Furthermore, WNH anticipates use of the WMS to automatically create service reports and work orders (based on inspection findings) and for notification of upcoming inspection and maintenance schedules.

Lastly, it is also intended to utilize the WMS for performing and building intelligence around inspection and maintenance data to allow for subsequent trending and root-cause analysis of asset deficiencies. As with other innovative endeavours, the WMS is regarded as a system that will facilitate the realization of strategic imperatives to improve organizational effectiveness and maintain its commitment to environmental stewardship through paperless record-keeping.

Operational Data Store (ODS)

As with the majority of LDCs, WNH handles vast amounts of data, relevant to the management and operation of its distribution system, within multiple independent systems. These systems include, at a minimum, the following:

- Customer Information System (CIS)
- Supervisory Control and Data Acquisition System (SCADA)
- Geographic Information System (GIS)
- Enterprise Resource Planning System (ERP)
- Workforce Management System (WMS)
- Smart Meter Information System (SMI)

These multiple independent systems, while providing a large volume of varying data, result in a manual information gathering and limited reporting process restricted to the native systems on which the data resides. Following an evaluation of third-party vendor solutions, WNH opted for the in-house development of an Operational Data Store (ODS). A customized system such as this serves as a central repository for operational and financial data from the independent systems and facilitates retrieval of data for analysis and reporting. Figure 2 below is a conceptual illustration of the ODS and its interface to existing or proposed systems.

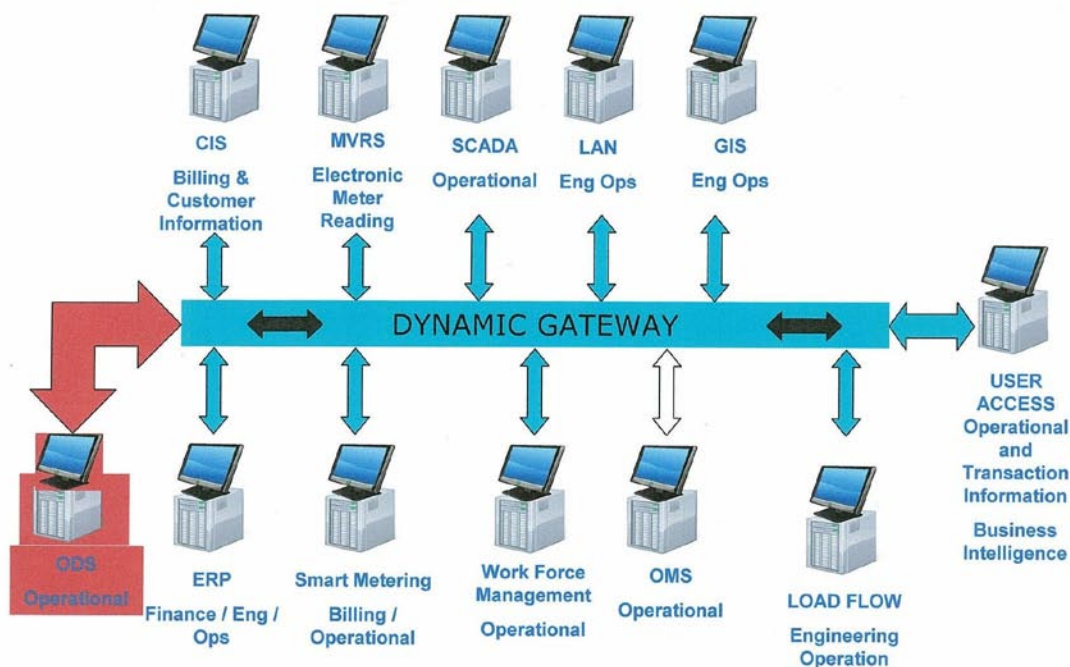


Figure 2 – Conceptual illustration of ODS as central repository for data from independent systems

Added benefits to be realized by Operations, Engineering, Customer Service or Finance departments include:

- Barrier-free access to all data across all native systems
- Ability to house 'orphan' data not residing within any one system
- Create intelligence needed to optimize the gathering and analysis of data from native systems
- Ability to turn data into information through business intelligence tool sets
- Provide presentment of information in the format needed to work effectively
- Integration with CIS service orders to provide dynamic access to field activity
- Minimize/eliminate duplicate data
- Integrated Outage Management System (OMS) functionality
- Assist with infrastructure planning via load analysis and trending

The system is currently under development to realize these benefits and will also assist WNH in achieving its strategic imperatives.

System Planning & Considerations

System planning follows a top-down approach, beginning with a long-term/general system supply study, and moving down to the short-term/detailed load growth forecast to identify a pool of projects for consideration in developing the annual capital budget.

WNH's system planning is a cyclical process whereby proposed (future) and existing assets are evaluated through various planning studies and processes (noted below):

1. System Supply Study
2. Five-Year Forecast
3. Load Growth Forecast
4. Planning Meetings

The details of each of these items are further discussed below.

System Supply Study

The system supply study is performed by WNH management, based in part on information gathered from regional and municipal authorities and development community stakeholders to evaluate the long-term (10+ years) supply needs of WNH and ensure system capacity to meet future growth. The study considers historical growth trends, forecasts and considers such factors as regional and provincial objectives and initiatives, regional/municipal development initiatives and plans and potential for development; the study also considers potential changes to development and growth rates, forecasts of electrical demand and future population, all of which provide a basis for determining transmission and transformation requirements at major supply facilities to ensure system capacity availability.

More specifically, the system supply study provides context and data as outlined below:

1. Introduction
 - a. Study Objectives
 - b. Study Timeframe
 - c. Method of Execution
 - d. Planning Criteria
2. Present Conditions
 - a. Existing Facilities
 - b. Supply Point Capacities
 - c. Existing Supply Point Loading
 - d. Historical Load Growth
 - e. Transmission Line Capacities
3. Gathered Data
 - a. Data Sources
4. Analysis and Observations
 - a. Case Study Development
 - b. Major Case Differences
 - c. Station Load Growth
 - d. Areas of Concern and Solutions
 - e. Overall System Capacity
 - f. Solutions
5. Results

A model of the distribution system, based on low, medium and high load growth scenarios for varying voltages and configurations is subsequently derived using planning software applicable to the industry.

In consideration of these data and system model, a cursory design and identification of projects (that is, proposed construction activity) with general timelines for implementation are developed to meet forecasted capacity requirements.

The system supply study is reviewed annually and updated on an as-needed basis. That is, studies are performed when any one of the aforementioned factors, context or data of previous studies significantly changes, such as policy changes impacting development, or significantly impacts system capacity as previously forecasted. The next long term system planning study is currently planned for 2010 and will evaluate the impact of leading indicators, such as distributed generation, and lagging indicators, such as Conservation Demand Management (CDM) and new Feed-In Tariff (FIT)/micro-FIT projects, as WNH will have had several years of experience under these programs. Additionally, WNH will evaluate the impact of factors such as development restrictions, the economy and cooler summer temperatures, all of which have caused recent decreases in demand, as evident from the annual load growth forecast.

As an example, previous system supply studies forecasted the majority of load growth to occur on the outskirts of the City of Waterloo (27.6kV system), and to a lesser extent in the core areas of Waterloo (13.8kV). Sensitivity analysis was performed to model these scenarios resulting in long-term recommendations to construct a new 27.6kV station, followed by a capacity upgrade at an existing 13.8kV station. As a result of subsequent provincial and municipal development policy changes restricting greenfield development and promoting urban intensification, subsequent analysis showed that the timing of these two capital projects be reversed

Results and recommendations from the system supply study are further considered in WNH's five-year forecast and capital plan.

Five-Year Capital Forecast

WNH's five-year capital requirements are forecast by WNH management. Specific capital projects planned for implementation over a rolling five-year period are summarized. The projects identified within the forecast may be intermediate steps to realize the recommendations from the long-term system supply study, but may also be identified through other leading indicators such as regional and municipal planning meetings, asset condition assessments and load growth forecasts. Indicators accounting for potential development are variable and sometimes unpredictable in nature of these factors; as such, WNH also considers lagging indicators in forecasting projects over a five-year period. Lagging indicators include such items as historical load growth, MS/TS refurbishments and distribution system rebuilds based on existing capacity, actual load and changes to zoning, development or policy. Also included within the five-year forecast are upgrades to communication systems (e.g. SCADA) and metering and equipment age/condition considerations determined through inspection and maintenance programs. The resulting system representation, combined with analysis of historical growth rates, allow for more detailed MS/TS planning and/or general overhead/underground distribution system engineering to ensure availability of projected system capacity and feeder loading such that strategic imperatives, specifically improved supply, reliability, loss prevention, are achieved.

In consideration of these leading and lagging indicators, the initial cursory design and sequence of projects with general timelines derived from the long-term system supply study are refined. Furthermore, construction activity, major facilities and assets are identified with general estimates for the amount of capital contribution required. The estimates are derived from several sources, including but not limited to recent project estimates for project scheduled for completion in the subsequent year, Requests for Quotation (RFQ's) for projects scheduled for completion in 2 – 3 years and historical values for projects scheduled in 4 or 5 years. The result is a general estimation of a five-year capital plan that is presented annually to WNH's Board of Directors. Adjustments to the scope and timing of the five-year forecast are made annually (typically in the fourth quarter) as part of development of the annual load growth forecast and capital budget.

Annual Load Growth Forecast

Completed by WNH management, the annual load growth study is a key component in forecasting future supply needs and the construction of major supply facilities. The forecast is generally completed in the third quarter, prior to the development of the capital budget for the subsequent year. The forecast is an evaluation of leading and lagging factors including actual load growth and existing factors influencing demand, such as Conservation Demand Management (CDM) programs, economic conditions and environmental factors (both of which have reduced demand from what was previously forecasted).

Planning Meetings

The following details various meetings in which WNH participates to evaluate and support the planning of its distribution system.

Utility Coordinating Committee Meetings

Utility Coordinating Committee (UCC) meetings occur monthly to review and discuss development plans that may impact WNH. Input to the meeting comes from Bell Canada, Rogers Cable, the Regional Municipality of Waterloo and the City of Waterloo. From WNH's perspective, these plans which are largely customer-driven (e.g. Subdivision development or road works), are categorized into one of the annual, five-year or long-term forecasts for planning of its distribution system infrastructure and subsequent consideration within the budget.

Regional Supply Meetings

WNH actively participates in regional supply meetings which are at present, conducted twice annually. A collaborative and coordinated effort by WNH, Kitchener-Wilmot Hydro, Guelph Hydro, Cambridge and North Dumfries Hydro and the Ontario Power Authority (OPA), this forum affords LDCs the opportunity to discuss current and future transmission supply/capacity requirements (founded in supply studies and forecasts) to the LDC's region such that the OPA may 'plan and procure electricity supply'⁵ as needed.

Operations and Engineering Meeting

The Operations/Engineering meeting is scheduled on a weekly basis and is primarily concerned with near term capital and maintenance work. The meeting provides a forum to discuss the design, scheduling/coordination and construction of major overhead and underground projects for the distribution system and with respect to the approved budget and annual objectives. Also included within the agenda of this meeting are discussions of unplanned work and operational issues, the latter of which may require further planning analysis to determine an appropriate solution for the issue or extended to other aspects of the system. As described in 'Documentation & Data Analysis', concerns relating to inspection and maintenance may be raised and discussed at this meeting, although occurring infrequently.

Capital Budget

Development Process

In developing the annual capital budget, WNH management continuously gather and analyze information to identify the need, scope and timing of projects. Capital projects are categorized as expansion, rebuild or relocation.

Capital Expansion Projects

Capital expansion projects generally concern proposed assets that contribute to WNH's ability to realize forecasted transmission/transformation capacity and load growth. These assets are largely those that may be directly attributed to customers and previously identified within defined plans and programs, such as the long-term system supply study, the five-year forecast or the annual load-growth forecast, based on planning meetings, in anticipation of an increase in demand and capacity. Evaluation of proposed assets includes discussion of projects completed to-date, policy/regulatory changes and regional/municipal development plans with respect to the studies and forecasts.

Capital Rebuild Projects

Capital rebuild projects concern existing assets currently in service and included in defined inspection and maintenance programs. These assets are evaluated on the basis of age and condition and cost/benefit analysis to determine the appropriate use of financial expenditures, be it rehabilitation/refurbishment to extend the asset's life cycle, or complete replacement of the asset. Individual assets such as distribution transformers, fuses and lightning arresters are typically run to failure, attributable to the minimal lead time and expense associated with replacement. Some assets however, such as protection and SCADA communication equipment, may be considered for replacement where it is more feasible or considered critical and could impact reliability and operation of the distribution system. Larger individual assets, for example switchgear and power transformers, are refurbished/rehabilitated for life extension due to the high cost of replacement and longer lead time for procurement of the asset.

⁵ < <http://www.powerauthority.on.ca/Page.asp?PageID=861&SiteNodeID=118>> (accessed 24-03-2010)

The feasibility of large-scale projects involving multiple or various assets may also be considered as warranted by age and condition assessments and root-cause analysis, or as revealed through routine maintenance programs. For example, IR thermography of live-front pad-mount switchgear identified thermal anomalies on numerous units. Through informal root-cause and cost-benefit analysis, and in consultation with the manufacturer and neighbouring LDCs, WNH management concluded the preferred solution would be to replace all the existing units with dead-front units. The schedule for selecting the priority units for replacement has been determined over a five year period; the urgency was not determined to be severe enough to warrant replacement of all units within the first year.

Capital Relocation Projects

Capital relocation projects concern existing assets currently in service that are required to be relocated or reconstructed due to work on public roadways. These projects are mandated by municipal and provincial road authorities and as such are non-discretionary.

System of Prioritization

Following evaluation of data from proposed and existing assets, estimates are compiled for the capital projects (including resource availability), an informal cost/benefit analysis is performed, and projects are identified for potential inclusion in the annual capital budget and the subsequent five-year capital plan.

Whereas system planning follows a top-down approach, prioritization of projects from those identified follows a bottom-up approach in which data from the annual load growth forecast and more recent planning or internal meetings are first considered to determine inclusion in one of the annual capital budget, the short-term capital plan or long-term plan.

Generally, the system of prioritization is as follows for inclusion in the annual capital budget:

1. Mandated Projects
2. Customer-Driven Projects
3. WNH Initiatives
 - a. Required
 - b. Flexible

Mandated projects are those projects required by municipalities (such as pole-line relocation to accommodate municipal road works) or through government directives (such as smart meter initiatives), as identified through planning meetings. Customer-Driven projects are those projects undertaken to accommodate customer requests for supply and generally include large industrial or commercial customers. WNH always strives to meet its obligations to respond to municipality or government directives and customer demands.

Mandated and customer-driven projects (if known) are always included within the annual capital budget. With respect to mandated projects, WNH is cognizant of and able to cost these projects in advance through the various planning meetings in which it participates. Additionally, WNH is able to reasonably foresee these costs based on experience/historical trends and therefore provide for an appropriate allowance within the annual budget. It should also be noted that the volume, scope of work and associated costs for customer-driven projects are fairly consistent; historically, approximately 70% of projected work actually materializes (due to economic or environmental factors) and is therefore accounted for accordingly within the annual capital budget.

WNH initiatives are those projects concerning capital expansion, as considered in the system supply study, the five-year forecast and the annual load growth forecast, or capital rebuild, as a result of inspection and maintenance programs. These initiatives however have varying degrees of flexibility in the staging of their execution. Higher priority is placed on those projects for proposed assets required to accommodate the forecasted increase in load and ultimately ensure availability of supply capacity. Also of higher priority are critical projects concerning existing assets, as identified through inspection and maintenance programs, required for ensuring safety or reliability of service. Projects such as these are therefore considered to be of greater urgency and necessitate inclusion in the annual capital budget.

Projects that may have greater flexibility are those that are designed to enhance reliability or optimize the configuration of the distribution system. This may include projects such as a conversion from a radial configuration to loop configuration for rural customers. Alternatively, projects may also concern existing assets for which a rebuild, for example, may be required in the near term as the assets are not yet considered to be of critical age, risk or condition. Generally, WNH's use of the term flexible concerns adjustable project schedules; that is, it is not a matter of whether the project will be executed, but whether the project will be executed immediately, in the subsequent year, the short-term or long-term. Consider, for example, the rebuild of an overhead distribution line. WNH performs a hierarchical evaluation considering the age, risk and condition of the pole line to determine criticality of the rebuild. A multi-phase, multi-circuit expressway crossing, subject to adverse weather conditions and 50 years old is considered to be of higher priority for a capitalized pole replacement program than an older rural single-phase pole line, generally in good condition. Annually, the capital budget will have a mixture of these various types of projects.

As part of the prioritization process, an evaluation of the business case of the projects is performed to determine if projects achieve multiple strategic objectives. A project that is projected to realize multiple objectives is deemed to have greater value and have higher priority, in which case execution may be more immediate. For example, through the inspection and maintenance programs it was identified that one station in particular required a replacement of the power transformer and air-break switches. Additionally, WNH identified the need for spill containment and increased capacity, identified through the long-term supply study, at this station. Through evaluation of capacity planning, risk analysis and maintenance, WNH determined this project was of higher priority as it converged multiple objectives, specifically to increase capacity and reliability and decrease risk. To realize these objectives, WNH has included phases of this project, such as replacement of aged plant, within its annual capital plan and five-year plan.

Inspections/maintenance programs may identify chronic problems that could warrant rehabilitation or replacement. These are considered with respect to the five-year forecast to determine if there is a project within the 5-year forecast that could be associated with the rehabilitation/replacement. If no such associated project exists, or if rehabilitation/replacement needs to be accelerated then the rehabilitation/replacement could be advanced or included within a subsequent year's budget (for either of these 2 scenarios, the five-year forecast will be amended to reflect scope change in projects) or included within the current year's budget.

Methodologies to establish optimum equipment/asset replacement schedules are based on:

- Condition
- Consequences and probability of failure
- Projected replacement/refurbishment costs

Operations, Maintenance & Administrative Budget

Overview

The Operations, Maintenance & Administrative (OM&A) budget identifies administrative expenditures as well as routine and non-routine operations and maintenance expenditures for the budget year within seven (7) major account categories: Operations Administration, Overhead, Underground, Forestry, SCADA, Municipal Substations and Transformer Stations.

Maintenance activities are coordinated with the Minimum Inspection Requirements of the DSC and for Transformer Stations the IESO Transmission Code. Any maintenance recommendations resulting from the routine visual patrols, reactive or preventative maintenance performed are addressed within this maintenance budget. Generally, the budget reflects the latest performance priorities, as well as new or routine priorities for maintenance of the distribution system.

Budget Details

Expenditures within each of these seven (7) major account categories are further classified into one of the following:

1. Operations Administration
 - a. Line Supervision – Operating
 - b. Line Supervision – Maintenance
 - c. Recoverable
2. Overhead
 - a. Lines and Feeders – Operating
 - b. Poles, Towers and Fixtures – Operating
 - c. Conductors and Devices – Operating
 - d. Services – Operating
 - e. Transformers – Operating
 - f. Transformers – Maintenance
3. Underground
 - a. Lines and Feeders – Operating
 - b. Conductors and Devices – Operating
 - c. Services – Operating
 - d. Transformers – Operating
 - e. Transformers – Maintenance
 - f. Recoverable – Operating
4. Forestry
 - a. Lines and Feeders – Maintenance
 - b. Recoverable – Tree Trimming
5. SCADA
 - a. Operations
 - b. Equipment Maintenance

6. Municipal Substations
 - a. Buildings & Fixtures
 - b. Building Maintenance
 - c. Equipment Operating
 - d. Equipment Maintenance
 - e. External Services
7. Transformer Stations
 - a. Buildings & Fixtures
 - b. Building Maintenance
 - c. Equipment Operating
 - d. Equipment Maintenance
 - e. External Services

Each of these sub-categories includes expenditures charged against various minor accounts, including but not limited to:

- Management and Union (labour burdens, regular and overtime hours)
- Staff Training and Development Fees
- Vehicle Fees
- Travel
- Inventory
- Tools and Equipment
- Supplies/Materials

Maintenance activities previously described, such as insulator washing and load-break switch maintenance, are reflected within the operations and maintenance budget. Also included are inspection activities as previously described.

Budget Development Process

Development of the capital, operating and maintenance budgets is a continuous process whereby items for consideration are presented and reviewed with respect to routine and non-routine or unforeseen expenditures. Routine inspection and maintenance expenditures are estimated based on historical values, equating these to internal labour hours for the proposed year, whereas non-routine expenditures may be estimated through quotations. For the majority of activities, inspection and maintenance occurs annually and as such, the expenditures are included each year, but may be adjusted to reflect changes to scope of work as identified by the supervisors in each respective area, through informal communications or data analysis or environmental factors. Where available internal labour hours exceed those required for routine inspection and maintenance, the remaining are utilized for the capital program. If, however, labour hours required are beyond those available within the year, then excess hours may be assigned to third-party contractors for completion of routine inspection and maintenance programs or for capital projects. In addition to these expenditures, the budget also reflects administrative items, for example forecasted staff training and development, cell phones or travel expenditures. The budget development process is typically concluded in September. The VP of Operations and VP of Engineering & Stations for review of expenditures cost/scope justifications and priorities. A draft of the proposed OM&A budget for the upcoming year is then made available in September for review by the CFO and CEO.

Approval of Capital and OM&A Budgets

Following the selection of projects for inclusion within the annual capital budget, a formal capital project business case is developed in identifying the business needs, project details, expected results and estimated annual expenditure. For multi-year projects, as identified in the five-year capital plan, the estimated capital contribution for each year is also included within the business case.

Drafts of the capital and OM&A budgets are presented to the Finance department and supplemented with additional expenditures such as prorated costs of building, taxes or utilities, for example. Additionally, the Finance department analyzes the draft budgets for anomalies and will subsequently address these items with the department responsible for development of that budget (i.e. Engineering or Operations). A second or third draft may be further developed until any such discrepancies are resolved. Once resolved, this draft is presented, typically in October, to executive members within WNH. Again, the draft budgets are evaluated whereby discrepancies are addressed or expenditures reprioritized. A final draft is then presented in November to WNH's Board of Directors by the VP of Finance/CFO and CEO for Board approval.

Variances in Approved Budgets

Following approval of the annual budget, execution of projects identified within the budget is initiated through work requisitions and purchase orders developed within WNH's ERP system. This system is also utilized to measure invoices and material expenditures for individual projects and is translated into a corresponding USoA code for regulatory financial reporting or into a work order for determining the financial status of a project (evaluated against the budgeted amount).

While WNH endeavours to develop an accurate annual budget, changes to project scope or individual projects may develop and could result in a variance from approved funds. These circumstances include changes in work arising from customer requests, changes due to municipal and third party work programs, and results of inspections and maintenance that may need immediate attention. Capital and maintenance work programs are routinely revaluated and projects and may be reprioritized depending on financial constraints and available resources. Projects may be added to the current program or deferred to subsequent years. Where variances may result in an increase to approved funds (for example a project once included within the five-year forecast may be advanced to the current budget year, as occasionally occurs with municipally-mandated projects such as road widening) and if overspending is anticipated, approval for the variance must be obtained from WNH's CFO/CEO prior to accommodating the project and resulting variance.

Appendix C

Tables 2-25 to 2-31

Capital Sheets for Projects In Excess of the Materiality Threshold of \$125,000

WNH 2005 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-25.01				
WR #:	WF0000183				
PROJECT #:	06EN11				
WR DESCRIPTION:	UG Residential Services				
	1855				Total \$
WR Costs by USoA	308,048				308,048

Business Need

This category includes the connection costs to service new customers. Also captured here are the costs to upgrade the capacity of existing services. The cost per service can vary widely with the nature and capacity of each service. Total expenditures vary with the level of economic activity in the WNH service area.

There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in conflict with the Distribution System Code and municipal development objectives.

Project Details / Scope

This project includes the installation of new services in new subdivisions serviced by underground power distribution. Also included are underground services that are installed or replaced as a result of customers requesting upgrades or major modifications to their existing service.

Expected Benefits

☒ Supply new customers and growth areas.

WNH 2005 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-25.02
WR #:	WF0000404
PROJECT #:	06EN10
WR DESCRIPTION:	Conservation Meadows Ph5B-Kelso

	1840	1845	1850		Total \$
WR Costs by USoA	25,810	92,486	94,637		212,932

Business Need

Underground Residential Subdivisions are capital expansions to the WNH distribution system driven solely by customer demand. In accordance with the Distribution System Code, WNH performs an economic evaluation for each project and provides the developer with an Offer to Connect. Developers that meet WNH's Conditions of Service and provide the necessary financial commitments are connected. Total expenditures vary with the level of economic activity in WNH's service area.

This spending is customer driven.

There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.

Project Details / Scope

This project involves the installation of new plant to facilitate electrical servicing of new residential developments. Included are new primary cables, transformers, civil infrastructure, secondary cables, and other necessary plant and equipment. Work is coordinated with developers and other utilities and is completed in accordance with developer's timelines.

Expected Benefits

- ☒ Increased feeder capacity and distribution assets for growth.
- ☒ Expansion of system to connect new customers.

WNH 2005 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-25.03				
WR #:	WF0000408				
PROJECT #:	06EN10				
WR DESCRIPTION:	DSU Columbia Forest II				
	1840	1845	1850		Total \$
WR Costs by USoA	52,739	184,586	202,166		439,491

Business Need

Underground Residential Subdivisions are capital expansions to the WNH distribution system driven solely by customer demand. In accordance with the Distribution System Code, WNH performs an economic evaluation for each project and provides the developer with an Offer to Connect. Developers that meet WNH's Conditions of Service and provide the necessary financial commitments are connected. Total expenditures vary with the level of economic activity in WNH's service area.

This spending is customer driven.

There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.

Project Details / Scope

This project involves the installation of new plant to facilitate electrical servicing of new residential developments. Included are new primary cables, transformers, civil infrastructure, secondary cables, and other necessary plant and equipment. Work is coordinated with developers and other utilities and is completed in accordance with developer's timelines.

Expected Benefits

- ☒ Increased feeder capacity and distribution assets for growth.
- ☒ Expansion of system to connect new customers.

WNH 2005 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-25.04
WR #:	WF0000411
PROJECT #:	06EN09
WR DESCRIPTION:	Replace Primary @ 397 Keatsway

	1840	1845	1850		Total \$
WR Costs by USoA	19,190	27,414	89,096		135,700

Business Need

This category includes expenditures for the replacement of underground distribution feeder assets. Underground distribution is replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. Cable rehabilitation has been explored, however, it has not yet been found to be cost effective in our URD applications. WNH has three (3) distinct populations of Underground Distribution, most of which is underground residential distribution (URD).

- 1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been, and continues to be, the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency and safety are being achieved by retiring the 4 kV distribution system.
- 2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years.
- 3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years.

The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

This area was initially serviced with first generation underground distribution in the mid 1970's. This project includes primary trenching in the form of directional drilling and the replacement of transformers. Primary cable is replaced with new cable in duct, transformers are replaced in accordance with the latest standards, and additional spare ducts are installed to facilitate the future replacement of streetlighting and secondary conductors.

Expected Benefits

- | | |
|---|--|
| x | Increased reliability of new distribution equipment and materials. |
| x | Increased safety of new design standards and clearances. |
| x | Reduced operational trouble calls. |

WNH 2005 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-25.05				
WR #:	WF0000420				
PROJECT #:	06MT02				
WR DESCRIPTION:	Polyphase Meters New Commercial Regular				
	1860				Total \$
WR Costs by USoA	164,052				164,052

Business Need

Waterloo North Hydro is required under the federal Electricity and Gas Inspection Act to use approved Revenue Metering Equipment for the purpose of establishing the basis of a charge for the supply of electricity to its customers. WNH meets this requirement for its Commercial and industrial Customers by purchasing Measurement Canada approved meters, instrument transformers and other related equipment.

Activity in this work program is driven by new customers, obsolescence of equipment and equipment failure. This activity is mandated.

Project Details / Scope

Cost accumulated under this work order include the labour, materials, equipment and contract labour to install revenue metering for Commercial and Industrial customers.

Expected Benefits

x	Meets the requirement of the federal Electricity and Gas Inspection Act.
x	Fulfills the business needs of WNH in establishing the basis of a charge for the supply of electricity to its customers.

WNH 2005 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-25.06
WR #:	WF0000484
PROJECT #:	CPCP
WR DESCRIPTION:	Information Technology - Software Requirements - Various

	1925				Total \$
WR Costs by USoA	175,099				175,099

Business Need

In order to maintain operational efficiencies and provide additional information to users, WNH invests in Information Technology Software. WNH as a "standing" work order each year that accumulates the software purchases.

Project Details / Scope

WNH has reviewed this work order and has determined that it consists of many small purchases, the largest of which was \$54,244 paid to Able-One Systems Inc. The payment to Able-One was to upgrade users from MS Office XP to MOS Office 2003 Pro.

Expected Benefits

☒

Increase business efficiency of the organization in providing up to date software tools.

WNH 2005 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-25.07
WR #:	WF0000486
PROJECT #:	CPCP
WR DESCRIPTION:	IS - Hardware requirements

	1920				Total \$
WR Costs by USoA	306,684				306,684

Business Need

WNH maintains many software systems and periodically these systems require a more robust central server. This allows each system to operate at maximum efficiency and ensures reliabilities for its users and customers.

Project Details / Scope

WNH has reviewed this work order and has determined that it consists of many small purchases, and one purchase which exceeds the \$125,000 materiality threshold. WNH paid Maxim Solutions \$218,373 for a central server for our core CIS (Billing and Customer Service) & ERP (Financials, Purchasing, Inventory, Work Order Management and Payroll) Software Applications.

Expected Benefits

☒	Increased business efficiency of the organization in providing up to date computer hardware.
☒	Increased reliability of systems serving customers, suppliers and internal users.

WNH 2005 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-25.08				
WR #:	WF0000503				
PROJECT #:	06EN04				
WR DESCRIPTION:	Rebuilding Existing Line on Arthur St., N., Woolwich				
	1830	1835	1850		Total \$
WR Costs by USoA	54,700	148,672	37,460		240,832
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in the rural areas and a 3 year cycle in the urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project included the rebuilding of overhead distribution that was in poor condition and had reached the end of its life. The project also facilitated the conversion from 8 kV to 27.6 kV as part of WNH's Asset Management strategy. Transformers, conductors, poles, guys/anchors, and other equipment were replaced.					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				
x	Increased line capacity / lower line losses from voltage conversions.				

WNH 2005 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-25.09	
WR #:	WF0000504	
PROJECT #:	06EN05	
WR DESCRIPTION:	Relocate Poles Steffler Rd Waterloo to Elmira	
	1830	1835
	1850	1855
	Total \$	
WR Costs by USoA	159,069	123,711
	148,622	531
	431,932	

Business Need

This category includes expenditures to relocate/replace pole line assets that conflict with roadway construction activities. The level of spending is driven by the activities of the road authorities and specific projects are rarely known at the time that the budget is developed. Total expenditures can vary greatly from year to year and reimbursement is normally limited to 50% of labour and labour saving devices.

There are no alternatives to these activities. These expenditures are not discretionary as compliance is mandated by the Public Service Works on Highways Act, R.S.O. 1990.

Project Details / Scope

This work includes the removal of all existing poles, conductors, transformers, guying and all other equipment within the road authority's scope of work and construction of a new distribution line to new construction standards at an alternate location.

Expected Benefits

There are seldom any benefits to WNH in relocating existing lines. Experience has shown that assets required to be relocated are rarely at end of life. Although some recovery of materials can occur, most do not comply with standards for reuse in new construction and are depreciated to the point that the combination of labour cost to recover used materials and the remaining life of the asset often approaches or exceeds the cost to purchase new materials.

x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new plant and materials.
x	Increased safety of new design standards and clearances.

WNH 2005 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-25.10					
WR #:	WF0000572					
PROJECT #:	06EN10					
WR DESCRIPTION:	Elmira Raceway Ph.2, Second St.					
	1806	1830	1840	1845	1850	Total \$
WR Costs by USoA	2,510	2,510	17,570	67,770	36,395	126,756

Business Need

Underground Residential Subdivisions are capital expansions to the WNH distribution system driven solely by customer demand. In accordance with the Distribution System Code, WNH performs an economic evaluation for each project and provides the developer with an Offer to Connect. Developers that meet WNH's Conditions of Service and provide the necessary financial commitments are connected. Total expenditures vary with the level of economic activity in WNH's service area.

This spending is customer driven.

There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.

Project Details / Scope

This project involves the installation of new plant to facilitate electrical servicing of new residential developments. Included are new primary cables, transformers, civil infrastructure, secondary cables, and other necessary plant and equipment. Work is coordinated with developers and other utilities and is completed in accordance with developer's timelines.

Expected Benefits

☒	Increased feeder capacity and distribution assets for growth.
☒	Expansion of system to connect new customers.

WNH 2005 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-25.11				
WR #:	WF0000573				
PROJECT #:	06EN10				
WR DESCRIPTION:	Clair Hills Sub Stage 8 Phase 3&4				
	1840	1845	1850		Total \$
WR Costs by USoA	16,580	60,794	59,412		136,786

Business Need

Underground Residential Subdivisions are capital expansions to the WNH distribution system driven solely by customer demand. In accordance with the Distribution System Code, WNH performs an economic evaluation for each project and provides the developer with an Offer to Connect. Developers that meet WNH's Conditions of Service and provide the necessary financial commitments are connected. Total expenditures vary with the level of economic activity in WNH's service area.

This spending is customer driven.

There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.

Project Details / Scope

This project involves the installation of new plant to facilitate electrical servicing of new residential developments. Included are new primary cables, transformers, civil infrastructure, secondary cables, and other necessary plant and equipment. Work is coordinated with developers and other utilities and is completed in accordance with developer's timelines.

Expected Benefits

- ☒ Increased feeder capacity and distribution assets for growth.
- ☒ Expansion of system to connect new customers.

WNN 2005 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-25.12				
WR #:	WF0000598				
PROJECT #:	06FL02				
WR DESCRIPTION:	R61 - New Material Handler, Single Bucket Truck				
	1930				Total \$
WR Costs by USOA	309,397				309,397
Business Need					
WNN maintains its fleet of vehicles to achieve a typical useful life of 14 to 16 years for our large vehicles (bucket trucks, RBDs, workbody trucks) and 8 to 10 years for our small vehicles (pickup trucks, vans, etc). WNN has determined that these time frames represent the most cost efficient replacement schedule and that to extend beyond these timeframes it incurs increased maintenance costs and reduced fleet reliability. WNN replaced Truck R35, a 1987 Ford (18 years old) tandem axle chassis outfitted with a 50 foot Altec single bucket work platform that is at its end of life condition.					
Project Details / Scope					
This project includes all costs associated with developing the specification documents for the truck chassis, work platform, and truck body; completing the tendering process; ordering the vehicle; inspecting the work platform and body during fabrication and assembly of the truck; and commissioning the completed truck at our facility (installing signage and high visibility striping, two way radio system, registering the truck with MTO, completing an in-service training session for our drivers, etc.). For this truck replacement we specified an International tandem axle chassis outfitted with a Posi-Plus model 500 boom. This unit will provide a single bucket with a maximum working height of 55 feet and will be able to lift material loads up to 1200 lbs.					
Expected Benefits					
x	Replacement of Truck R35 will help to reduce total annual fleet maintenance costs by eliminating our oldest single bucket truck (R35 - 18 years old) from our fleet.				
x	The new replacement truck (R61) has extended vertical and horizontal reach. This allows our staff to reach taller poles that are also set further off the roadway. This is becoming more common as we rebuild our pole lines both in our rural service territory as well as in congested areas within our urban service territory.				

WNH 2005 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-25.13				
WR #:	WF0000744				
PROJECT #:	06EN04				
WR DESCRIPTION:	Kressler Road Elmira 27 kV Feeder				
	1830	1835	1850		Total \$
WR Costs by USoA	172,071	467,679	117,838		757,589

Business Need

Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in the rural areas and a 3 year cycle in the urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions.

Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

The scope of this project included the rebuilding of overhead distribution that was in poor condition and had reached the end of its life. The project also facilitated the conversion from 8 kV to 27.6 kV as part of WNH's Asset Management strategy. Transformers, conductors, poles, guys/anchors, and other equipment were replaced.

Expected Benefits

x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new plant and materials.
x	Increased safety of new design standards and clearances.
x	Increased line capacity / lower line losses from voltage conversions.

WNH 2005 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-25.14				
WR #:	WF0000753				
PROJECT #:	06EN04				
WR DESCRIPTION:	Rebuild & Convert Eldale Rd/Church St				
	1830	1835	1850		Total \$
WR Costs by USoA	87,721	49,247	16,929		153,896

Business Need

Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in the rural areas and a 3 year cycle in the urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions.

Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

The scope of this project included the rebuilding of overhead distribution that was in poor condition and had reached the end of its life. The project also facilitated the conversion from 8 kV to 27.6 kV as part of WNH's Asset Management strategy. Transformers, conductors, poles, guys/anchors, and other equipment were replaced.

Expected Benefits

x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new plant and materials.
x	Increased safety of new design standards and clearances.
x	Increased line capacity / lower line losses from voltage conversions.

WNH 2005 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-25.15
WR #:	WF0000773
PROJECT #:	06EN10
WR DESCRIPTION:	Valley View Heights Subdivision, St Jacobs

	1840	1845	1850		Total \$
WR Costs by USoA	20,032	64,104	49,413		133,550

Business Need

Underground Residential Subdivisions are capital expansions to the WNH distribution system driven solely by customer demand. In accordance with the Distribution System Code, WNH performs an economic evaluation for each project and provides the developer with an Offer to Connect. Developers that meet WNH's Conditions of Service and provide the necessary financial commitments are connected. Total expenditures vary with the level of economic activity in WNH's service area.

This spending is customer driven.

There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.

Project Details / Scope

This project involves the installation of new plant to facilitate electrical servicing of new residential developments. Included are new primary cables, transformers, civil infrastructure, secondary cables, and other necessary plant and equipment. Work is coordinated with developers and other utilities and is completed in accordance with developer's timelines.

Expected Benefits

- | | |
|----------|---|
| x | Increased feeder capacity and distribution assets for growth. |
| x | Expansion of system to connect new customers. |

WNH 2005 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-25.16				
WR #:	WF0000831				
PROJECT #:	06EN10				
WR DESCRIPTION:	Westfield Acres Sub UG Distribution				
	1840	1845	1850		Total \$
WR Costs by USoA	28,556	100,699	21,042		150,297

Business Need

Underground Residential Subdivisions are capital expansions to the WNH distribution system driven solely by customer demand. In accordance with the Distribution System Code, WNH performs an economic evaluation for each project and provides the developer with an Offer to Connect. Developers that meet WNH's Conditions of Service and provide the necessary financial commitments are connected. Total expenditures vary with the level of economic activity in WNH's service area.

This spending is customer driven.

There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.

Project Details / Scope

This project involves the installation of new plant to facilitate electrical servicing of new residential developments. Included are new primary cables, transformers, civil infrastructure, secondary cables, and other necessary plant and equipment. Work is coordinated with developers and other utilities and is completed in accordance with developer's timelines.

Expected Benefits

- ☒ Increased feeder capacity and distribution assets for growth.
- ☒ Expansion of system to connect new customers.

WNH 2005 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2.25.17				
WR #:	WF017645				
PROJECT #:	GM02				
WR DESCRIPTION:	Service Centre - Replace Emergency Generator				
	1920				Total \$
WR Costs by USoA	116,702				116,702

Business Need

The Waterloo North Hydro Service Centre is the facility which houses key operational functions that operate and maintain WNH's distribution system and grid connected 115 kV and 230 kV transformer systems

Operations centre, engineering, and customer communication functions are critical during times of system disturbances, inclement weather, system failure or high system loading. The ability to utilize systems such as SCADA, GIS, information networks, and communications that support the operation, repair and restoration during critical times, relies on reliable emergency power. This project has fulfilled WNH's requirement for reliable emergency power at this facility.

The implications of not proceeding with would result in WNH being unable to respond in a timely and effective manner to customers, Hydro One and the IESO in loss of power situations.

Project Details / Scope

The costs captured in this project include all labour, material, trucking, equipment and contractor costs to specify, procure, install, test and commission a new 350kW standby generator at WNH main office. The costs also included all modifications required to the existing equipment to be able to connect the new generator.

This unit replaced an existing unit (1981) which could no longer provide the emergency power for critical and support systems such as operations centre, SCADA, network systems, heating and lighting.

Expected Benefits

X	Increased safety to workers.
X	Increased reliability of power to customers.
X	Ability to respond to HONI and IESO during emergency/loss of power conditions.
X	IESO compliance.

WNH 2006 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-26.01
WR #:	WF0001108
PROJECT #:	06EN13
WR DESCRIPTION:	2006 GIS - Mapping - Capital

	1925				Total \$
WR Costs by USoA	184,180				184,180

Business Need

In 2005 WNH began implementing an ESRI Geographic Information System (GIS) to support its business operations. GIS integrates hardware, software, and data for capturing, managing, analyzing, and displaying asset and customer information. GIS provides critical tools to organize information and knowledge, make informed decisions, improve communications and increase efficiency of work processes. From its inception, much work has been performed in transferring paper based asset data into the GIS data base. WNH currently uses its GIS to assist with engineering design, asset management, supply planning outage, planning and budgeting processes. Data types currently maintained are asset type, quantity, condition, location and results of inspection and maintenance programs. The GIS is constantly being updated and expanded as new assets are installed, such as with new construction or replacing assets and also as new analytical tools are needed. There are plans to integrate the GIS with other enterprise information systems such as outage management, SCADA and engineering analysis tools to provide faster, more efficient analysis and response to power system operational issues.

The consequences of not proceeding would be to maintain asset information in paper based formats that are difficult and inefficient to maintain. These formats also do not support the increased asset analysis and reporting required for current asset management and regulatory compliance.

Project Details / Scope

The focus for the GIS system in 2006 was to continue to build the database of primary and secondary distribution circuits. A number of external tools were implemented to aid in data extraction from the system.

Expected Benefits

x	Increased efficiency in maintaining information.
x	Increased efficiency accessing information.
x	Increased ability to analyze data and develop improvement strategies.
x	Increased ability to report data to internal and external stakeholders.

WNH 2006 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-26.02				
WR #:	WF0001109				
PROJECT #:	06SS03				
WR DESCRIPTION:	2006 Computer Software				
	1925				Total \$
WR Costs by USoA	179,740				179,740

Business Need

In order to maintain operational efficiencies and provide additional information to users, WNH invests in Information Technology Software. WNH as a "standing" work order each year that accumulates the software purchases.

Project Details / Scope

This Work Order consists of many small software purchases as well as a larger purchase of \$76,045 which was paid to Itron Inc. for the Network version of our MV90 Software. This software reads commercial meters. The Network version was needed to allow Users to access the software from multiple work stations to address the need for business contingency and enhanced features.

Expected Benefits

x	Increase business efficiency of the organization in providing up to date software tools.
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WNH 2006 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-26.03				
WR #:	WF0001112				
PROJECT #:	06EN04				
WR DESCRIPTION:	2006 Pole Replacement				
	1830	1835	1850		Total \$
WR Costs by USoA	108,686	58,797	10,690		178,174

Business Need

Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in the rural areas and a 3 year cycle in the urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions.

Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

The scope of this project included replacing individual poles that were identified under the 2006 WNH pole testing program as in poor condition and needing immediate replacement. Poles were replaced as close as possible to their existing locations and all hardware, transformers and other equipment associated with the pole were replaced. Where possible, poles were brought up to today's standards and clearances. Some poles were replaced "like for like" where existing conditions dictated.

Expected Benefits

x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new plant and materials.
x	Increased safety of new design standards and clearances.

WNH 2006 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-26.04				
WR #:	WF0001115				
PROJECT #:	06SN02				
WR DESCRIPTION:	TS HSA Rehabilitation - Building & Site				
	1808				Total \$
WR Costs by USoA	860,546				860,546

Business Need

WNH is supplied primarily through the IESO controlled, Hydro One Transmission System at transmission voltages of 115 kV and 230 kV. WNH owns and operates three (3) transmission grid connected Transformer Stations (TS's) operating at 115 kV – 13.8 kV, 230 kV – 27.6 kV and 230 kV – 13.8 kV. The transformer station buildings house components essential to the control and reliability of power distribution such as the medium voltage switchgear, protection and control systems and auxiliary equipment. The systems being housed within the TS buildings are critical to the delivery of safe and uninterrupted power supply to WNH customers; it is essential that these buildings be kept in good condition.

Projects being captured in this category include new buildings or major upgrades to existing buildings at transmission connected transformer stations that would be considered beyond regular operation and maintenance. Activities include construction of new buildings, replacement of major building components like roofing, siding, wall insulation, building electrical and mechanical systems, modifications due to security requirements, installation of TS specific building features such as cable drip pits, duct bank structures, cable pull pits, etc.

The implications of not taking proper corrective actions and improving building condition as required could result in damage to equipment, increased safety hazards to workers, unreliable or misoperation of equipment, explosive equipment failure, loss of power to customers, and breach of requirements set out in the Transmission System Code.

Project Details / Scope

In 2006 WNH started a multistage project of rehabilitating the 1960's vintage Scheifele "A" transformer station. The costs captured under this work request cover significant improvements to the building, which include upgrade of the insulation, removal of hazardous materials from the block walls, replacement of the siding, replacement of the roof, replacement of building water and sanitary services, replacement of the low voltage building electrical and mechanical systems and wiring, installation of new climate control devices, installation of a new battery room, water damage repairs as well as installation of cable drip pits in the Scheifele "A" building. This work request also covers water damage repairs and water ingress mitigation methods for the Scheifele "B" building as well as related site drainage improvements.

Expected Benefits

x	Increased safety to workers and public.
x	Increased reliability of power to customers.
x	Compliance with the Transmission System Code, HONI and/or IESO requirements.
x	Reduced Risk to the environment.

WNH 2006 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-26.05				
WR #:	WF0001116				
PROJECT #:	06EN07				
WR DESCRIPTION:	2006 OH Residential Service				
	1855				Total \$
WR Costs by USoA	147,409				147,409

Business Need

This category includes the connection costs to service new residential customers. Also captured here are the costs to upgrade the capacity of existing services. The cost per service can vary widely with the nature and capacity of each service. Total expenditures vary with the level of economic activity in the WNH service area.

There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.

Project Details / Scope

This project includes the installation of new services in overhead distribution areas. Also included are services that are installed or replaced as a result of customers requesting upgrades or major modifications to their existing service. The installation of new services include all labour and equipment associated with connecting customer's electrical servicing equipment to WNH lines - wire, poles, hardware.

Expected Benefits

x	Provision for growth.
x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new distribution equipment and materials.
x	Increased safety of new design standards and clearances.

WNH 2006 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-26.06				
WR #:	WF0001118				
PROJECT #:	06SN04				
WR DESCRIPTION:	TS HSA Rehabilitation-Transformers				
	1815				Total \$
WR Costs by USoA	717,502				717,502

Business Need

WNH is supplied primarily through the IESO controlled, Hydro One Transmission System at transmission voltages of 115 kV and 230 kV. WNH owns and operates three (3) transmission grid connected Transformer Stations (TS's) operating at 115 kV - 13.8 kV, 230 kV - 27.6 kV and 230 kV - 13.8 kV. Expenditures in this category are made due to one of the following reasons:

- there is a need to increase capacity to meet growth in demand. Such needs are normally identified through system planning activities.
- the equipment requires replacement or a major refurbishment due to its condition. In such cases, regular maintenance will not address the problem nor is it cost effective. This is normally identified as a result of a variety of regularly scheduled testing and maintenance activities.
- the equipment needs to be replaced due to obsolescence. Such needs are typically identified through the inability to source spare or replacement components.
- the equipment needs to be updated to meet regulatory requirements (Transmission System Code, Market Rules, etc)

Where at all possible, projects are scheduled such that one project can satisfy more than one need. Projects being captured in this category include new or major refurbishments to existing switches or breakers, transformers, switchgear, protection and control systems, structural support systems and environmental protection systems.

The implications of not taking proper actions and improving equipment capacity or condition as required, could result in the inability to supply power to customers, damage to equipment, increased safety hazards to workers, unreliable or misoperation of equipment, explosive equipment failure and breach of requirements set out in the Transmission System Code.

Project Details / Scope

In 2006 WNH started a multistage project of rehabilitating the 1960's vintage Scheifele "A" transformer station. The costs covered under this project include replacement of all radiators and fans on 2 power transformers, replacement of all gaskets including leaky low voltage bushing gaskets, detailed internal inspection of each transformer, replacement of auxiliary control devices, installation of new pressure relief vents, replacement of oil expulsion vent with new vents designed to direct the oil into the containment pit, complete overhaul of tap changer mechanisms.

Expected Benefits

- | | |
|----------|--|
| x | Increased safety to workers and public. |
| x | Increased reliability of power to customers. |
| x | Provision for increased supply for growth areas of Waterloo. |

WNH 2006 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-26.07				
WR #:	WF0001120				
PROJECT #:	06EN07				
WR DESCRIPTION:	2006 OH Commercial & Industrial Services				
	1855				Total \$
WR Costs by USoA	183,118				183,118

Business Need

This category includes the connection costs to service new large commercial and industrial customers. Also captured here are the costs to upgrade the capacity of existing services. The cost per service can vary widely with the nature and capacity of each service. Total expenditures vary with the level of economic activity in the WNH service area.

There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.

Project Details / Scope

This project includes the installation of new services in overhead distribution areas. Also included are services that are installed or replaced as a result of customers requesting upgrades or major modifications to their existing service. The installation of new services include all labour and equipment associated with connecting customer's electrical servicing equipment to WNH lines - wire, poles, hardware.

Expected Benefits

x	Provision for growth.
x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new distribution equipment and materials.
x	Increased safety of new design standards and clearances.

WNH 2006 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-26.08				
WR #:	WF0001121				
PROJECT #:	06EN07				
WR DESCRIPTION:	2006 OH Commercial & Industrial Services - Transformation Only				
	1850				Total \$
WR Costs by USoA	139,233				139,233

Business Need

This category includes the connection costs to service new large commercial and industrial customers. Also captured here are the costs to upgrade the capacity of existing services. The cost per service can vary widely with the nature and capacity of each service. Total expenditures vary with the level of economic activity in the WNH service area.

There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.

Project Details / Scope

This project includes the installation of new services in overhead distribution areas. Also included are services that are installed or replaced as a result of customers requesting upgrades or major modifications to their existing service. The installation of new services include all labour and equipment associated with connecting customer's electrical servicing equipment to WNH lines - transformation only.

Expected Benefits

x	Provision for growth.
x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new distribution equipment and materials.
x	Increased safety of new design standards and clearances.

WNH 2006 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-26.09				
WR #:	WF0001129				
PROJECT #:	06MT01				
WR DESCRIPTION:	2006 Residential - Regular Meters				
	1860				Total \$
WR Costs by USoA	135,389				135,389

Business Need

Waterloo North Hydro is required under the federal Electricity and Gas Inspection Act to use approved Revenue Metering Equipment for the purpose of establishing the basis of a charge for the supply of electricity to its customers. WNH meets this requirement for its residential customers by purchasing Measurement Canada approved meters, instrument transformers and other related equipment.

Activity in this work program is driven by new customers, obsolescence of equipment and equipment failure. This activity is mandated.

Project Details / Scope

Cost accumulated under this work order includes the labour, materials, equipment and contract labour to install revenue metering for residential customers.

Expected Benefits

x	Meets the requirement of the federal Electricity and Gas Inspection Act.
x	Fulfills the business needs of WNH in establishing the basis of a charge for the supply of electricity to its customers.

WNH 2006 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-26.10				
WR #:	WF0001134				
PROJECT #:	06MT02				
WR DESCRIPTION:	2006 Commercial & Industrial - Regular Meters				
	1860				Total \$
WR Costs by USoA	148,289				148,289

Business Need

Waterloo North Hydro is required under the federal Electricity and Gas Inspection Act to use approved Revenue Metering Equipment for the purpose of establishing the basis of a charge for the supply of electricity to its customers. WNH meets this requirement for its Commercial and industrial Customers by purchasing Measurement Canada approved meters, instrument transformers and other related equipment.

Activity in this work program is driven by new customers, obsolescence of equipment and equipment failure. This activity is mandated.

Project Details / Scope

Cost accumulated under this work order includes the labour, materials, equipment and contract labour to install revenue metering for residential customers.

Expected Benefits

x	Meets the requirement of the federal Electricity and Gas Inspection Act.
x	Fulfills the business needs of WNH in establishing the basis of a charge for the supply of electricity to its customers.

WNH 2006 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-26.11				
WR #:	WF0001150				
PROJECT #:	06EN11				
WR DESCRIPTION:	2006 UG Services - Residential				
	1850	1855			Total \$
WR Costs by USoA	4,188	414,636			418,824

Business Need

This category includes the connection costs to service new customers. Also captured here are the costs to upgrade the capacity of existing services. The cost per service can vary widely with the nature and capacity of each service. Total expenditures vary with the level of economic activity in the WNH service area.

There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in conflict with the Distribution System Code and municipal development objectives.

Project Details / Scope

This project includes the installation of new services in subdivisions serviced by underground power distribution. Also included are underground services that are installed or replaced as a result of customers requesting upgrades or major modifications to their existing service.

Expected Benefits

x	Supply new customers and growth areas.
x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new distribution equipment and materials.
x	Increased safety of new design standards and clearances.

WNH 2006 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-26.12				
WR #:	WF0001160				
PROJECT #:	06EN10				
WR DESCRIPTION:	Mill Creek Subdivision UG Distribution				
	1840	1845	1850		Total \$
WR Costs by USoA	21,595	75,584	57,073		154,252

Business Need

Underground Residential Subdivisions are capital expansions to the WNH distribution system driven solely by customer demand. In accordance with the Distribution System Code, WNH performs an economic evaluation for each project and provides the developer with an Offer to Connect. Developers that meet WNH's Conditions of Service and provide the necessary financial commitments are connected. Total expenditures vary with the level of economic activity in WNH's service area.

This spending is customer driven.

There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.

Project Details / Scope

This project involves the installation of new plant to facilitate electrical servicing of new residential developments. Included are new primary cables, transformers, civil infrastructure, secondary cables, and other necessary plant and equipment. Work is coordinated with developers and other utilities and is completed in accordance with developer's timelines.

Expected Benefits

- ☒ Increased feeder capacity and distribution assets for growth.
- ☒ Expansion of system to connect new customers.

WNH 2006 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-26.13				
WR #:	WF0001167				
PROJECT #:	06EN10				
WR DESCRIPTION:	Gies Westvale Subdivision - UG				
	1840	1845	1850		Total \$
WR Costs by USoA	31,215	110,293	66,592		208,100

Business Need

Underground Residential Subdivisions are capital expansions to the WNH distribution system driven solely by customer demand. In accordance with the Distribution System Code, WNH performs an economic evaluation for each project and provides the developer with an Offer to Connect. Developers that meet WNH's Conditions of Service and provide the necessary financial commitments are connected. Total expenditures vary with the level of economic activity in WNH's service area.

This spending is customer driven.

There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.

Project Details / Scope

This project involves the installation of new plant to facilitate electrical servicing of new residential developments. Included are new primary cables, transformers, civil infrastructure, secondary cables, and other necessary plant and equipment. Work is coordinated with developers and other utilities and is completed in accordance with developer's timelines.

Expected Benefits

- | | |
|----------|---|
| x | Increased feeder capacity and distribution assets for growth. |
| x | Expansion of system to connect new customers. |

WNH 2006 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-26.14				
WR #:	WF0001187				
PROJECT #:	06EN06				
WR DESCRIPTION:	Snyder's Flats Road - East of Grand River to Sawmill Rd				
	1840	1845	1850		Total \$
WR Costs by USoA	138,493	76,171	16,158		230,822

Business Need

This category includes expenditures for the addition of new feeder assets required to provide service to new customers in areas not previously serviced, and to previously serviced areas, to increase capacity where load density has increased.

Normally projects are identified through system planning activities which include monitoring and analyzing commercial activities, station and feeder peak loading, municipal development activities, developer activities and land development activities.

WNH is located in a region of moderately high growth. As these activities are driven by the level of economic activity in our area, resulting in expenditures that can vary greatly from year to year.

Not proceeding with this customer requested work would result in refusal of connection of new customers or overloading of existing lines, both of which are detrimental to WNH and its customers.

Project Details / Scope

The scope of this project includes building approximately 2 km of new 27.6 kV overhead lines to provide for new 27.6 kV capacity to the Breslau area currently supplied by a radial feed with limited capacity.

Expected Benefits

- | | |
|----------|---|
| x | Provision for increased line capacity for growth areas. |
| x | Increased reliability associated with providing an alternate supply to populated or growth areas. |

WNH 2006 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-26.15				
WR #:	WF0001195				
PROJECT #:	06EN05				
WR DESCRIPTION:	Fischer Hallman Rd - Regional Road Widening				
	1830	1835	1850		Total \$
WR Costs by USoA	236,992	128,209	23,311		388,512

Business Need

This category includes expenditures to relocate/replace pole line assets that conflict with roadway construction activities. The level of spending is driven by the activities of the road authorities and specific projects are rarely known at the time that the budget is developed. Total expenditures can vary greatly from year to year and reimbursement is normally limited to 50% of labour and labour saving devices.

There are no alternatives to these activities. These expenditures are not discretionary as compliance is mandated by the Public Service Works on Highways Act, R.S.O. 1990.

Project Details / Scope

This work includes the removal of all existing poles, conductors, transformers, guying and all other equipment within the road authority's scope of work and construction of a new distribution line to new construction standards at an alternate location.

Expected Benefits

There are seldom any benefits to WNH in relocating existing lines. Experience has shown that assets required to be relocated are rarely at end of life. Although some recovery of materials can occur, most do not comply with current standards for reuse in new construction and are depreciated to the point that the combination of labour cost to recover used materials and the remaining life of the asset often approaches or exceeds the cost to purchase new materials.

x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new plant and materials.
x	Increased safety of new design standards and clearances.

WNH 2006 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-26.16				
WR #:	WF0001199				
PROJECT #:	06EN05				
WR DESCRIPTION:	Ellis Crescent - Allen St to City Limits				
	1830	1835	1850		Total \$
WR Costs by USoA	143,330	79,343	30,714		253,386

Business Need

This category includes expenditures to relocate/replace pole line assets that conflict with roadway construction activities. The level of spending is driven by the activities of the road authorities and specific projects are rarely known at the time that the budget is developed. Total expenditures can vary greatly from year to year and reimbursement is normally limited to 50% of labour and labour saving devices.

There are no alternatives to these activities. These expenditures are not discretionary as compliance is mandated by the Public Service Works on Highways Act, R.S.O. 1990.

Project Details / Scope

This work includes the removal of all existing poles, conductors, transformers, guying and all other equipment within the road authority's scope of work and construction of a new distribution line to new construction standards at an alternate location.

Expected Benefits

There are seldom any benefits to WNH in relocating existing lines. Experience has shown that assets required to be relocated are rarely at end of life. Although some recovery of materials can occur, most do not comply with current standards for reuse in new construction and are depreciated to the point that the combination of labour cost to recover used materials and the remaining life of the asset often approaches or exceeds the cost to purchase new materials.

x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new plant and materials.
x	Increased safety of new design standards and clearances.

WNH 2006 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-26.17
WR #:	WF0001224
PROJECT #:	06EN05
WR DESCRIPTION:	University Ave.- Albert to Lester St. Rebuild

	1830	1835	1840	1845	1850	Total \$
WR Costs by USoA	122,030	61,015	2,034	8,135	10,169	203,383

Business Need

This category includes expenditures to relocate/replace pole line assets that conflict with roadway construction activities. The level of spending is driven by the activities of the road authorities and specific projects are rarely known at the time that the budget is developed. Total expenditures can vary greatly from year to year and reimbursement is normally limited to 50% of labour and labour saving devices.

There are no alternatives to these activities. These expenditures are not discretionary as compliance is mandated by the Public Service Works on Highways Act, R.S.O. 1990.

Project Details / Scope

This work includes the removal of all existing poles, conductors, transformers, guying and all other equipment within the road authority's scope of work and construction of a new distribution line to new construction standards at an alternate location.

Expected Benefits

There are seldom any benefits to WNH in relocating existing lines. Experience has shown that assets required to be relocated are rarely at end of life. Although some recovery of materials can occur, most do not comply with current standards for reuse in new construction and are depreciated to the point that the combination of labour cost to recover used materials and the remaining life of the asset often approaches or exceeds the cost to purchase new materials.

x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new plant and materials.
x	Increased safety of new design standards and clearances.

WNH 2006 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-26.18
WR #:	WF0001228
PROJECT #:	06EN09
WR DESCRIPTION:	Carter Ave and Willowdale Place Cable Replacement

	1840	1845	1850		Total \$
WR Costs by USoA	30,541	41,647	66,635		138,822

Business Need

This category includes expenditures for the replacement of underground distribution feeder assets. Underground distribution is replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. Cable rehabilitation has been explored, however, it has not yet been found to be cost effective in our URD applications. WNH has three (3) distinct populations of Underground Distribution, most of which is underground residential distribution (URD).

- 1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been, and continues to be, the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency and safety are being achieved by retiring the 4 kV distribution system.
- 2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years.
- 3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years.

The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

This area was initially serviced with first generation underground distribution in the early 1960's. This project includes primary trenching in the form of directional drilling and the replacement of transformers. Primary cable is replaced with new cable in duct, transformers are replaced in accordance with the latest standards, and additional spare ducts are installed to facilitate the future replacement of streetlighting and secondary conductors.

Expected Benefits

x	Increased reliability of new distribution equipment and materials.
x	Increased safety of new design standards and clearances.
x	Reduced operational trouble calls.

WNH 2006 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-26.19				
WR #:	WF0001282				
PROJECT #:	06EN09				
WR DESCRIPTION:	Lee Ave and Kane Drive Cable Replacement				
	1840	1845	1850		Total \$
WR Costs by USoA	48,066	68,665	112,153		228,883
Business Need					
This category includes expenditures for the replacement of underground distribution feeder assets. Underground distribution is replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. Cable rehabilitation has been explored, however, it has not yet been found to be cost effective in our URD applications. WNH has three (3) distinct populations of Underground Distribution, most of which is underground residential distribution (URD). 1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been, and continues to be, the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency and safety are being achieved by retiring the 4 kV distribution system. 2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continues to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years. 3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continues to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
This area was initially serviced with first generation underground distribution in the early 1960's.This project includes primary trenching in the form of directional drilling and the replacement of transformers. Primary cable is replaced with new cable in duct, transformers are replaced in accordance with the latest standards, and additional spare ducts are installed to facilitate the future replacement of streetlighting and secondary conductors.					
Expected Benefits					
x	Increased reliability of new distribution equipment and materials.				
x	Increased safety of new design standards and clearances.				
x	Reduced operational trouble calls.				

WNH 2006 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-26.20				
WR #:	WF0001302				
PROJECT #:	06EN10				
WR DESCRIPTION:	Conservation Drive Subdivision				
	1840	1845	1850		Total \$
WR Costs by USoA	44,959	159,086	141,794		345,839

Business Need

Underground Residential Subdivisions are capital expansions to the WNH distribution system driven solely by customer demand. In accordance with the Distribution System Code, WNH performs an economic evaluation for each project and provides the developer with an Offer to Connect. Developers that meet WNH's Conditions of Service and provide the necessary financial commitments are connected. Total expenditures vary with the level of economic activity in WNH's service area.

This spending is customer driven.

There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.

Project Details / Scope

This project involves the installation of new plant to facilitate electrical servicing of new residential developments. Included are new primary cables, transformers, civil infrastructure, secondary cables, and other necessary plant and equipment. Work is coordinated with developers and other utilities and is completed in accordance with developer's timelines.

Expected Benefits

- | | |
|----------|---|
| x | Increased feeder capacity and distribution assets for growth. |
| x | Expansion of system to connect new customers. |

WNH 2006 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-26.21				
WR #:	WF0001303				
PROJECT #:	06EN10				
WR DESCRIPTION:	Hopewell Heights Phase 2				
	1840	1845	1850		Total \$
WR Costs by USoA	35,956	124,647	79,103		239,705

Business Need

Underground Residential Subdivisions are capital expansions to the WNH distribution system driven solely by customer demand. In accordance with the Distribution System Code, WNH performs an economic evaluation for each project and provides the developer with an Offer to Connect. Developers that meet WNH's Conditions of Service and provide the necessary financial commitments are connected. Total expenditures vary with the level of economic activity in WNH's service area.

This spending is customer driven.

There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.

Project Details / Scope

This project involves the installation of new plant to facilitate electrical servicing of new residential developments. Included are new primary cables, transformers, civil infrastructure, secondary cables, and other necessary plant and equipment. Work is coordinated with developers and other utilities and is completed in accordance with developer's timelines.

Expected Benefits

- | | |
|---|---|
| x | Increased feeder capacity and distribution assets for growth. |
| x | Expansion of system to connect new customers. |

WNH 2006 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-26.23				
WR #:	WF0001371				
PROJECT #:	06SN04				
WR DESCRIPTION:	TS HSA Rehabilitation - Switches				
	1815				Total \$
WR Costs by USoA	323,288				323,288
Business Need					
WNH is supplied primarily through the IESO controlled, Hydro One Transmission System at transmission voltages of 115 kV and 230 kV. WNH owns and operates three (3) transmission grid connected Transformer Stations (TS's) operating at 115 kV - 13.8 kV, 230 kV - 27.6 kV and 230 kV - 13.8 kV. Expenditures in this category are made due to one of the following reasons: - there is a need to increase capacity to meet growth in demand. Such needs are normally identified through system planning activities. - the equipment requires replacement or a major refurbishment due to its condition. In such cases, regular maintenance will not address the problem nor is it cost effective. This is normally identified as a result of a variety of regularly scheduled testing and maintenance activities. - the equipment needs to be replaced due obsolescence. Such needs are typically identified through the inability to source spare or replacement components. - the equipment needs to be updated to meet regulatory requirements (Transmission System Code, Market Rules, etc) Where at all possible, projects are scheduled such that one project can satisfy more than one need. Projects being captured in this category include new or major refurbishments to existing switches or breakers, transformers, switchgear, protection and control systems, structural support systems and environmental protection systems. The implications of not taking proper actions and improving equipment capacity or condition as required, could result in the inability to supply power to customers, damage to equipment, increased safety hazards to workers, unreliable or misoperation of equipment, explosive equipment failure and breach of requirements set out in the Transmission System Code.					
Project Details / Scope					
In 2006 WNH started a multistage project of rehabilitating the 1960's vintage Scheifele "A" transformer station. Costs covered under this project include the complete replacement of the original air disconnect switches and air gaps with new air disconnect switches and lightning arresters. The costs include all labour, material, trucking and equipment to specify and procure the switches, the lightning arresters, string insulators, all the consulting fees for structural tower analysis and structural design for the new switch mounting brackets. Costs also include all contractor's charges for installation of the new switches, lightning arresters, and all insulators of a four-legged gantry structure as well as all Hydro One make-ready work required to provide the proper outage isolation. The Hydro One work included addition of a new set of Mid Span Opens (MSOs) as well as upgrades to the existing MSO and loops.					
Expected Benefits					
x	Increased safety to workers and public.				
x	Increased reliability of power to customers.				
x	Compliance with the Transmission System Code, HONI and/or IESO requirements.				

WNH 2006 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-26.24				
WR #:	WF0001372				
PROJECT #:	06SN04				
WR DESCRIPTION:	TS HSA Rehabilitation - Switchgear				
	1815				Total \$
WR Costs by USoA	643,434				643,434

Business Need

WNH is supplied primarily through the IESO controlled, Hydro One Transmission System at transmission voltages of 115 kV and 230 kV. WNH owns and operates three (3) transmission grid connected Transformer Stations (TS's) operating at 115 kV - 13.8 kV, 230 kV - 27.6 kV and 230 kV - 13.8 kV. Expenditures in this category are made due to one of the following reasons:

- there is a need to increase capacity to meet growth in demand. Such needs are normally identified through system planning activities.
- the equipment requires replacement or a major refurbishment due to its condition. In such cases, regular maintenance will not address the problem nor is it cost effective. This is normally identified as a result of a variety of regularly scheduled testing and maintenance activities.
- the equipment needs to be replaced due to obsolescence. Such needs are typically identified through the inability to source spare or replacement components.
- the equipment needs to be updated to meet regulatory requirements (Transmission System Code, Market Rules, etc)

Where at all possible, projects are scheduled such that one project can satisfy more than one need. Projects being captured in this category include new or major refurbishments to existing switches or breakers, transformers, switchgear, protection and control systems, structural support systems and environmental protection systems.

The implications of not taking proper actions and improving equipment capacity or condition as required, could result in the inability to supply power to customers, damage to equipment, increased safety hazards to workers, unreliable or misoperation of equipment, explosive equipment failure and breach of requirements set out in the Transmission System Code.

Project Details / Scope

In 2006 WNH started a multistage project of rehabilitating the 1960's vintage Scheifele "A" transformer station. Costs covered under this project include all procurement and contractor installation charges associated with the replacement of all the original switchgear breakers with new vacuum roll-in breakers. Cost also include reinforcement of the switchgear itself to provide an arc proof level B protection (safe to walk on any side of the switchgear), which consisted of replacement of the front and back doors and all the associated breaker control devices as well as modifications to the top of the gear. The costs include all WNH labour, trucking, materials, and equipment to facilitate this work as well as all outages to perform this work.

Expected Benefits

- | | |
|----------|--|
| x | Increased safety to workers and public. |
| x | Increased reliability of power to customers. |

WNH 2006 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-26.25					
WR #:	WF0001386					
PROJECT #:	06EN09					
WR DESCRIPTION:	U/G Cable Replacement Dansbury and Concordia					
	1830	1835	1840	1845	1850	Total \$
WR Costs by USoA	6,526	19,579	17,948	58,737	60,369	163,160

This category includes expenditures for the replacement of underground distribution feeder assets. Underground distribution is replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. Cable rehabilitation has been explored, however, it has not yet been found to be cost effective in our URD applications. WNH has three (3) distinct populations of Underground Distribution, most of which is underground residential distribution (URD).

1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been, and continues to be, the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency and safety are being achieved by retiring the 4 kV distribution system.

2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years.

3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years.

The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

This area was initially serviced with first generation underground distribution in the early to mid 1970's. This project includes primary trenching in the form of directional drilling and the replacement of transformers. Primary cable is replaced with new cable in duct, transformers are replaced in accordance with the latest standards, and additional spare ducts are installed to facilitate the future replacement of streetlighting and secondary conductors.

Expected Benefits

x	Increased reliability of new distribution equipment and materials.
x	Increased safety of new design standards and clearances.
x	Reduced operational trouble calls.

WNH 2006 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-26.26				
WR #:	WF0001422				
PROJECT #:	06EN06				
WR DESCRIPTION:	River Crossing - Kaufman Flats to Snyder's Flats				
	1830	1835			Total \$
WR Costs by USoA	102,680	55,289			157,969

Business Need

This category includes expenditures for the addition of new feeder assets required to provide service to new customers in areas not previously serviced, and to previously serviced areas, to increase capacity where load density has increased.

Normally projects are identified through system planning activities which include monitoring and analyzing commercial activities, station and feeder peak loading, municipal development activities, developer activities and land development activities.

WNH is located in a region of moderately high growth. As these activities are driven by the level of economic activity in our area, resulting in expenditures that can vary greatly from year to year.

Not proceeding with this customer requested work would result in refusal of connection of new customers or overloading of existing lines, both of which are detrimental to WNH and its customers.

Project Details / Scope

The scope of this project includes building approximately 2 km of new 27.6 kV overhead lines to provide for new 27.6 kV capacity to the Breslau area currently supplied by a radial feed with limited capacity.

Expected Benefits

- | | |
|----------|---|
| x | Provision for increased line capacity for growth areas. |
| x | Increased reliability associated with providing an alternate supply to populated or growth areas. |

WNH 2006 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-26.27				
WR #:	WF0001545				
PROJECT #:	06EN08				
WR DESCRIPTION:	HS 17 Duct Bank - Conestoga Expressway to Scheifele TS				
	1840	1845			Total \$
WR Costs by USoA	32,975	131,901			164,876

Business Need

This category includes expenditures for the addition of new feeder assets required to provide service to new customers in areas not previously serviced, and to previously serviced areas, to increase capacity where load density has increased.

Normally projects are identified through system planning activities which include monitoring and analyzing commercial activities, station and feeder peak loading, municipal development activities, developer activities and land development activities.

WNNH is located in a region of moderately high growth. As these activities are driven by the level of economic activity in our area, resulting in expenditures that can vary greatly from year to year.

Not proceeding with this customer requested work would result in refusal of connection of new customers or overloading of existing lines, both of which are detrimental to WNH and its customers.

Project Details / Scope

This project includes the installation of new underground ductbank to allow for the egress of three (3) new feeders from Scheifele TS.

Expected Benefits

- | | |
|----------|--|
| x | Increased reliability of power to customers. |
| x | Provision for increased supply for growth areas of Waterloo. |

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-27.01				
WR #:	WF0001184				
PROJECT #:	06EN04				
WR DESCRIPTION:	CDM Program Line Loss/Capacitor Installation				
	1830	1835			Total \$
WR Costs by USoA	262,191	141,180			403,370
Business Need					
Waterloo North Hydro considers the ongoing minimization of losses a key strategy in operating an efficient and well functioning distribution system. One component of that strategy is the application of capacitors on the distribution system. This program, aimed at the energy efficiency of the distribution system, will help to reduce distribution system losses and will reduce the system demand. This in turn will help relieve growth strains on transmission network capacity and demand for generation capacity. The reductions benefit all customers and effect permanent changes in electricity demand that are not reliant on sustained changes in customer consumption.					
Project Details / Scope					
In 2005, WNH completed a major analysis of its main 13.8 kV and 27.6 kV feeders which resulted in the deployment of approximately 25 MX of capacitor banks throughout the system in 2006 and 2007. This resulted in a lowering of WNH system peak by approximately 10 MVA. The costs captured in this project include all labour, trucking, material, equipment, consulting costs and contracting costs required to analyze the system and develop a capacitor deployment plan, and to specify, procure, and install the capacitor banks at approximately 40 locations. The costs also included the required engineering and any make ready work to prepare the selected pole location for capacitor installation.					
Expected Benefits					
x	Increased line capacity / lower line losses.				
x	Increased Station capacity / losses.				
x	Improved feeder voltage regulation.				

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-27.02				
WR #:	WF0001191				
PROJECT #:	06EN04				
WR DESCRIPTION:	Hawkesville Road from Kressler Rd to St. Jacobs				
	1830	1835	1850		Total \$
WR Costs by USoA	557,954	293,162	94,568		945,685
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades/additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project included the rebuilding and converting of approximately 4.0 km of overhead lines that were in poor condition and had reached the end of their life. The project also facilitated voltage conversions from 8 kV to 27.6 kV as part of WNH's Asset Management strategy. All equipment including poles, conductors, transformers, and guying were replaced.					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				
x	Increased line capacity / lower line losses from voltage conversions.				

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-27.03				
WR #:	WF0001198				
PROJECT #:	06EN06				
WR DESCRIPTION:	Sawmill Rd - Snyder's Flats to Kraft Drive/Ebycrest Rd				
	1830	1835	1850		Total \$
WR Costs by USoA	313,927	173,781	72,876		560,584
Business Need					
This category includes expenditures for the addition of new feeder assets required to provide service to new customers in areas not previously serviced, and to previously serviced areas, to increase capacity where load density has increased. Normally projects are identified through system planning activities which include monitoring and analyzing commercial activities, station and feeder peak loading, municipal development activities, developer activities and land development activities. WNH is located in a region of moderately high growth. As these activities are driven by the level of economic activity in our area, resulting in expenditures that can vary greatly from year to year. Not proceeding with this customer requested work would result in refusal of connection of new customers or overloading of existing lines, both of which are detrimental to WNH and its customers.					
Project Details / Scope					
The scope of this project includes building approximately 2 km of new 27.6 kV overhead lines to provide for new 27.6 kV capacity to the Breslau area currently supplied by a radial feed with limited capacity.					
Expected Benefits					
x	Provision for increased line capacity for growth areas.				
x	Increased reliability associated with providing an alternate supply to populated or growth areas.				

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-27.04				
WR #:	WF0001213				
PROJECT #:	06EN04				
WR DESCRIPTION:	Alexandra Avenue - Rebuild & Convert Pole Line				
	1830	1835	1850		Total \$
WR Costs by USoA	106,666	60,540	123,963		291,169
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project included the rebuilding and converting of approximately 900 m of overhead line that was in poor condition and had reached the end of its life. The project also facilitated voltage conversions from 4 kV to 13.8 kV as part of WNH's Asset Management strategy. All equipment including poles, conductors, transformers, and guying were replaced.					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				
x	Increased line capacity / lower line losses from voltage conversions.				

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-27.05				
WR #:	WF0001271				
PROJECT #:	06FL02				
WR DESCRIPTION:	R71 - New Single Bucket Forestry Truck				
	1930				Total \$
WR Costs by USoA	210,417				210,417
Business Need					
WNH maintains its fleet of vehicles to achieve a typical useful life of 14 to 16 years for our large vehicles (bucket trucks, RBDs. workbody trucks) and 8 to 10 years for our small vehicles (pickup trucks, vans, etc). WNH has determined that these time frames represent the most cost efficient replacement schedule and to extend beyond these timeframes incurs increased maintenance costs and reduced fleet reliability. WNH replaced Truck R32, a 1993 (14 years old) International tandem chassis with a 55 foot Altec single bucket work platform used by our Forestry crew that was at end of life condition.					
Project Details / Scope					
This project includes all costs associated with developing the specification documents for the truck chassis, work platform, and truck body; completing the tendering process; ordering the vehicle; inspecting the work platform and body during fabrication and assembly of the truck; and commissioning the completed truck at our facility (installing signage and high visibility striping, two way radio system, registering the truck with MTO, completing an in-service training session for our drivers, etc.). WNH specified an International tandem chassis outfitted with a Posi-Plus 60 foot single bucket work platform integrated with a 15 foot vertical single elevator. The unit also has a rear dump box for efficiently hauling and disposing of waste wood chips.					
Expected Benefits					
x	Replacement of Truck R32 will help to reduce total annual fleet maintenance costs by eliminating a 14 year old Forestry bucket truck from our fleet.				
x	The new replacement truck (R71) has extended reach, both vertically and horizontally. This allows our crews to be more efficient as they can complete additional tree trimming without having to move and reposition the truck.				
x	The vertical elevator feature of Truck R71 also allows our Forestry staff to work more effectively and safely in congested areas within the city as they are able to reach the verticle heights they need to access without the knuckle of the work platform's boom being in danger of being hit by passing vehicles.				

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-27.06				
WR #:	WF0001568				
PROJECT #:	06EN10				
WR DESCRIPTION:	Elmira Raceway Subdivision Stages 2 and 3				
	1840	1845	1850		Total \$
WR Costs by USoA	23,885	78,025	57,324		159,234
Business Need					
Underground Residential Subdivisions are capital expansions to the WNH distribution system driven solely by customer demand. In accordance with the Distribution System Code, WNH performs an economic evaluation for each project and provides the developer with an Offer to Connect. Developers that meet WNH's Conditions of Service and provide the necessary financial commitments are connected. Total expenditures vary with the level of economic activity in WNH's service area. This spending is customer driven. There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.					
Project Details / Scope					
This project involves the installation of new plant to facilitate electrical servicing of new residential developments. Included are new primary cables, transformers, civil infrastructure, secondary cables, and other necessary plant and equipment. Work is coordinated with developers and other utilities and is completed in accordance with developer's timelines.					
Expected Benefits					
☒	Increased feeder capacity and distribution assets for growth.				
☒	Expansion of system to connect new customers.				

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-27.07
WR #:	WF0001608
PROJECT #:	06EN09
WR DESCRIPTION:	Cable Replacement, Lakeview Drive & Pine Ridge Road

	1840	1845	1850		Total \$
WR Costs by USoA	96,088	137,866	183,821		417,775

Business Need

This category includes expenditures for the replacement of underground distribution feeder assets. Underground distribution is replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. Cable rehabilitation has been explored, however, it has not yet been found to be cost effective in our URD applications. WNH has three (3) distinct populations of Underground Distribution, most of which is underground residential distribution (URD).

- 1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been, and continues to be, the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency, and safety are being achieved by retiring the 4 kV distribution system.
- 2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years.
- 3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years.

The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

This area was initially serviced with first generation underground distribution in the mid 1970's. This project includes primary trenching in the form of directional drilling and the replacement of transformers. Primary cable is replaced with new cable in duct, transformers are replaced in accordance with the latest standards, and additional spare ducts are installed to facilitate the future replacement of streetlighting and secondary conductors.

Expected Benefits

- | | |
|----------|--|
| x | Increased reliability of new distribution equipment and materials. |
| x | Increased safety of new design standards and clearances. |
| x | Reduced operational trouble calls. |

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-27.08				
WR #:	WF0001609				
PROJECT #:	06EN09				
WR DESCRIPTION:	Cable Replacement, Whitmore Dr.				
	1840	1845	1850		Total \$
WR Costs by USoA	46,654	69,980	77,756		194,390
Business Need					
This category includes expenditures for the replacement of underground distribution feeder assets. Underground distribution is replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. Cable rehabilitation has been explored, however, it has not yet been found to be cost effective in our URD applications. WNH has three (3) distinct populations of Underground Distribution, most of which is underground residential distribution (URD). 1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been, and continues to be, the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency, and safety are being achieved by retiring the 4 kV distribution system. 2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years. 3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
This area was initially serviced with first generation underground distribution in the early 1960's. This project includes primary trenching in the form of directional drilling and the replacement of transformers. Primary cable is replaced with new cable in duct, transformers are replaced in accordance with the latest standards, and additional spare ducts are installed to facilitate the future replacement of streetlighting and secondary conductors.					
Expected Benefits					
x	Increased reliability of new distribution equipment and materials.				
x	Increased safety of new design standards and clearances.				
x	Reduced operational trouble calls.				

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-27.09				
WR #:	WF0001639				
PROJECT #:	06EN10				
WR DESCRIPTION:	Tealby Drive U/G Distribution				
	1840	1845	1850		Total \$
WR Costs by USoA	18,616	71,805	42,551		132,972
Business Need					
Underground Residential Subdivisions are capital expansions to the WNH distribution system driven solely by customer demand. In accordance with the Distribution System Code, WNH performs an economic evaluation for each project and provides the developer with an Offer to Connect. Developers that meet WNH's Conditions of Service and provide the necessary financial commitments are connected. Total expenditures vary with the level of economic activity in WNH's service area. This spending is customer driven. There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.					
Project Details / Scope					
This project involves the installation of new plant to facilitate electrical servicing of new residential developments. Included are new primary cables, transformers, civil infrastructure, secondary cables, and other necessary plant and equipment. Work is coordinated with developers and other utilities and is completed in accordance with developer's timelines.					
Expected Benefits					
☒	Increased feeder capacity and distribution assets for growth.				
☒	Expansion of system to connect new customers.				

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-27.10				
WR #:	WF0001671				
PROJECT #:	06EN04				
WR DESCRIPTION:	Kraft Dr - Sawmill to Bloomingdale Rd, Woolwich				
	1830	1835	1850		Total \$
WR Costs by USoA	98,086	53,851	40,388		192,325
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades/additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project included the rebuilding of approximately 1.6 km of overhead distribution that was in poor condition and had reached the end of its life. The project also facilitated the conversion from 8 kV to 27.6 kV as part of WNH's Asset Management strategy. Transformers, conductors, poles, guys/anchors, and other equipment were replaced. This project is part of several that provide for new 27.6 kV capacity to the Breslau area currently supplied by a radial feed with limited capacity.					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				
x	Increased line capacity / lower line losses from voltage conversions.				

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-27.11				
WR #:	WF0001672				
PROJECT #:	06EN06				
WR DESCRIPTION:	Ebycrest Rd - Sawmill to Bridge St., Woolwich				
	1830	1835	1850		Total \$
WR Costs by USoA	230,436	124,362	10,973		365,771
Business Need					
This category includes expenditures for the addition of new feeder assets required to provide service to new customers in areas not previously serviced, and to previously serviced areas, to increase capacity where load density has increased. Normally projects are identified through system planning activities which include monitoring and analyzing commercial activities, station and feeder peak loading, municipal development activities, developer activities and land development activities. WNH is located in a region of moderately high growth. As these activities are driven by the level of economic activity in our area, resulting in expenditures that can vary greatly from year to year. Not proceeding with this customer requested work would result in refusal of connection of new customers or overloading of existing lines, both of which are detrimental to WNH and its customers.					
Project Details / Scope					
The scope of this project includes building approximately 1.9 km of new 27.6 kV overhead lines to provide for new 27.6 kV capacity to the Breslau area currently supplied by a radial feed with limited capacity.					
Expected Benefits					
☒	Provision for increased line capacity for growth areas.				
☒	Increased reliability associated with providing an alternate supply to populated or growth areas.				

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-27.12				
WR #:	WF0001696				
PROJECT #:	06EN04				
WR DESCRIPTION:	Floradale Road - Rebuild and Convert Pole Line				
	1830	1835	1850		Total \$
WR Costs by USoA	275,651	149,123	27,113		451,888
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades/additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project included the rebuilding of approximately 2.6 km of overhead distribution that was in poor condition and had reached the end of its life. The project also facilitated the conversion from 8 kV to 27.6 kV as part of WNH's Asset Management strategy. Transformers, conductors, poles, guys/anchors, and other equipment were replaced.					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				
x	Increased line capacity / lower line losses from voltage conversions.				

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-27.13				
WR #:	WF0001785				
PROJECT #:	06EN04				
WR DESCRIPTION:	Reid Woods Dr.- East of Arthur St. N, Woolwich				
	1830	1835	1850		Total \$
WR Costs by USoA	119,261	65,221	1,863		186,345
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades/additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project included the rebuilding of approximately 700 m of overhead distribution that was in poor condition and had reached the end of its life. Transformers, conductors, poles, guys/anchors, and other equipment were replaced.					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				
x	Increased line capacity / lower line losses from voltage conversions.				

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-27.14				
WR #:	WF0001822				
PROJECT #:	06EN05				
WR DESCRIPTION:	Weber Street Regional Relocation				
	1830	1835	1850		Total \$
WR Costs by USoA	106,975	54,336	8,490		169,801
Business Need					
This category includes expenditures to relocate/replace pole line assets that conflict with roadway construction activities. The level of spending is driven by the activities of the road authorities and specific projects are rarely known at the time that the budget is developed. Total expenditures can vary greatly from year to year and reimbursement is normally limited to 50% of labour and labour saving devices. There are no alternatives to these activities. These expenditures are not discretionary as compliance is mandated by the Public Service Works on Highways Act, R.S.O. 1990.					
Project Details / Scope					
This work includes the removal of all existing poles, conductors, transformers, guying and all other equipment within the road authority's scope of work and construction of a new distribution line to new construction standards at an alternate location.					
Expected Benefits					
There are seldom any benefits to WNH in relocating existing lines. Experience has shown that assets required to be relocated are rarely at end of life. Although some recovery of materials can occur, most do not comply with current standards for reuse in new construction and are depreciated to the point that the combination of labour cost to recover used materials and the remaining life of the asset often approaches or exceeds the cost to purchase new materials.					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-27.15
WR #:	WF0001844
PROJECT #:	06EN13
WR DESCRIPTION:	2007 GIS - Mapping - Capital

	1925				Total \$
WR Costs by USoA	188,260				188,260

Business Need

In 2005 WNH began implementing an ESRI Geographic Information System (GIS) to support its business operations. GIS integrates hardware, software, and data for capturing, managing, analyzing, and displaying asset and customer information. GIS provides critical tools to organize information and knowledge, make informed decisions, improve communications and increase efficiency of work processes. From its inception, much work has been performed in transferring paper based asset data into the GIS data base. WNH currently uses its GIS to assist with engineering design, asset management, supply planning outage planning and budgeting processes. Data types currently maintained are asset type, quantity, condition, location and results of inspection and maintenance programs. The GIS is constantly being updated and expanded as new assets are installed, such as with new constructions or replacing assets, and also as new analytical tools are needed. There are plans to integrate the GIS with other enterprise information systems such as outage management, SCADA and engineering analysis tools to provide faster, more efficient analysis and response to power system operational issues.

The consequences of not proceeding would be to maintain asset information in paper based formats that are difficult and inefficient to maintain. These formats also do not support the increased asset analysis and reporting required for current asset management and regulatory compliance.

Project Details / Scope

The focus for the GIS system in 2007 was to continue to build the database of primary and secondary distribution circuits. A number of external tools were implemented to aid in data extraction from the system. Work was also performed on the 'Joint Use' database for third party attachments.

Expected Benefits

x	Increased efficiency in maintaining information.
x	Increased efficiency accessing information.
x	Increased ability to analyze data and develop improvement strategies.
x	Increased ability to report data to internal and external stakeholders.

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-27.16				
WR #:	WF0001866				
PROJECT #:	06SS02				
WR DESCRIPTION:	2007 System Hardware				
	1920				Total \$
WR Costs by USoA	160,484				160,484
Business Need					
In 2007 WNH recorded their hardware requirements in a "standing" Work Order in which all hardware costs were accumulated. This work order consists of many different corporate hardware purchases. The purchases are spread among multiple vendors across multiple P.O.'s. These purchases include new servers, server racks, monitors, PC's, printers. These purchases were necessary in order to keep up-to-date with technology, to meet the computer operational and informational needs of the corporation and to ensure appropriate backup/recovery solutions are in place for WNH.					
Project Details / Scope					
WNH has reviewed this work order and has determined that it consists of many small purchases, the largest of which was \$28,091 paid to Able-One Systems Inc.					
Expected Benefits					
☒ Increased business efficiency of the organization in providing up to date computer hardware.					

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-27.17				
WR #:	WF0001872				
PROJECT #:	06EN04				
WR DESCRIPTION:	Depreciated Pole Replacement				
	1830	1835	1850		Total \$
WR Costs by USoA	95,985	49,912	46,073		191,971
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades/additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project included replacing individual poles that were identified under the 2007 WNH pole testing program as in poor condition and needing immediate replacement. Poles were replaced as close as possible to their existing locations and all hardware, transformers and other equipment associated with the pole were replaced. Where possible, poles were brought up to today's standards and clearances. Some poles were replaced "like for like" where existing conditions dictated.					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-27.18				
WR #:	WF0001874				
PROJECT #:	06EN07				
WR DESCRIPTION:	OH Commercial & Industrial Services				
	1850	1855			Total \$
WR Costs by USoA	11,501	152,802			164,303
Business Need					
This category includes the connection costs to service new large commercial and industrial customers. Also captured here are the costs to upgrade the capacity of existing services. The cost per service can vary widely with the nature and capacity of each service. Total expenditures vary with the level of economic activity in the WNH service area. There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.					
Project Details / Scope					
This project includes the installation of new services in overhead distribution areas. Also included are services that are installed or replaced as a result of customers requesting upgrades or major modifications to their existing service. The installation of new services include all labour and equipment associated with connecting customer's electrical servicing equipment to WNH lines - wire, poles, hardware.					
Expected Benefits					
x	Provision for growth.				
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new distribution equipment and materials.				
x	Increased safety of new design standards and clearances.				

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-27.19				
WR #:	WF0001875				
PROJECT #:	06EN07				
WR DESCRIPTION:	OH Residential Services				
	1850	1855			Total \$
WR Costs by USoA	22,557	150,960			173,517
Business Need					
This category includes the connection costs to service new residential customers. Also captured here are the costs to upgrade the capacity of existing services. The cost per service can vary widely with the nature and capacity of each service. Total expenditures vary with the level of economic activity in the WNH service area. There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.					
Project Details / Scope					
This project includes the installation of new services in overhead distribution areas. Also included are services that are installed or replaced as a result of customers requesting upgrades or major modifications to their existing service. The installation of new services include all labour and equipment associated with connecting customer's electrical servicing equipment to WNH lines - distribution equipment only.					
Expected Benefits					
☒	Provision for growth.				
☒	Reduced exposure to safety hazards associated with aged plant and equipment.				
☒	Increased reliability of new distribution equipment and materials.				
☒	Increased safety of new design standards and clearances.				

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY													
TABLE #:	2-27.20												
WR #:	WF0001901												
PROJECT #:	06EN11												
WR DESCRIPTION:	U/G Residential Services Distribution												
	1855				Total \$								
WR Costs by USoA	385,059				385,059								
Business Need													
This category includes the connection costs to service new customers. Also captured here are the costs to upgrade the capacity of existing services. The cost per service can vary widely with the nature and capacity of each service. Total expenditures vary with the level of economic activity in the WNH service area. There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in conflict with the Distribution System Code and municipal development objectives.													
Project Details / Scope													
This project includes the installation of new services in new subdivisions serviced by underground power distribution. Also included are underground services that are installed or replaced as a result of customers requesting upgrades or major modifications to their existing service.													
Expected Benefits													
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%; text-align: center;">x</td> <td>Supply new customers and growth areas.</td> </tr> <tr> <td style="text-align: center;">x</td> <td>Reduced exposure to safety hazards associated with aged plant and equipment.</td> </tr> <tr> <td style="text-align: center;">x</td> <td>Increased reliability of new distribution equipment and materials.</td> </tr> <tr> <td style="text-align: center;">x</td> <td>Increased safety of new design standards and clearances.</td> </tr> </table>						x	Supply new customers and growth areas.	x	Reduced exposure to safety hazards associated with aged plant and equipment.	x	Increased reliability of new distribution equipment and materials.	x	Increased safety of new design standards and clearances.
x	Supply new customers and growth areas.												
x	Reduced exposure to safety hazards associated with aged plant and equipment.												
x	Increased reliability of new distribution equipment and materials.												
x	Increased safety of new design standards and clearances.												

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-27.21				
WR #:	WF0001912				
PROJECT #:	06MT01				
WR DESCRIPTION:	07 Residential Meters				
	1860				Total \$
WR Costs by USoA	174,160				174,160
Business Need					
As part of WNH's Third Tranche CDM Program, WNH conducted a pilot Smart Meter Program.					
Project Details / Scope					
WNH installed 500 Tantulus Smart Meters into residential customers' home. WNH learned valuable information in this pilot. The installation of Smart Meters at WNH is a result of the Ontario Ministry of Energy's instructions as set forth in Section 2, Procument, of Ontario Regulation 427/06 made under the Electricity Act, 1998 (and as amended), entitled: Smart Meters: Discretionary Metering Activity and Procurement Principles. As part of the Provincial Smart Metering Initiative - Phase 2 RFP led by London Hydro, WHN has selected and deployed the Sensus Flexnet Smart Metering Infrastructure. Cost accumulated under this WR include the labour, materials, equipment and contract labour to install approximately 50,000 smart meters for residential customers and commercial customers with electrical demands less than 50 kW. The 2007 work program included the development of equipment specifications and plans for the deployment of smart meters.					
Expected Benefits					
x	Testing of Smart Meter Product.				
x	Determine operational and set-up issues WNH will face upon full deployment.				

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-27.22				
WR #:	WF0001933				
PROJECT #:	06SN02				
WR DESCRIPTION:	HSA Rehabilitation - Building repairs and upgrades				
	1808				Total \$
WR Costs by USoA	550,212				550,212
Business Need					
WNH is supplied primarily through the IESO controlled, Hydro One Transmission System at transmission voltages of 115 kV and 230 kV. WNH owns and operates three (3) transmission grid connected Transformer Stations (TS's) operating at 115 kV - 13.8 kV, 230 kV - 27.6 kV and 230 kV - 13.8 kV. Expenditures in this category are made due to one of the following reasons: - there is a need to increase capacity to meet growth in demand. Such needs are normally identified through system planning activities. - the equipment requires replacement or a major refurbishment due to its condition. In such cases, regular maintenance will not address the problem nor is it cost effective. This is normally identified as a result of a variety of regularly scheduled testing and maintenance activities. - the equipment needs to be replaced due to obsolescence. Such needs are typically identified through the inability to source spare or replacement components. - the equipment needs to be updated to meet regulatory requirements (Transmission System Code, Market Rules, etc) Where at all possible, projects are scheduled such that one project can satisfy more than one need. Projects being captured in this category include new or major refurbishments to existing switches or breakers, transformers, switchgear, protection and control systems, structural support systems and environmental protection systems. The implications of not taking proper actions and improving equipment capacity or condition as required, could result in the inability to supply power to customers, damage to equipment, increased safety hazards to workers, unreliable or misoperation of equipment, explosive equipment failure and breach of requirements set out in the Transmission System Code.					
Project Details / Scope					
In 2006 WNH started a multistage project of rehabilitating the 1960's vintage Scheifele "A" transformer station. This project consisted of all labour, material, trucking, equipment, consulting charges and contractor charges to specify, procure and install a new oil containment pit around the 2 transformers, upgrade and extend the existing fire wall to bring it to code, install new concrete encased duct banks for control cables going to each transformer as well as each HV disconnect switch.					
Expected Benefits					
x	Increased safety to workers and public.				
x	Increased reliability of power to customers.				
x	Compliance with the Transmission System Code, HONI and/or IESO requirements.				
x	Reduced risk to the environment.				

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-27.23				
WR #:	WF0001949				
PROJECT #:	06EN09				
WR DESCRIPTION:	Braemore,Sandowne Cable Replacement Area 8				
	1840	1845	1850		Total \$
WR Costs by USoA	152,054	231,387	277,664		661,105

Business Need

This category includes expenditures for the replacement of underground distribution feeder assets. Underground distribution is replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. Cable rehabilitation has been explored, however, it has not yet been found to be cost effective in our URD applications. WNH has three (3) distinct populations of Underground Distribution, most of which is underground residential distribution (URD).

- 1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been, and continues to be, the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency and safety are being achieved by retiring the 4 kV distribution system.
- 2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years.
- 3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years.

The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

This area was initially serviced with first generation underground distribution in the 1960's. This project includes primary trenching in the form of directional drilling and the replacement of transformers. Primary cable is replaced with new cable in duct, transformers are replaced in accordance with the latest standards, and additional spare ducts are installed to facilitate the future replacement of streetlighting and secondary conductors.

Expected Benefits

x	Increased reliability of new distribution equipment and materials.
x	Increased safety of new design standards and clearances.
x	Reduced operational trouble calls.

WNL 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-27.24				
WR #:	WF0001954				
PROJECT #:	06EN04				
WR DESCRIPTION:	St Charles - Pole Line Rebuild - 1935-1940				
	1830	1835	1850		Total \$
WR Costs by USOA	78,395	43,117	9,146		130,659
Business Need					
Waterloo North Hydro (WNL) has a population of approximately 24,000 overhead line poles. WNL recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNL's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades/additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project included rebuilding of overhead distribution that was in poor condition and had reached the end of its life. The project also facilitated the conversion from 8 kV to 27.6 kV as part of WNL's Asset Management strategy. Transformers, conductors, poles, guys/anchors, and other equipment were replaced.					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				
x	Increased line capacity / lower line losses from voltage conversions.				

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-27.25				
WR #:	WF0001955				
PROJECT #:	06EN04				
WR DESCRIPTION:	Bridge St - West of Ebycrest Rd, Woolwich				
	1830	1835	1850		Total \$
WR Costs by USoA	177,596	96,871	48,435		322,902
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades/additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project included the rebuilding of approximately 2.4 km of overhead distribution that was in poor condition and had reached the end of its life. The project also facilitated the conversion from 8 kV to 27.6 kV as part of WNH's Asset Management strategy. Transformers, conductors, poles, guys/anchors, and other equipment were replaced. This project is part of several that provide for new 27.6 kV capacity to the Breslau area currently supplied by a radial feed with limited capacity.					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				
x	Increased line capacity / lower line losses from voltage conversions.				

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-27.26				
WR #:	WF0002008				
PROJECT #:	06EN09				
WR DESCRIPTION:	Glenelm Cresc & Lonelm Crt - Primary & Transformer Replacement				
	1840	1845	1850		Total \$
WR Costs by USoA	35,468	54,679	57,635		147,782
Business Need					
This category includes expenditures for the replacement of underground distribution feeder assets. Underground distribution is replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. Cable rehabilitation has been explored, however, it has not yet been found to be cost effective in our URD applications. WNH has three (3) distinct populations of Underground Distribution, most of which is underground residential distribution (URD). 1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been, and continues to be, the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency and safety are being achieved by retiring the 4kV distribution system. 2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continues to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years. 3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continues to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
This area was initially serviced with first generation underground distribution in the mid to late1970's.This project includes primary trenching in the form of directional drilling and the replacement of transformers. Primary cable is replaced with new cable in duct, transformers are replaced in accordance with the latest standards, and additional spare ducts are installed to facilitate the future replacement of streetlighting and secondary conductors.					
Expected Benefits					
x	Increased reliability of new distribution equipment and materials.				
x	Increased safety of new design standards and clearances.				
x	Reduced operational trouble calls.				

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-27.27				
WR #:	WF0002052				
PROJECT #:	06EN04				
WR DESCRIPTION:	Capital Poles and Circuits - March 1, 2007				
	1830	1835	1850		Total \$
WR Costs by USoA	132,390	71,621	13,022		217,033
Business Need					
Capital replacement of poles and circuits damaged by ice and high wind storm March 2, 2007.					
Project Details / Scope					
The scope of this project included the replacement of 12 poles King St. N, toward St. Jacobs. Extensive repairs were required to the conductors, including new insulators and guying. This work order also covered the costs for the emergency pole replacements in various other locations (Arthur St. N. Elmira, Albert Street, Waterloo) damaged by the same storm.					
Expected Benefits					
x	Restoration of electricity supply to approx 2,000 customers affected by downed/damaged pole lines.				
x	Eliminate public safety hazard caused by downed/damaged powerlines.				
x	Maintain distribution system reliability and extended life of plant.				

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY				
TABLE #:	2-27.28			
WR #:	WF0002054			
PROJECT #:	06EN10			
WR DESCRIPTION:	Ferris Drive Phase 2 Underground			
	1840	1845	1850	Total \$
WR Costs by USoA	17,984	69,367	41,106	128,458
Business Need				
Underground Residential Subdivisions are capital expansions to the WNH distribution system driven solely by customer demand. In accordance with the Distribution System Code, WNH performs an economic evaluation for each project and provides the developer with an Offer to Connect. Developers that meet WNH's Conditions of Service and provide the necessary financial commitments are connected. Total expenditures vary with the level of economic activity in WNH's service area. This spending is customer driven. There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.				
Project Details / Scope				
This project involves the installation of new plant to facilitate electrical servicing of new residential developments. Included are new primary cables, transformers, civil infrastructure, secondary cables, and other necessary plant and equipment. Work is coordinated with developers and other utilities and is completed in accordance with developer's timelines.				
Expected Benefits				
☒	Increased feeder capacity and distribution assets for growth.			
☒	Expansion of system to connect new customers.			

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-27.29				
WR #:	WF0002095				
PROJECT #:	06EN04				
WR DESCRIPTION:	Anndale Road rebuild				
	1830	1835	1850		Total \$
WR Costs by USoA	78,143	41,203	22,733		142,078
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades/additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project included the rebuilding and converting of overhead distribution that was in poor condition and had reached the end of its life. The project also facilitated voltage conversions from 4 kV to 13.8 kV as part of WNH's Asset Management strategy. All equipment including poles, conductors, transformers, and guying were replaced.					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				
x	Increased line capacity / lower line losses from voltage conversions.				

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-27.30				
WR #:	WF0002222				
PROJECT #:	06EN04				
WR DESCRIPTION:	Fischer-Hallman Rd, Waterloo				
	1830	1835	1850		Total \$
WR Costs by USoA	210,676	115,213	3,292		329,181
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades/additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project included the rebuilding of overhead distribution that was in poor condition and had reached the end of its life. All equipment including poles, conductors, transformers, and guying were replaced.					
Expected Benefits					
☒	Reduced exposure to safety hazards associated with aged plant and equipment.				
☒	Increased reliability of new plant and materials.				
☒	Increased safety of new design standards and clearances.				

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-27.31				
WR #:	WF0002539				
PROJECT #:	06FL02				
WR DESCRIPTION:	R89 - New Single Bucket Truck				
	1930				Total \$
WR Costs by USoA	179,242				179,242
Business Need					
WNH maintains its fleet of vehicles to achieve a typical useful life of 14 to 16 years for our large vehicles (bucket trucks, RBDs, workbody trucks) and 8 to 10 years for our small vehicles (pickup trucks, vans, etc). WNH has determined that these time frames represent the most cost efficient replacement schedule and that to extend beyond these timeframes it incurs increased maintenance costs and reduced fleet reliability. WNH's primary trouble truck (R24) in 2007 was a 2002 (5 years old) Freightliner chassis with a 42 ft single bucket work platform. This unit operates five days a week for regular duty and seven days a week to respond to after hour emergency calls. To ensure we can maintain R24 for at least 14 years of service life, we normally use this type of truck as the primary trouble response vehicle for the first 5 to 7 years of its life and then assign it to another crew to reduce the intensity of use for the balance of the truck's useful life. Thus, WNH has added Truck R89 to our fleet as the replacement of truck R35. R35 was a 1987 (20 years old) Ford F800 single axle chassis with a 45 foot single bucket work platform.					
Project Details / Scope					
This project includes all costs associated with developing the specification documents for the truck chassis, work platform, and truck body; completing the tendering process; ordering the vehicle; inspecting the work platform and body during fabrication and assembly of the truck; and commissioning the completed truck at our facility (installing signage and high visibility striping, two way radio system, registering the truck with MTO, completing an in-service training session for our drivers, etc.). WNH purchased an International tandem chassis with a 45 foot Posi-Plus single bucket work platform. This new truck will be assigned to our Service Department and will be used to provide the initial response to all trouble calls.					
Expected Benefits					
x	Replacement of Truck R35 will help to reduce total annual fleet maintenance costs by eliminating our oldest single bucket truck (R35 - 14 years old) from our fleet.				
x	The new replacement truck (R89) allowed us to maintain a reliable vehicle to respond to all trouble calls and ensure we achieve an average working life for our large vehicles of at least 14 years.				
x	The replacement truck (R89) was equipped with improved emergency lighting and vehicle marker lighting which helped to improve the visibility of this truck during low light situations. This improves the safety for our On-Call Powerline Maintainers when they respond to emergency calls such as motor vehicle accidents affecting our poles and other equipment. This is especially important when weather creates poor visibility situations such as fog, blowing snow, etc.				

WNH 2007 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-27.32				
WR #:	WF0001433				
PROJECT #:	06EN05				
WR DESCRIPTION:	Wideman Rd., - West of Erbsville Rd., Waterloo				
	1830	1835	1850		Total \$
WR Costs by USoA	87,770	48,921	7,194		143,886

Business Need

This category includes expenditures to relocate/replace pole line assets that conflict with roadway construction activities. The level of spending is driven by the activities of the road authorities and specific projects are rarely known at the time that the budget is developed. Total expenditures can vary greatly from year to year and reimbursement is normally limited to 50% of labour and labour saving devices.

There are no alternatives to these activities. These expenditures are not discretionary as compliance is mandated by the Public Service Works on Highways Act, R.S.O. 1990.

Project Details / Scope

This work includes the removal of all existing poles, conductors, transformers, guying and all other equipment within the road authority's scope of work and construction of a new distribution line to new construction standards at an alternate location.

Expected Benefits

There are seldom any benefits to WNH in relocating existing lines. Experience has shown that assets required to be relocated are rarely at end of life. Although some recovery of materials can occur, most do not comply with current standards for reuse in new construction and are depreciated to the point that the combination of labour cost to recover used materials and the remaining life of the asset often approaches or exceeds the cost to purchase new materials.

x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new plant and materials.
x	Increased safety of new design standards and clearances.

WNH 2008 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-28.01
WR #:	WF0001610
PROJECT #:	06EN09
WR DESCRIPTION:	Cable Replacement, Castlefield Ave., Anndale Rd.

	1830	1840	1845	1850	Total \$
WR Costs by USoA	2,798	61,565	95,146	120,332	279,843

Business Need

This category includes expenditures for the replacement of underground distribution feeder assets. Underground distribution is replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. Cable rehabilitation has been explored, however, it has not yet been found to be cost effective in our URD applications. WNH has three (3) distinct populations of Underground Distribution, most of which is underground residential distribution (URD).

- 1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been, and continues to be, the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency, and safety are being achieved by retiring the 4 kV distribution system.
- 2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years.
- 3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years.

The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

This area was initially serviced with first generation underground distribution in the mid to late 1970's. This project includes primary trenching in the form of directional drilling and the replacement of transformers. Primary cable is replaced with new cable in duct, transformers are replaced in accordance with the latest standards, and additional spare ducts are installed to facilitate the future replacement of streetlighting and secondary conductors.

Expected Benefits

x	Increased reliability of new distribution equipment and materials.
x	Increased safety of new design standards and clearances.
x	Reduced operational trouble calls.

WNH 2008 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-28.02
WR #:	WF0001956
PROJECT #:	06EN06
WR DESCRIPTION:	Ebycrest Rd - Bridge St to Victoria St., Breslau

	1830	1835	1850		Total \$
WR Costs by USoA	242,333	128,984	19,543		390,860

Business Need

This category includes expenditures for the addition of new feeder assets required to provide service to new customers in areas not previously serviced and to previously serviced areas to increase capacity where load density has increased. Normally projects are identified through system planning activities which include monitoring and analyzing commercial activities, station and feeder peak loading, municipal development activities, developer activities and land development activities.

WNH is located in a region of moderately high growth. As these activities are driven by the level of economic activity in our area, resulting in expenditures that can vary greatly from year to year.

Not proceeding with this customer requested work would result in refusal of connection of new customers or overloading of existing lines, both of which are detrimental to WNH and its customers.

Project Details / Scope

This project includes the construction of new overhead conductors, poles, transformers, guying and other plant associated with providing new 27.6 kV system capacity through a second point of supply to the Breslau area.

Expected Benefits

- ☒ Provision for increased line capacity for growth areas.
- ☒ Increased reliability associated with providing an alternate supply to populated or growth areas.

WNH 2008 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-28.03				
WR #:	WF0001996				
PROJECT #:	06EN09				
WR DESCRIPTION:	Underground Rebuild on Mayfield Ave and Meaford Drive				
	1840	1845	1850		Total \$
WR Costs by USoA	98,153	160,614	187,384		446,151

Business Need

This category includes expenditures for the replacement of underground distribution feeder assets. Underground distribution is replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. Cable rehabilitation has been explored, however, it has not yet been found to be cost effective in our URD applications. WNH has three (3) distinct populations of Underground Distribution, most of which is underground residential distribution (URD).

1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been, and continues to be, the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency, and safety are being achieved by retiring the 4 kV distribution system.

2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years.

3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years.

The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

This area was initially serviced with first generation underground distribution in the 1960's. This project includes primary trenching in the form of directional drilling and the replacement of transformers. Primary cable is replaced with new cable in duct, transformers are replaced in accordance with the latest standards, and additional spare ducts are installed to facilitate the future replacement of streetlighting and secondary conductors.

Expected Benefits

- | | |
|----------|--|
| x | Increased reliability of new distribution equipment and materials. |
| x | Increased safety of new design standards and clearances. |
| x | Reduced operational trouble calls. |

WNH 2008 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-28.04
WR #:	WF0002010
PROJECT #:	06EN05
WR DESCRIPTION:	Erb St. W - Westmount to Fischer/Hallman Rd

	1830	1835	1850		Total \$
WR Costs by USoA	731,054	384,765	166,732		1,282,551

Business Need

This category includes expenditures to relocate/replace pole line assets that conflict with roadway construction activities. The level of spending is driven by the activities of the road authorities and specific projects are rarely known at the time that the budget is developed. Total expenditures can vary greatly from year to year and reimbursement is normally limited to 50% of labour and labour saving devices.

There are no alternatives to these activities. These expenditures are not discretionary as compliance is mandated by the Public Service Works on Highways Act, R.S.O. 1990.

Project Details / Scope

This work includes the removal of all existing poles, conductors, transformers, guying and all other equipment within the road authority's scope of work and construction of a new distribution line to new construction standards at an alternate location.

Expected Benefits

There are seldom any benefits to WNH in relocating existing lines. Experience has shown that assets required to be relocated are rarely at end of life. Although some recovery of materials can occur, most do not comply with current standards for reuse in new construction and are depreciated to the point that the combination of labour cost to recover used materials and the remaining life of the asset often approaches or exceeds the cost to purchase new materials.

x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new plant and materials.
x	Increased safety of new design standards and clearances.

WNH 2008 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-28.05				
WR #:	WF0002070				
PROJECT #:	06EN04				
WR DESCRIPTION:	Ament Line Voltage Conversion 27 kV-Linwood				
	1830	1835	1850		Total \$
WR Costs by USoA	375,273	205,227	5,864		586,364

Business Need

Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades/additions.

Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

The scope of this project included the replacement of overhead lines in poor condition and at the end of their useful life and also conversion from 8 kV to 27.6 kV. Poles, transformers, conductor and all associated hardware were replaced. This project is part of several that provides for a second point of 27.6 kV supply to the Linwood settlement area which is currently supplied by a radial 27.6 kV feed originating in Elmira and through Hydro One territory.

Expected Benefits

x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new plant and materials.
x	Increased safety of new design standards and clearances.
x	Increased line capacity / lower line losses from voltage conversions.

WNH 2008 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-28.06
WR #:	WF0002223
PROJECT #:	06EN05
WR DESCRIPTION:	Farmers Market Rd, Woolwich

	1830	1835	1850		Total \$
WR Costs by USoA	118,454	62,929	3,702		185,085

Business Need

This category includes expenditures to relocate/replace pole line assets that conflict with roadway construction activities. The level of spending is driven by the activities of the road authorities and specific projects are rarely known at the time that the budget is developed. Total expenditures can vary greatly from year to year and reimbursement is normally limited to 50% of labour and labour saving devices.

There are no alternatives to these activities. These expenditures are not discretionary as compliance is mandated by the Public Service Works on Highways Act, R.S.O. 1990.

Project Details / Scope

This work includes the removal of all existing poles, conductors, transformers, guying and all other equipment within the road authority's scope of work and construction of a new distribution line to new construction standards at an alternate location.

Expected Benefits

There are seldom any benefits to WNH in relocating existing lines. Experience has shown that assets required to be relocated are rarely at end of life. Although some recovery of materials can occur, most do not comply with current standards for reuse in new construction and are depreciated to the point that the combination of labour cost to recover used materials and the remaining life of the asset often approaches or exceeds the cost to purchase new materials.

x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new plant and materials.
x	Increased safety of new design standards and clearances.

WNH 2008 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-28.07
WR #:	WF0002371
PROJECT #:	06EN09
WR DESCRIPTION:	516-532 Sunnydale Place - Cable & Transformer Replacement

	1840	1845	1850		Total \$
WR Costs by USoA	66,396	107,499	142,278		316,174

Business Need

This category includes expenditures for the replacement of underground distribution feeder assets. Underground distribution is replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. Cable rehabilitation has been explored, however, it has not yet been found to be cost effective in our URD applications. WNH has three (3) distinct populations of Underground Distribution, most of which is underground residential distribution (URD).

1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been, and continues to be, the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency, and safety are being achieved by retiring the 4 kV distribution system.

2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years.

3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years.

The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

This area was initially serviced with first generation underground distribution in the early to mid 1970's. This project includes primary trenching in the form of directional drilling and the replacement of transformers. Primary cable is replaced with new cable in duct, transformers are replaced in accordance with the latest standards, and additional spare ducts are installed to facilitate the future replacement of streetlighting and secondary conductors.

Expected Benefits

x	Increased reliability of new distribution equipment and materials.
x	Increased safety of new design standards and clearances.
x	Reduced operational trouble calls.

WNH 2008 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-28.08
WR #:	WF0002394
PROJECT #:	06EN04
WR DESCRIPTION:	2008 Designated danger pole replacement

	1830	1835	1850		Total \$
WR Costs by USoA	225,235	120,125	26,277		371,638

Business Need

Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades/additions.

Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

The scope of this project included replacing individual poles that were identified under the 2008 WNH pole testing program as in poor condition and needing immediate replacement. Poles were replaced as close as possible to their existing locations and all hardware, transformers and other equipment associated with the pole were replaced. Where possible, poles were brought up to today's standards and clearances. Some poles were replaced "like for like" where existing conditions dictated.

Expected Benefits

x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new plant and materials.
x	Increased safety of new design standards and clearances.

WNH 2008 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-28.09
WR #:	WF0002487
PROJECT #:	06EN10
WR DESCRIPTION:	Riverland Subdivision Breslau

	1840	1845	1850		Total \$
WR Costs by USoA	74,623	266,511	197,218		538,352

Business Need

Underground Residential Subdivisions are capital expansions to the WNH distribution system driven solely by customer demand. In accordance with the Distribution System Code, WNH performs an economic evaluation for each project and provides the developer with an Offer to Connect. Developers that meet WNH's Conditions of Service and provide the necessary financial commitments are connected. Total expenditures vary with the level of economic activity in WNH's service area.

This spending is customer driven.

There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.

Project Details / Scope

This project involves the installation of new plant to facilitate electrical servicing of new residential developments. Included are new primary cables, transformers, civil infrastructure, secondary cables, and other necessary plant and equipment. Work is coordinated with developers and other utilities and is completed in accordance with developer's timelines.

Expected Benefits

- | | |
|----------|---|
| x | Increased feeder capacity and distribution assets for growth. |
| x | Expansion of system to connect new customers. |

WNH 2008 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-28.11
WR #:	WF0002546
PROJECT #:	06EN02
WR DESCRIPTION:	2008 MTS#4 Land Purchasing & Other Engineering

	1805				Total \$
WR Costs by USoA	240,656				240,656

Business Need

WNH is supplied primarily through the IESO controlled, Hydro One Transmission System at transmission voltages of 115 kV and 230 kV. WNH owns and operates three (3) transmission grid connected Transformer Stations (TS's) operating at 115 kV – 13.8 kV, 230 kV – 27.6 kV and 230 kV – 13.8 kV. The stations need to be constructed on strategically located property ideally adjacent to the transmission line and central to load growth centre(s).

Projects being captured in this category include the purchase of new land and the costs associated with regulatory processes such as Environmental Assessment and municipal approvals. Included under this category are also land servicing costs such as water, sanitary, and gas services, as well as site grading and landscaping for newly purchased land or existing stations requiring major upgrades.

The implications of not purchasing and servicing new land would result in limiting the capacity of the WNH distribution system to the existing stations which would eventually lead to an inability to reliably supply load to WNH customers.

Project Details / Scope

This project includes all the costs associated with the purchase of land, municipal and authority approvals, preliminary site plan, and the environmental assessment process.

Expected Benefits

x	Increased reliability of power to customers.
x	Provision for increased supply for future growth.
x	Compliance with the Transmission System Code, HONI and/or IESO requirements.

WNH 2008 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-28.12
WR #:	WF0002550
PROJECT #:	06EN07
WR DESCRIPTION:	2008 O/H Commercial Services

	1830	1850	1855		Total \$
WR Costs by USoA	4,451	22,256	195,852		222,559

Business Need

This category includes the connection costs to service new large commercial and industrial customers. Also captured here are the costs to upgrade the capacity of existing services. The cost per service can vary widely with the nature and capacity of each service. Total expenditures vary with the level of economic activity in the WNH service area.

There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.

Project Details / Scope

This project includes the installation of new services in overhead distribution areas. Also included are services that are installed or replaced as a result of customers requesting upgrades or major modifications to their existing service. The installation of new services include all labour and equipment associated with connecting customer's electrical servicing equipment to WNH lines - wire, poles, hardware.

Expected Benefits

x	Provision for growth.
x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new distribution equipment and materials.
x	Increased safety of new design standards and clearances.

WNH 2008 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-28.13
WR #:	WF0002551
PROJECT #:	06EN07
WR DESCRIPTION:	2008 Commercial Services Transformation

	1850				Total \$
WR Costs by USoA	200,247				200,247

Business Need

This category includes the connection costs to service new large commercial and industrial customers. Also captured here are the costs to upgrade the capacity of existing services. The cost per service can vary widely with the nature and capacity of each service. Total expenditures vary with the level of economic activity in the WNH service area.

There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.

Project Details / Scope

This project includes the installation of new services in overhead distribution areas. Also included are services that are installed or replaced as a result of customers requesting upgrades or major modifications to their existing service. The installation of new services include all labour and equipment associated with connecting customer's electrical servicing equipment to WNH lines - transformation only.

Expected Benefits

x	Provision for growth.
x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new distribution equipment and materials.
x	Increased safety of new design standards and clearances.

WNH 2008 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-28.14
WR #:	WF0002555
PROJECT #:	06EN11
WR DESCRIPTION:	2008 U/G Residential Services

	1855				Total \$
WR Costs by USoA	535,067				535,067

Business Need

This category includes the connection costs to service new large commercial and industrial customers. Also captured here are the costs to upgrade the capacity of existing services. The cost per service can vary widely with the nature and capacity of each service. Total expenditures vary with the level of economic activity in the WNH service area.

There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.

Project Details / Scope

This project includes the installation of new services in new subdivisions serviced by underground power distribution. Also included are underground services that are installed or replaced as a result of customers requesting upgrades or major modifications to their existing service.

Expected Benefits

x	Supply new customers and growth areas.
x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new distribution equipment and materials.
x	Increased safety of new design standards and clearances.

WNH 2008 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-28.15
WR #:	WF0002561
PROJECT #:	06MT02
WR DESCRIPTION:	2008 Commercial Regular Meters

	1860				Total \$
WR Costs by USoA	275,629				275,629

Business Need

Waterloo North Hydro is required under the federal Electricity and Gas Inspection Act to use approved Revenue Metering Equipment for the purpose of establishing the basis of a charge for the supply of electricity to its customers. WNH meets this requirement for its Commercial and industrial Customers (C&I > 50 kW) by purchasing Measurement Canada approved meters, instrument transformers and other related equipment.

Activity in this work program is driven by new C&I customers, obsolescence of equipment and equipment failure. This activity is mandated.

Project Details / Scope

Cost accumulated under this work order includes the labour, materials, equipment and contract labour to install revenue metering for Commercial and Industrial customers.

Expected Benefits

x	Meets the requirement of the federal Electricity and Gas Inspection Act.
x	Fulfills the business needs of WNH in establishing the basis of a charge for the supply of electricity to its customers.

WNH 2008 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-28.16
WR #:	WF0002565
PROJECT #:	06EN13
WR DESCRIPTION:	2008 GIS Mapping - Capital

	1925				Total \$
WR Costs by USoA	127,959				127,959

Business Need

In 2005 WNH began implementing an ESRI Geographic Information System (GIS) to support its business operations. GIS integrates hardware, software, and data for capturing, managing, analyzing, and displaying asset and customer information. GIS provides critical tools to organize information and knowledge, make informed decisions, improve communications and increase efficiency of work processes. From its inception, much work has been performed in transferring paper based asset data into the GIS data base. WNH currently uses its GIS to assist with engineering design, asset management, supply planning outage planning and budgeting processes. Data types currently maintained are asset type, quantity, condition, location and results of inspection and maintenance programs. The GIS is constantly being updated and expanded as new assets are installed, such as with new constructions or replacing assets, and also as new analytical tools are needed. There are plans to integrate the GIS with other enterprise information systems such as outage management, SCADA and engineering analysis tools to provide faster, more efficient analysis and response to power system operational issues.

The consequences of not proceeding would be to maintain asset information in paper based formats that are difficult and inefficient to maintain. These formats also do not support the increased asset analysis and reporting required for current asset management and regulatory compliance.

Project Details / Scope

Costs collected under this project include all labour, material and equipment require to continue to build WNH's Graphical Information System (GIS). The 2008 GIS program focused on a number of initiatives. First was to continue to build upon the information data bases to provide better utility to engineering and operations processes. Second was to construct additional tools used by various departments to facilitate and record testing and inspection data to support WNH's asset management strategy. Third was to support the capital design program through the development of design base plans.

Expected Benefits

x	Increased efficiency in maintaining information.
x	Increased efficiency accessing information.
x	Increased ability to analyze data and develop improvement strategies.
x	Increased ability to report data to internal and external stakeholders.

WNH 2008 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-28.17
WR #:	WF0002577
PROJECT #:	06OH01
WR DESCRIPTION:	2008 Operations - Pole Replacement

	1830	1835	1850		Total \$
WR Costs by USoA	194,247	106,229	3,035		303,511

Business Need

Replacement of poles throughout our service area that were identified as hazards by our regular overhead system inspections.

Project Details / Scope

WNH has a "standing" work order to collect the costs of labour, material, trucking to replace poles. Pole testing is performed as part of regular maintenance and, if required, poles are replaced due to age, wear etc. Poles may also be changed if noted life end, rotting etc., by crews when performing regular work assignments. Transformers that are affected by these pole changes are changed if the transformer's size is inefficient, upgrade or downsize, or if the transformer has reached the end of it's life (rusted tank, flashed / cracked bushings, etc.). 43 poles and 5 polemounted transformers are replaced.

Expected Benefits

- | | |
|----------|--|
| x | Maintain distribution system reliability and extended life of plant. |
| x | Reduce potential of a pole failure creating a public safety hazard. |

WNH 2008 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-28.18
WR #:	WF0002581
PROJECT #:	06EN04
WR DESCRIPTION:	Line 86 Pole Line Rebuild

	1830	1835	1850		Total \$
WR Costs by USoA	260,532	138,408	8,142		407,081

Business Need

Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades/additions.

Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

The scope of this project included the rebuilding of 8 kV and 27.6 kV overhead lines supplying the Linwood settlement area that were in poor condition and at the end of their life. Poles, transformers, conductor and all associated hardware were replaced.

Expected Benefits

x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new plant and materials.
x	Increased safety of new design standards and clearances.
x	Increased line capacity / lower line losses via added circuits or voltage conversions.

WNH 2008 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-28.19
WR #:	WF0002665
PROJECT #:	06EN06
WR DESCRIPTION:	Dolman & Joseph St. New Pole Line

	1830	1835	1850		Total \$
WR Costs by USoA	80,719	43,632	95,990		220,340

Business Need

This category includes expenditures for the addition of new feeder assets required to provide service to new customers in areas not previously serviced, and to previously serviced areas, to increase capacity where load density has increased. Normally projects are identified through system planning activities which include monitoring and analyzing commercial activities, station and feeder peak loading, municipal development activities, developer activities and land development activities.

WNH is located in a region of moderately high growth. As these activities are driven by the level of economic activity in our area, resulting in expenditures that can vary greatly from year to year.

Not proceeding with this customer requested work would result in refusal of connection of new customers or overloading of existing lines, both of which are detrimental to WNH and its customers.

Project Details / Scope

The scope of this project includes the construction of a new 27.6 kV overhead line to service new developments in the area. Poles, transformers, conductor and all associated hardware were installed.

Expected Benefits

- | | |
|----------|---|
| x | Provision for increased line capacity for growth areas. |
| x | Increased reliability associated with providing an alternate supply to populated or growth areas. |

WNH 2008 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-28.20				
WR #:	WF0002731				
PROJECT #:	06EN04				
WR DESCRIPTION:	457-511 Albert St., Conversion to 13.8 kV				
	1830	1835	1850		Total \$
WR Costs by USoA	65,848	34,492	56,441		156,781
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades/additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project included the rebuilding overhead lines that were in poor condition and to facilitate the conversion of 4 kV lines to 13.8 kV. This project supports the decommissioning of 4 kV stations, upgrading of 4 kV to 13.8 kV underground and provides additional 13.8 kV capacity on existing overhead lines. Transformers, conductors, poles, guys/anchors, and other equipment were replaced as each conversion dictated.					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				
x	Increased line capacity / lower line losses via added circuits or voltage conversions.				

WNH 2008 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-28.21				
WR #:	WF0002734				
PROJECT #:	06EN04				
WR DESCRIPTION:	Ament Line PH1 - 27.6 kV Rebuild, Lavery to Knarr				
	1830	1835			Total \$
WR Costs by USoA	102,457	55,169			157,626
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades/additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project included the rebuilding of overhead lines along Ament Line that were in poor condition and had reached the end of their life. The project also supports a second point of 27.6 kV supply to the Linwood area through voltage conversion from 8 kV to 27.6 kV. Poles, conductor, transformers, and all other overhead plant were replaced.					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				
x	Increased line capacity / lower line losses via added circuits or voltage conversions.				

WNH 2008 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-28.22				
WR #:	WF0002922				
PROJECT #:	06EN04				
WR DESCRIPTION:	St. Charles St., Ph. II - Pole Line Rebuild				
	1830	1835	1850		Total \$
WR Costs by USoA	260,361	140,512	12,398		413,271
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades/additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes rebuilding a the overhead lines along St. Charles St. to replace depreciated assets and provide for a future 27.6 kV supply to the Maryhill area. Poles, conductor, transformers, and all other overhead plant will be replaced.					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				
x	Increased line capacity / lower line losses via added circuits or voltage conversions.				

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.01				
WR #:	WF0001757				
PROJECT #:	06SN04				
WR DESCRIPTION:	TS HSB T5 Repairs				
	1815				Total \$
WR Costs by USoA	217,827				217,827

Business Need

WNH is supplied primarily through the IESO controlled, Hydro One Transmission System at transmission voltages of 115 kV and 230 kV. WNH owns and operates three (3) transmission grid connected Transformer Stations (TS's) operating at 115 kV - 13.8 kV, 230 kV - 27.6 kV and 230 kV - 13.8 kV. Expenditures in this category are made due to one of the following reasons:

- there is a need to increase capacity to meet growth in demand. Such needs are normally identified through system planning activities.
- the equipment requires replacement or a major refurbishment due to its condition. In such cases, regular maintenance will not address the problem nor is it cost effective. This is normally identified as a result of a variety of regularly scheduled testing and maintenance activities.
- the equipment needs to be replaced due to obsolescence. Such needs are typically identified through the inability to source spare or replacement components.
- the equipment needs to be updated to meet regulatory requirements (Transmission System Code, Market Rules, etc)

Where at all possible, projects are scheduled such that one project can satisfy more than one need. Projects being captured in this category include new or major refurbishments to existing switches or breakers, transformers, switchgear, protection and control systems, structural support systems and environmental protection systems.

The T5 transformer supplies 27.6 kV load customers on the east side of Waterloo. It was required to repair or replace the unit. Replacement of the damaged unit with a new unit was examined and ruled out due to higher cost and delivery times than the repair option.

Project Details / Scope

In May of 2006, the T5 transformer at Scheifele TS had sustained damage due to lightning and was not field repairable. After a thorough examination it was determined that a complete re-wind at a transformer repair facility was required. The costs accumulated in this work order cover all the labour, trucking and material for the following activities: transformer disassembly and transportation to the repair facility, the repair costs themselves, transformer inspection and testing at key repair milestones in the repair facility, transformer final testing, transportation and assembly back to site, final on site testing and commissioning. A substantial portion of the costs incurred were recovered through insurance and have been reflected in the cost above.

Expected Benefits

- | | |
|----------|--|
| x | Maintain reliability of power to customers. |
| x | Required to meet customer load requirements. |

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.02				
WR #:	WF0001940				
PROJECT #:	06SN04				
WR DESCRIPTION:	TS HSA Rehabilitation - Bulk protection upgrades				
	1815				Total \$
WR Costs by USoA	648,179				648,179

WNH is supplied primarily through the IESO controlled, Hydro One Transmission System at transmission voltages of 115 kV and 230 kV. WNH owns and operates three (3) transmission grid connected Transformer Stations (TS's) operating at 115 kV - 13.8 kV, 230 kV - 27.6 kV and 230 kV - 13.8 kV. Expenditures in this category are made due to one of the following reasons:

- there is a need to increase capacity to meet growth in demand. Such needs are normally identified through system planning activities.
- the equipment requires replacement or a major refurbishment due to its condition. In such cases, regular maintenance will not address the problem nor is it cost effective. This is normally identified as a result of a variety of regularly scheduled testing and maintenance activities.
- the equipment needs to be replaced due to obsolescence. Such needs are typically identified through the inability to source spare or replacement components.
- the equipment needs to be updated to meet regulatory requirements (Transmission System Code, Market Rules, etc)

Where at all possible, projects are scheduled such that one project can satisfy more than one need. Projects being captured in this category include new or major refurbishments to existing switches or breakers, transformers, switchgear, protection and control systems, structural support systems and environmental protection systems.

The protection equipment was 40 years old, non repairable and obsolete. The equipment also lacked the programmability and information gathering capabilities needed to protect modern distribution systems. Implications of not proceeding would result in increased safety hazards to workers, unreliable or misoperation of equipment, explosive equipment failure, loss of power to customers and breach of requirements set out in the Transmission System Code.

Project Details / Scope

This project consisted of complete replacement of the original 1960's electromechanical protection and control relays, relay panels, cabling, and auxiliary systems with new electronic relays mounted in new control panels connected to the power equipment with new cabling. The costs accumulated in this work request comprised of all labour, material, trucking, outside purchases for all relay, equipment, cabling, support systems, all labour for installation, assembly, programming, and testing of the new protection systems. Included in this work request are also all charges and labour associated with obtaining all necessary approvals from Hydro One and IESO.

Expected Benefits

- | | |
|----------|--|
| x | Increased safety to workers and public. |
| x | Increased reliability of power to customers. |
| x | Compliance with the Transmission System Code, HONI and/or IESO requirements. |

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.03				
WR #:	WF0001942				
PROJECT #:	06SN04				
WR DESCRIPTION:	TS HS25 Feeder				
	1815				Total \$
WR Costs by USoA	353,060				353,060

Business Need

WNH is supplied primarily through the IESO controlled, Hydro One Transmission System at transmission voltages of 115 kV and 230 kV. WNH owns and operates three (3) transmission grid connected Transformer Stations (TS's) operating at 115 kV - 13.8 kV, 230 kV - 27.6 kV and 230 kV - 13.8 kV. Expenditures in this category are made due to one of the following reasons:

- there is a need to increase capacity to meet growth in demand. Such needs are normally identified through system planning activities.
- the equipment requires replacement or a major refurbishment due to its condition. In such cases, regular maintenance will not address the problem nor is it cost effective. This is normally identified as a result of a variety of regularly scheduled testing and maintenance activities.
- the equipment needs to be replaced due to obsolescence. Such needs are typically identified through the inability to source spare or replacement components.
- the equipment needs to be updated to meet regulatory requirements (Transmission System Code, Market Rules, etc)

Where at all possible, projects are scheduled such that one project can satisfy more than one need. Projects being captured in this category include new or major refurbishments to existing switches or breakers, transformers, switchgear, protection and control systems, structural support systems and environmental protection systems.

The implications of not taking proper actions and improving equipment capacity or condition as required could result in inability to supply power to customers, damage to equipment, increased safety hazards to workers, unreliable or misoperation of equipment, explosive equipment failure, and breach of requirements set out in the Transmission System Code.

Project Details / Scope

This work order was for the procurement of 750 kcmil, 28 kV cable for 2 new feeders from Scheifele "B" TS. The feeders are needed due to increased load growth near Phillip Street and Columbia. This area is traditionally supplied by other stations (Scheifele "A" TS and Eby Rush TS). Supplying the new load from Scheifele "B" feeders not only satisfies the customers load needs, but also increases the number of available power supply sources and thereby increases reliability.

Expected Benefits

- | | |
|----------|---|
| x | Increased reliability of power to customers. |
| x | Increased capacity for developing industrial growth area. |

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.04
WR #:	WF0002039
PROJECT #:	06EN04
WR DESCRIPTION:	Somerset Crescent / Ashton Crescent Rear Lot Rebuild

	1830	1835	1850		Total \$
WR Costs by USoA	104,019	55,891	12,593		172,503

Business Need

Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions.

Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

The scope of this project included rebuilding overhead distribution that was in poor condition and that reached the end of its life. The project included an overhead supplied rear lot subdivision and elimination of deteriorating #6 primary conductor. Transformers and primary line were either eliminated or moved to road accessible locations wherever possible. All equipment including poles, conductors, transformers, and guying were replaced. In addition covered wire was installed to reduce the impact of trees on the overhead primary conductor where the conductor could not be eliminated.

Expected Benefits

x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new plant and materials.
x	Increased safety of new design standards and clearances.
x	Elimination deteriorating rear lot #6 primary conductor.

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.05
WR #:	WF0002284
PROJECT #:	06EN05
WR DESCRIPTION:	Shantz Stations Underground Rebuild

	1835	1840	1845	1850	Total \$
WR Costs by USoA	122,725	56,241	181,893	14,332	375,191

Business Need

This category includes expenditures to relocate/replace pole line assets that conflict with roadway construction activities. The level of spending is driven by the activities of the road authorities and specific projects are rarely known at the time that the budget is developed. Total expenditures can vary greatly from year to year and reimbursement is normally limited to 50% of labour and labour saving devices.

There are no alternatives to these activities. These expenditures are not discretionary as compliance is mandated by the Public Service Works on Highways Act, R.S.O. 1990.

Project Details / Scope

The Region of Waterloo (Airport Authority) requested that the existing overhead line located within the Shantz Station Road road allowance be moved because of a conflict with airport expansion plans. This work involved converting an overhead section of line to underground by installing new ductbank and feeder cables in an easement outside of the road allowance, and to the removal of the existing overhead line due to clearance issues with the runway airspace. This project was funded 100% by the Region due to the fact that the requested work was for the airport authority, undergrounding of a rural distribution line is beyond WNH's normal standard construction

Expected Benefits

x	Compliance with authority requirements.
x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new plant and materials.

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.06				
WR #:	WF0002368				
PROJECT #:	06EN09				
WR DESCRIPTION:	Mount Anne Dr & Lynnbrook Cr - Primary & Transformer Replacement				
	1840	1845	1850		Total \$
WR Costs by USoA	80,777	130,140	237,843		448,760

Business Need

This category includes expenditures for the replacement of underground distribution feeder assets. Underground distribution is replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. Cable rehabilitation has been explored, however, it has not yet been found to be cost effective in our URD applications. WNH has three (3) distinct populations of Underground Distribution, most of which is underground residential distribution (URD).

1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been, and continues to be, the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency and safety are being achieved by retiring the 4 kV distribution system.

2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years.

3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years.

The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

This area was initially serviced with first generation underground distribution in the early to mid 1960's. This project includes 800 m of primary trenching in the form of directional drilling and the replacement of 8 transformers. Primary cable is replaced with new cable in duct, transformers are replaced in accordance with the latest standards, and additional spare ducts are installed to facilitate the future replacement of streetlighting and secondary conductors.

Expected Benefits

x	Increased reliability of new distribution equipment and materials.
x	Increased safety of new design standards and clearances.
x	Reduced operational trouble calls.

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.07
WR #:	WF0002502
PROJECT #:	06EN10
WR DESCRIPTION:	Gerber Rd. Wellesley (Village Estate Ph. IV Stage 1)

	1835	1840	1845	1850	Total \$
WR Costs by USoA	3,313	26,505	82,830	53,011	165,659

Business Need

Underground Residential Subdivisions are capital expansions to the WNH distribution system driven solely by customer demand. In accordance with the Distribution System Code, WNH performs an economic evaluation for each project and provides the developer with an Offer to Connect. Developers that meet WNH's Conditions of Service and provide the necessary financial commitments are connected. Total expenditures vary with the level of economic activity in WNH's service area.

This spending is customer driven.

There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.

Project Details / Scope

This project includes the installation of ducts, primary cable, transformers, secondary cable, streetlighting and all civil infrastructure required to service new underground subdivisions. Included are provisions for 53 Lots.

Expected Benefits

- | | |
|----------|---|
| x | Increased feeder capacity and distribution assets for growth. |
| x | Expansion of system to connect new customers. |

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.08				
WR #:	WF0002598				
PROJECT #:	06SN05				
WR DESCRIPTION:	Upgrade SCADA Radio System & Repeater Tower				
	1980				Total \$
WR Costs by USoA	192,126				192,126

Business Need

WNH operates a Supervisory Control And Data Acquisition System (SCADA) to be able to respond to the operating needs of the distribution system needs as quickly as possible and to be in compliance with the requirements of the Market Rules and the Transmission System Code. WNH uses a SCADA system comprising of dual master computers and 5 Remote Terminal Units (RTUs) at three (3) transmission connected transformer stations and 23 RTUs at 18 municipal stations, distribution stations and on the distribution lines. The SCADA system reports on over 2,000 status points and approximately 4,000 analog points and allows remote control for over 400 field points. The communication media for the SCADA system consists of a combination of fibre, leased telephone circuits, and private data radio system including repeater towers. The system provides for the required master-to-master ICCC connections to Hydro One and IESO. The SCADA system is capable of storing and trending past data which is used to make operational decisions, as well as, in preparation of system expansion plans.

Projects in this category include addition of new, upgraded or replacement of the hardware or software associated with the SCADA system itself, the field RTUs, any communication system required to support the SCADA system, or any system that archives or displays the SCADA historical data.

Lack of investing in the SCADA system components would eventually lead to loss of remote control of field devices resulting in the need for more manual operations in the field, not being able to respond to customers needs as quickly as possible, increasing customer outage minutes, reduction in public safety in case of downed power lines, and less precise operating and system expansion plans and higher operating costs.

Project Details / Scope

The scope of this project was the complete replacement of the original 1990's vintage data radio system with new radio technology. In addition to radio replacement, antenna and cable replacement was also performed at the WNH office, the main radio repeater site, and every existing radio site at the time. In addition, 2 new sub-repeater sites were added to address traditionally poor communication to 2 remote stations. The costs accumulated in this work order consists of all the labour, material, trucking, equipment, support structures, and contractor costs required for the removal of the old system, installation, configuration, commissioning and troubleshooting of the new radio system.

Expected Benefits

- | | |
|---|---|
| x | Increased safety to workers and public. |
| x | Information supports regulatory reporting requirements, reliability and system supply planning. |
| x | Increased reliability of power to customers. |
| x | Development of more precise operating and system expansion models. |

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.09
WR #:	WF0002675
PROJECT #:	06EN04
WR DESCRIPTION:	Kossuth Road Rebuild

	1830	1835	1850		Total \$
WR Costs by USoA	504,187	272,237	25,309		801,733

Business Need

Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions.

Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

The scope of this project included rebuilding approximately 6 km of overhead lines that were in poor condition and had reached the end of their life. The reconstruction allowed for two 27.6 kV overhead circuits. All equipment including poles, conductors, transformers, and guying were replaced.

The poles and one circuit are owned by WNH and supply WNH customers. The second circuit on WNH poles is owned by Cambridge & North Dumfries Hydro Inc and supplies CNDHI customers. CNDHI has paid its appropriate cost share of the costs and CNDHI will become a joint use tenant on WNH line. Customers of CNDHI that are currently supplied by WNH 8 kV line will be transferred to the new CNDHI 27.6 kV circuit and thus removed from WNH's load transfer customer listing.

Expected Benefits

x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new distribution equipment and materials.
x	Provision for increased line capacity for future growth areas / lower line losses.
x	Elimination of load transfer customers to meet the requirements of the Distribution System Code.

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.10				
WR #:	WF0002699				
PROJECT #:	06EN04				
WR DESCRIPTION:	Ament Line, East of Geddes St., Pole Line Rebuild				
	1830	1835	1850		Total \$
WR Costs by USoA	236,571	126,669	61,255		424,496

Business Need

Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions.

Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

The scope of this project included the rebuilding and converting approximately 1.7 km of overhead lines that were in poor condition and had reached the end of their life. All equipment including poles, conductors, transformers, and guying were replaced. This project is the first of several that will convert existing 8kV lines to 27.6 kV and ultimately provide a second point of supply to the Linwood area.

Expected Benefits

x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new distribution equipment and materials.
x	Increased safety of new design standards and clearances.
x	Increased line capacity / lower line losses via added circuits or voltage conversions.
x	Increased reliability associated with providing an alternate supply to populated or growth areas.

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.11
WR #:	WF0002751
PROJECT #:	06SN05
WR DESCRIPTION:	TS HSA Rehab - SCADA upgrades

	1980				Total \$
WR Costs by USoA	181,341				181,341

Business Need

WNH operates a Supervisory Control And Data Acquisition System (SCADA) to be able to respond to the operating needs of the distribution system needs as quickly as possible and to be in compliance with the requirements of the Market Rules and the Transmission System Code. WNH uses a SCADA system comprising of dual master computers and 5 Remote Terminal Units (RTUs) at three (3) transmission connected transformer stations and 23 RTUs at 18 municipal stations, distribution stations and on the distribution lines. The SCADA system reports on over 2,000 status points and approximately 4,000 analog points and allows remote control for over 400 field points. The communication media for the SCADA system consists of a combination of fibre, leased telephone circuits, and private data radio system including repeater towers. The system provides for the required master-to-master ICCP connections to Hydro One and IESO. The SCADA system is capable of storing and trending past data which is used to make operational decisions, as well as, in preparation of system expansion plans.

Projects in this category include addition of new, upgraded or replaced hardware or software associated with the SCADA system itself, the field RTUs, any communication system required to support the SCADA system, or any system that archives or displays the SCADA historical data.

Lack of investing in the SCADA system components would eventually lead to loss of remote control of field devices resulting in the need for more manual operations in the field, not being able to respond to customers needs as quickly as possible, increasing customer outage minutes, reduction in public safety in case of downed power lines, less precise operating and system expansion plans and higher operating costs.

Project Details / Scope

The scope of this project consisted of the installation of a new control system at Scheifele "A" (HSA) TS capable of communicating with the new electronic protection relays, the WNH SCADA master, the IESO SCADA master, as well as provide for local control. Project design and timing was driven by Market Rules requirement for providing real time data from load serving transformer stations. The charges accumulated in this work order consists of all labour, material, equipment, trucking, and outside contractor costs for procurement of the RTU, the local control HMI, all the required networking devices, auxiliary equipment and cabling necessary, as well as all labour charges to install, configure, test, commission and troubleshoot the new control system. This project was completed in conjunction with the Scheifele "A" (HSA) Bulk Protection System Upgrades.

Expected Benefits

x	Information supports regulatory reporting requirements, reliability and system supply planning.
x	Increased reliability of power to customers.
x	Development of more precise operating and system expansion models.
x	Compliance with the Transmission System Code, HONI and/or IESO requirements.

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.12
WR #:	WF0002752
PROJECT #:	06EN10
WR DESCRIPTION:	Mill Creek Meadows Sub,Ph. III, Wellesley

	1840	1845	1850		Total \$
WR Costs by USoA	30,882	106,243	50,153		187,279

Business Need

Underground Residential Subdivisions are capital expansions to the WNH distribution system driven solely by customer demand. In accordance with the Distribution System Code, WNH performs an economic evaluation for each project and provides the developer with an Offer to Connect. Developers that meet WNH's Conditions of Service and provide the necessary financial commitments are connected. Total expenditures vary with the level of economic activity in WNH's service area.

This spending is customer driven.

There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.

Project Details / Scope

This project includes the installation of ducts, primary cable, transformers, secondary cable, streetlighting and all civil infrastructure required to service new underground subdivisions. Included are provisions for 53 Lots.

Expected Benefits

- | | |
|----------|---|
| x | Increased feeder capacity and distribution assets for growth. |
| x | Expansion of system to connect new customers. |

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY					
TABLE #:	2-29.13				
WR #:	WF0002777				
PROJECT #:	06FL02				
WR DESCRIPTION:	R92 - New Material Handler, Double Bucket / Elevator Truck				
	1930				Total \$
WR Costs by USoA	470,413				470,413
Business Need					
WNH maintains its fleet of vehicles to achieve a typical useful life of 14 to 16 years for our large vehicles (bucket trucks, RBDs, workbody trucks) and 8 to 10 years for our small vehicles (pickup trucks, vans, etc). WNH has determined that these time frames represent the most cost efficient replacement schedule and that to extend beyond these timeframes it incurs increased maintenance costs and reduced fleet reliability. WNH replaced Truck R21, a 1993 Volvo (16 years old) tandem axle chassis outfitted with a 68 foot Altec double bucket work platform and a single vertical elevator that is at its end of life condition.					
Project Details / Scope					
This project includes all costs associated with developing the specification documents for the truck chassis, work platform, and truck body; completing the tendering process; ordering the vehicle; inspecting the work platform and body during fabrication and assembly of the truck; and commissioning the completed truck at our facility (installing signage and high visibility striping, two way radio system, registering the truck with MTO, completing an in-service training session for our drivers, etc.). For this truck replacement WNH has specified a Freightliner tandem axle chassis outfitted with a Posi-Plus 83 foot double bucket work platform and a double vertical elevator.					
Expected Benefits					
x	Replacement of Truck R21 will help to reduce total annual fleet maintenance costs by eliminating our oldest double bucket truck (R21 - 16 years old) from our fleet.				
x	The new replacement truck (R92) has extended vertical and horizontal reach. This allows our staff to reach taller poles that are also set further off the roadway. This is becoming more common as we rebuild our pole lines both in our rural service territory as well as in congested areas within our urban service territory.				
x	The double elevator feature on truck R92 provides additional safety benefits to our Powerline Maintainers. This feature allows the truck to be set up in locations out of the normal flow of traffic and has the extended reach to get our staff up to our required vertical work heights without the knuckle of the the workplatform's boom being in danger of being hit by passing vehicles.				

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.14
WR #:	WF0002807
PROJECT #:	06EN04
WR DESCRIPTION:	Schaefer Street - Voltage Conversion to 13.8 kV

	1830	1835	1850		Total \$
WR Costs by USoA	48,153	25,677	101,081		174,911

Business Need

Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades/additions.

Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

The scope of this project included rebuilding approximately 300m of overhead triple circuit line that was in poor condition and to facilitate 4 kV conversions and 4 kV station decommissioning as part of WNH's Asset Management Strategy. This area served by MS 7, 9, and 11.

Expected Benefits

x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new distribution equipment and materials.
x	Increased safety of new design standards and clearances.
x	Increased line capacity / lower line losses from voltage conversions.
x	Facilitation of the underground conversions to eliminate old lower voltage stations and lines.

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.15
WR #:	WF0002812
PROJECT #:	06EN06
WR DESCRIPTION:	Erbsville & Kressler to Hessen Strasse, Woolwich

	1830	1835	1850		Total \$
WR Costs by USoA	331,099	173,967	56,118		561,184

Business Need

This category includes expenditures for the addition of new feeder assets required to provide service to new customers in areas not previously serviced, and to previously serviced areas, to increase capacity where load density has increased. Normally projects are identified through system planning activities which include monitoring and analyzing commercial activities, station and feeder peak loading, municipal development activities, developer activities and land development activities.

WNH is located in a region of moderately high growth. As these activities are driven by the level of economic activity in our area, resulting in expenditures that can vary greatly from year to year.

Not proceeding with this customer requested work would result in refusal of connection of new customers or overloading of existing lines, both of which are detrimental to WNH and its customers.

Project Details / Scope

The scope of this project includes the building of approximately 1.9 km of new overhead circuitis. This project is one of several that will allow WNH to convert existing 8 kV lines to 27.6 kV and ultimately provide a second point of supply to the St. Clements / Wellesley areas.

Expected Benefits

☒	Provision for increased line capacity for future growth areas.
☒	Increased reliability associated with providing an alternate supply to populated or growth areas.

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.16
WR #:	WF0002855
PROJECT #:	06EN10
WR DESCRIPTION:	Hopewell Heights Sub. Stage 3A, Breslau, Thomasfield Homes

	1840	1845	1850		Total \$
WR Costs by USoA	25,543	88,550	56,195		170,289

Business Need

Underground Residential Subdivisions are capital expansions to the WNH distribution system driven solely by customer demand. In accordance with the Distribution System Code, WNH performs an economic evaluation for each project and provides the developer with an Offer to Connect. Developers that meet WNH's Conditions of Service and provide the necessary financial commitments are connected. Total expenditures vary with the level of economic activity in WNH's service area.

This spending is customer driven.

There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.

Project Details / Scope

This project includes the installation of ducts, primary cable, transformers, secondary cable, streetlighting and all civil infrastructure required to service new underground subdivisions. Included are provisions for 71 Lots.

Expected Benefits

- | | |
|----------|---|
| x | Increased feeder capacity and distribution assets for growth. |
| x | Expansion of system to connect new customers. |

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.17
WR #:	WF0002931
PROJECT #:	06EN04
WR DESCRIPTION:	Weimar Line Overhead Rebuild Ph1

	1830	1835	1850		Total \$
WR Costs by USoA	256,445	137,936	12,030		406,411

Business Need

Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions.

Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

The scope of this project included rebuilding and converting approximately 2.4 km of overhead distribution that was in poor condition and that reached the end of its life. All equipment including poles, conductors, transformers, and guying were replaced. This project is one of several that will allow WNH to convert existing 8 kV lines to 27.6 kV and ultimately provide a backup supply to the St. Clements / Wellesley areas.

Expected Benefits

☒	Reduced exposure to safety hazards associated with aged plant and equipment.
☒	Increased reliability of new distribution equipment and materials.
☒	Increased safety of new design standards and clearances.
☒	Increased line capacity / lower line losses via added circuits or voltage conversions.
☒	Increased reliability associated with providing an alternate supply to populated or growth areas.

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.18
WR #:	WF0003048
PROJECT #:	06EN06
WR DESCRIPTION:	Hessen Strasse - Kressler Rd to Herrgott Rd, Wellsley Twp.

	1830	1835	1850		Total \$
WR Costs by USoA	219,696	115,530	43,560		378,786

Business Need

This category includes expenditures for the addition of new feeder assets required to provide service to new customers in areas not previously serviced, and to previously serviced areas, to increase capacity where load density has increased. Normally projects are identified through system planning activities which include monitoring and analyzing commercial activities, station and feeder peak loading, municipal development activities, developer activities and land development activities.

WNH is located in a region of moderately high growth. As these activities are driven by the level of economic activity in our area, resulting in expenditures that can vary greatly from year to year.

Not proceeding with this customer requested work would result in refusal of connection of new customers or overloading of existing lines, both of which are detrimental to WNH and its customers.

Project Details / Scope

The scope of this project includes the building of new 27.6 kV OH lines between St. Clements and Wellesley. This project is one of several that will allow us to supply 27.6 kV loads in St. Clements / Wellesley areas.

Expected Benefits

☒	Provision for increased line capacity for future growth areas.
☒	Increased reliability associated with providing an alternate supply to populated or growth areas.

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.19				
WR #:	WF0003117				
PROJECT #:	06FL02				
WR DESCRIPTION:	R90 - New Single Bucket Truck with Telescopic Boom in 2009				
	1930				Total \$
WR Costs by USoA	267,040				267,040

Business Need

WNH maintains its fleet of vehicles to achieve a typical useful of 14 to 16 years for our large vehicles (bucket trucks, RBDs, workbody trucks) and 8 to 10 years for our small vehicles (pickup trucks, vans, etc). WNH has determined that these time frames represent the most cost efficient replacement schedule and that to extend beyond these timeframes it incurs increased maintenance costs and reduced fleet reliability. WNH replaced Truck 60, a 1990 Ford F800 (19 years old) single axle chassis outfitted with a 38 foot Altec single bucket work platform that had reached its end of life condition.

Project Details / Scope

This project includes all costs associated with developing the specification documents for the truck chassis, work platform, and truck body; completing the tendering process; ordering the vehicle; inspecting the work platform and body during fabrication and assembly of the truck; and commissioning the completed truck at our facility (installing signage and high visibility striping, two way radio system, registering the truck with MTO, completing an in-service training session for our drivers, etc.).

For this truck replacment WNH specified an International single axle chassis outfitted with a Terex, Hi-Ranger, 40 foot telesopic single bucket work platform.

Expected Benefits

x	Replacement of Truck R60 will help to reduce total annual fleet maintenance costs by eliminating our oldest single bucket truck (R60 - 19 years old) from our fleet.
x	The new replacement truck (R90) will be assigned to our Service Department to respond to trouble calls, complete service changes and other overhead maintenance work etc.
x	This new single bucket truck has several features that will improve WNH operations. The telescopic boom feature will allow our Powerline maintainers greater flexibility in reaching work areas that are in the 20 foot to 40 foot vertical height range on small side streets and areas where truck setup space is limited. The new truck is also 5000 kG lighter than our existing single bucket service trucks. The lighter weight results lower fuel consumption as well as reducing the impact the truck has when it must be set up as a work platform on sod / landscaped areas which ultimately reduces our restoration costs for these projects.
x	The new single bucket truck will also be used by our line construction crews when they require a smaller truck for special purpose work such as transferring secondary services on major line restruction projects where restricted road widths require a smaller bucket truck to be used.

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.20
WR #:	WF0003126
PROJECT #:	06EN09
WR DESCRIPTION:	Shakespeare Area Cable Replacement

	1835	1840	1845	1850	Total \$
WR Costs by USoA	10,578	72,733	245,239	297,379	625,929

Business Need

This category includes expenditures for the replacement of underground distribution feeder assets. Underground distribution is replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. Cable rehabilitation has been explored, however, it has not yet been found to be cost effective in our URD applications. WNH has three (3) distinct populations of Underground Distribution, most of which is underground residential distribution (URD).

1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been and continues to be the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency and safety are being achieved by retiring the 4 kV distribution system.

2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years.

3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years.

Project Details / Scope

This area was initially serviced with first generation underground distribution in the early to mid 1960's. This project includes 3050 m of primary trenching in the form of directional drilling and the replacement of 16 transformers. Primary cable is replaced with new cable in duct, transformers are replaced in accordance with the latest standards, and additional spare ducts are installed to facilitate the future replacement of streetlighting and secondary conductors.

Expected Benefits

☒	Increased reliability of new distribution equipment and materials.
☒	Increased safety of new design standards and clearances.
☒	Reduced operational trouble calls.

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.21
WR #:	WF0003150
PROJECT #:	06EN04
WR DESCRIPTION:	Riverside Dr and Victoria Glen, Elmira

	1830	1835	1850		Total \$
WR Costs by USoA	82,472	44,731	12,580		139,783

Business Need

Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions.

Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

The scope of this project included the rebuilding approximately 500m of overhead distribution in Elmira that was in poor condition and that reached the end of its life. All equipment including poles, conductors, transformers, and guying were replaced. WNH removed difficult to access poles from rear lot locations to front lot locations as well as converted from 4 kV to 27.6 kV.

Expected Benefits

x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new distribution equipment and materials.
x	Increased safety of new design standards and clearances.
x	Provision for increased line capacity for future growth areas / lower line losses.

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.22
WR #:	WF0003155
PROJECT #:	06EN04
WR DESCRIPTION:	Hawkesville Voltage Conversion, Herrgott Rd & Ament Line

	1830	1835	1850		Total \$
WR Costs by USoA	189,678	101,539	158,470		449,687

Business Need

Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions.

Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

The scope of this project included the rebuilding overhead distribution in the Hawksville area that was in poor condition and that reached the end of its life. All equipment including poles, conductors, transformers, and guying was replaced. This project is one of several that will allow WNH to convert existing 8 kV lines to 27.6 kV and ultimately provide a second point of supply to the St. Clements / Wellesley areas.

Expected Benefits

x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new distribution equipment and materials.
x	Increased safety of new design standards and clearances.
x	Increased line capacity / lower line losses via added circuits or voltage conversions.
x	Increased reliability associated with providing an alternate supply to populated or growth areas.

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.23
WR #:	WF0003218
PROJECT #:	06EN06
WR DESCRIPTION:	Herrgott Rd, Hessen Strasse to Industrial Cres, St. Clements

	1830	1835	1850		Total \$
WR Costs by USoA	238,393	129,653	50,188		418,234

Business Need

This category includes expenditures for the addition of new feeder assets required to provide service to new customers in areas not previously serviced, and to previously serviced areas, to increase capacity where load density has increased. Normally projects are identified through system planning activities which include monitoring and analyzing commercial activities, station and feeder peak loading, municipal development activities, developer activities and land development activities.

WNH is located in a region of moderately high growth. As these activities are driven by the level of economic activity in our area, resulting in expenditures that can vary greatly from year to year.

Not proceeding with this customer requested work would result in refusal of connection of new customers or overloading of existing lines, both of which are detrimental to WNH and its customers.

Project Details / Scope

The scope of this project includes building of new 27.6 kV lines in the Hawksville area. This project is one several that will allow WNH to 27.6 kV supply loads in the St. Clements / Wellesley areas.

Expected Benefits

- | | |
|----------|---|
| x | Provision for increased line capacity for future growth areas. |
| x | Increased reliability associated with providing an alternate supply to populated or growth areas. |

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.24
WR #:	WF0003220
PROJECT #:	06EN04
WR DESCRIPTION:	2009 Designated danger poles

	1830	1835	1850		Total \$
WR Costs by USoA	120,838	64,775	25,311		210,924

Business Need

Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions.

Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

The scope of this project included replacing individual poles that were identified under the WNH pole testing program as in poor condition and needing immediate replacement. Poles were replaced as close as possible to their existing locations and all hardware, transformers and other equipment associated with the pole were replaced. Where possible, poles were brought up to today's standards and clearances. Some poles were replaced "like for like" where existing conditions dictated.

Expected Benefits

x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new distribution equipment and materials.
x	Increased safety of new design standards and clearances.

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.25
WR #:	WF0003232
PROJECT #:	06EN07
WR DESCRIPTION:	2009 Residential Services - OH

	1850	1855			Total \$
WR Costs by USoA	38,662	151,697			190,359

Business Need

This category includes the connection costs to service new residential customers. Also captured here are the costs to upgrade the capacity of existing services. The cost per service can vary widely with the nature and capacity of each service. Total expenditures vary with the level of economic activity in the WNH service area.

There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.

Project Details / Scope

This project includes the installation of new services in overhead distribution areas. Also included are services that are installed or replaced as a result of customers requesting upgrades or major modifications to their existing service.

Expected Benefits

☒	Provision for growth.
☒	Reduced exposure to safety hazards associated with aged plant and equipment.
☒	Increased reliability of new distribution equipment and materials.
☒	Increased safety of new design standards and clearances.

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.26
WR #:	WF0003233
PROJECT #:	06EN07
WR DESCRIPTION:	2009 Commercial Services - OH

	1850	1855			Total \$
WR Costs by USoA	152,819	220,913			373,731

Business Need

This category includes the connection costs to service new residential customers. Also captured here are the costs to upgrade the capacity of existing services. The cost per service can vary widely with the nature and capacity of each service. Total expenditures vary with the level of economic activity in the WNH service area.

There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.

Project Details / Scope

This project includes the installation of new services in overhead distribution areas. Also included are services that are installed or replaced as a result of customer requesting upgrades or major modifications to their existing service.

Expected Benefits

x	Provision for growth.
x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new distribution equipment and materials.
x	Increased safety of new design standards and clearances.

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.27
WR #:	WF0003237
PROJECT #:	06EN11
WR DESCRIPTION:	2009 U/G Residential Services

	1855				Total \$
WR Costs by USoA	347,859				347,859

Business Need

This category includes the connection costs to service new residential customers. Also captured here are the costs to upgrade the capacity of existing services. The cost per service can vary widely with the nature and capacity of each service. Total expenditures vary with the level of economic activity in the WNH service area.

There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.

Project Details / Scope

This project includes the installation of new services in new subdivisions serviced by underground power distribution. Also included are underground services that are installed or replaced as a result of customers requesting upgrades or major modifications to their existing service.

Expected Benefits

x	Supply new customers and growth areas.
x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new distribution equipment and materials.
x	Increased safety of new design standards and clearances.

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.28				
WR #:	WF0003243				
PROJECT #:	06OH01				
WR DESCRIPTION:	2009 Operations - Pole & Transformer Capital Replacement				
	1830	1835	1850		Total \$
WR Costs by USoA	192,718	103,802	11,041		307,561

Business Need

Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions.

Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

The scope of this project included replacing individual poles that were identified by either WNH's overhead plant inspection program or by WNH staff when performing regular work assignments as in poor condition and needing immediate replacement. Poles were replaced as close as possible to their existing locations and all hardware, transformers and other equipment associated with the pole were replaced. Where possible, poles were brought up to today's standards and clearances. Some poles were replaced "like for like" where existing conditions dictated. Transformers that are affected by these pole changes are also changed if the transformer's size is inefficient, upgrade or downsize to match current connected customer requirements, or if the transformer has reached the end of it's life (rusted tank, flashed / cracked bushings, etc.).

Expected Benefits

x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new distribution equipment and materials.
x	Increased safety of new design standards and clearances.

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.29
WR #:	WF0003244
PROJECT #:	07OU01
WR DESCRIPTION:	2009 Operations - U/G Distribution & Transformer Replacement

	1840	1845	1850		Total \$
WR Costs by USoA	6,824	10,255	168,360		185,438

Business Need

The reliability of supply to most residential customers in WNH's service territory is affected by the age and condition of the underground distribution system supplying their homes.

WNH has three (3) distinct populations of Underground Distribution, most of which is underground residential distribution (URD).

1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been and continues to be the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency and safety are being achieved by retiring the 4 kV distribution system.

2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years.

3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years.

The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

The scope of this project included all costs associated with replacing individual pad-mounted and submersible transformers, switching cubicles and associated components that were identified as hazards requiring immediate replacement either as part of WNH's underground plant inspection program or by WNH staff when completing regular work assignments.

Expected Benefits

☒	Increased reliability of new distribution equipment and materials.
☒	Increased safety of new design standards and clearances.
☒	Reduced operational trouble calls .

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.30
WR #:	WF0003260
PROJECT #:	06SS03
WR DESCRIPTION:	ODS/OMS Project Implementation

	1925				Total \$
WR Costs by USoA	215,747				215,747

Business Need

WNH handles vast amounts of data, relevant to the management and operation of its distribution system, within multiple independent systems. These systems included, at a minimum, the Customer Information System (CIS), Supervisory Control and Data Acquisition System (SCADA), Geographic Information System (GIS), Enterprise Resources Planning System (ERP), Workforce Management System (WMS) and the Smart Meter Information System (SMI).

These multiple independent systems, while providing a large volume of varying data, result in a manual information gathering and limited reporting process restricted to the native systems on which the data resides. WNH has determined that the ODS is the appropriate system to integrate these independent systems.

WNH evaluated several options and opted for a third party vendor customized solution.

Consequences of not proceeding will not allow WNH to achieve operational efficiencies and achieve its strategic imperatives.

Project Details / Scope

A customized system such as this serves as a central repository for operational and financial data from the independent systems and facilitates retrieval of data for analysis and reporting.

WNH has hired a third party vendor to customize the integration of the data between the various systems listed above. This is an ongoing project which will involve, and impact, every department within the organization. As described below in the expected benefits, this project has far reaching effects and benefits.

Expected Benefits

x	Barrier-free access to all data across all native systems.
x	Ability to house 'orphan' data not residing in any one system.
x	Create intelligence needed to optimize the gathering and analysis of data from native systems.
x	Ability to turn data into information through business intelligence tool sets.
x	Provide presentation of information in the format needed to work effectively.
x	Integration of CIS service orders to provide dynamic access to field activity.
x	Minimize/eliminate duplicate data.
x	Integrated Outage Management System (OMS) functionality.
x	Assist with infrastructure planning via load analysis and trending.

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.31
WR #:	WF0003376
PROJECT #:	06MT02
WR DESCRIPTION:	2009 Commercial & Industrial - Regular Meters > 50 kW

	1860				Total \$
WR Costs by USoA	205,619				205,619

Business Need

Waterloo North Hydro is required under the federal Electricity and Gas Inspection Act to use approved Revenue Metering Equipment for the purpose of establishing the basis of a charge for the supply of electricity to its customers. WNH meets this requirement for its Commercial and industrial Customers (C&I > 50 kW) by purchasing Measurement Canada approved meters, instrument transformers and other related equipment.

Activity in this work program is driven by new C&I customers, obsolescence of equipment and equipment failure. This activity is mandated.

Project Details / Scope

Cost accumulated under this work order include the labour, materials, equipment and contract labour to install revenue metering for Commercial and Industrial customers.

Expected Benefits

☒	Meets the requirement of the federal Electricity and Gas Inspection Act.
☒	Fulfills the business needs of WNH in establishing the basis of a charge for the supply of electricity to its customers.

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.32				
WR #:	WF0003389				
PROJECT #:	06SN04				
WR DESCRIPTION:	TS ERTS Rehabilitation - HV Switch Replacement				
	1815				Total \$
WR Costs by USoA	175,485				175,485

Business Need

WNH is supplied primarily through the IESO controlled, Hydro One Transmission System at transmission voltages of 115 kV and 230 kV. WNH owns and operates three (3) transmission grid connected Transformer Stations (TS's) operating at 115 kV - 13.8 kV, 230 kV - 27.6 kV and 230 kV - 13.8 kV. Expenditures in this category are made due to one of the following reasons:

- there is a need to increase capacity to meet growth in demand. Such needs are normally identified through system planning activities.
- the equipment requires replacement or a major refurbishment due to its condition. In such cases, regular maintenance will not address the problem nor is it cost effective. This is normally identified as a result of a variety of regularly scheduled testing and maintenance activities.
- the equipment needs to be replaced due obsolescence. Such needs are typically identified through the inability to sources spare or replacement components.
- the equipment needs to be updated to meet regulatory requirements (Transmission System Code, Market Rules, etc)

Where at all possible, projects are scheduled such that one project can satisfy more than one need. Projects being captured in this category include new or major refurbishments to existing switches or breakers, transformers, switchgear, protection and control systems, structural support systems and environmental protection systems.

The implications of not taking proper actions and improving equipment capacity or condition as required could result in inability to supply power to customers, damage to equipment, increased safety hazards to workers, unreliable or misoperation of equipment, explosive equipment failure, and breach of requirements set out in the Transmission System Code.

Project Details / Scope

The scope of this project consisted of specification and the procurement of 2 new HV circuit switchers to replace the original 1962 vintage high voltage air disconnect switches at Eby Rush TS.

Expected Benefits

x	Increased reliability of power to customers.
x	Compliance with the Transmission System Code, HONI and/or IESO requirements.
x	Increased reliability for Elmira TS, which is supplied from the same 115kV circuit as Eby Rush TS and also supplies mostly WNH load.

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.33				
WR #:	WF0003398				
PROJECT #:	06EN09				
WR DESCRIPTION:	Old Post Road Area - Cable Replacement				
	1840	1845	1850		Total \$
WR Costs by USoA	92,279	144,172	179,031		415,482

Business Need

This category includes expenditures for the replacement of underground distribution feeder assets. Underground distribution is replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. Cable rehabilitation has been explored, however, it has not yet been found to be cost effective in our URD applications. WNH has three (3) distinct populations of Underground Distribution, most of which is underground residential distribution (URD).

1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been and continues to be the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency and safety are being achieved by retiring the 4 kV distribution system.

2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years.

3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years.

The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

This area was initially serviced with first generation underground distribution in the early to mid 1970's. This project includes replacement of all underground plant in the "old post" subdivision and area. Transformers, grounding, foundations, primary cable, and some secondary cable are replaced. All new cable is replaced with cable installed in conduit to provide added mechanical protection and to better facilitate future replacement projects.

Expected Benefits

x	Increased reliability of new distribution equipment and materials.
x	Increased safety of new design standards and clearances.
x	Reduced operational trouble calls.

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.34			
WR #:	WF0003402			
PROJECT #:	06EN04			
WR DESCRIPTION:	Ament Line PH2 - 27.6 kV Rebuild, Town of Linwood			
	1830	1835	1850	Total \$
WR Costs by USoA	190,831	102,307	102,941	396,078

Business Need

Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions.

Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

The scope of this project included the rebuilding overhead lines that were in poor condition and had reached the end of their life and converting overhead single and double circuit lines east of Linwood and into the town. All equipment including poles, conductors, transformers, and guying were replaced. This project is one of several that will allow us to convert existing 8 kV lines to 27.6 kV and ultimately provide a backup supply to the Town of Linwood.

Expected Benefits

x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new distribution equipment and materials.
x	Increased safety of new design standards and clearances.
x	Increased line capacity / lower line losses via added circuits or voltage conversions.
x	Increased reliability associated with providing a second point of supply to the Linwood area.

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.35				
WR #:	WF0003457				
PROJECT #:	06EN04				
WR DESCRIPTION:	King - Columbia to Weber - MS9 conversion to 13.8 kV				
	1830	1835	1850		Total \$
WR Costs by USoA	38,357	20,516	67,926		126,798

Business Need

Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions.

Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

The scope of this project included the rebuilding of overhead lines to facilitate 4 kV conversions and 4 kV station decommissioning as part of WNH's Asset Management strategy. Transformers, conductors, poles, guys/anchors, and other equipment were replaced. The conversion area is served by stations MS 9 and 11. This work was to facilitate the removal of aged 4 kV distribution and stations from our system.

Expected Benefits

x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new distribution equipment and materials.
x	Increased safety of new design standards and clearances.
x	Increased line capacity / lower line losses via added circuits or voltage conversions.

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.37
WR #:	WF0003576
PROJECT #:	06EN06
WR DESCRIPTION:	Hergott Rd., Lobsinger Line to St. Clements

	1830	1835	1850		Total \$
WR Costs by USoA	195,817	101,674	79,080		376,571

Business Need

This category includes expenditures for the addition of new feeder assets required to provide service to new customers in areas not previously serviced and to previously serviced areas to increase capacity where load density has increased. Normally projects are identified through system planning activities which include monitoring and analyzing commercial activities, station and feeder peak loading, municipal development activities, developer activities and land development activities.

WNH is located in a region of moderately high growth. As these activities are driven by the level of economic activity in our area, resulting in expenditures that can vary greatly from year to year.

Not proceeding with this customer requested work would result in refusal of connection of new customers or overloading of existing lines, both of which are detrimental to WNH and its customers.

Project Details / Scope

The scope of this project includes construction of 1.2 km of multi circuit lines through the town of St. Clements. This project is one of several that will allow WNH to convert existing 8kV lines to 27.6 kV and ultimately provide a second point of supply to the St. Clements / Wellesley areas.

Expected Benefits

☒	Provision for increased line capacity for future growth areas.
☒	Increased reliability associated with providing an alternate supply to populated or growth areas.

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.38				
WR #:	WF0003582				
PROJECT #:	06EN06				
WR DESCRIPTION:	Industrial Crescent, St Clements				
	1830	1835	1850		Total \$
WR Costs by USoA	80,745	43,602	37,143		161,491

Business Need

This category includes expenditures for the addition of new feeder assets required to provide service to new customers in areas not previously serviced, and to previously serviced areas, to increase capacity where load density has increased. Normally projects are identified through system planning activities which include monitoring and analyzing commercial activities, station and feeder peak loading, municipal development activities, developer activities and land development activities.

WNH is located in a region of moderately high growth. As these activities are driven by the level of economic activity in our area, resulting in expenditures that can vary greatly from year to year.

Not proceeding with this customer requested work would result in refusal of connection of new customers or overloading of existing lines, both of which are detrimental to WNH and its customers.

Project Details / Scope

The scope of this project includes the building of new 27.6 kV OH lines in Industrial Cr. South of St. Clements. This project is one of several that will allow us to supply 27.6 kV loads in St. Clements / Wellesley areas.

Expected Benefits

- | | |
|----------|---|
| x | Provision for increased line capacity for growth areas. |
| x | Increased reliability associated with providing an alternate supply to populated or growth areas. |

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.39				
WR #:	WF0003606				
PROJECT #:	06EN04				
WR DESCRIPTION:	Lexington Rd at Conestoga Pky, Rebuild Pole Line Crossings				
	1830	1835			Total \$
WR Costs by USoA	93,682	50,444			144,127

Business Need

Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions.

Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.

Project Details / Scope

All crossings in WNH territory were inspected and prioritized for replacement based on pole, equipment and guying/anchoring condition. The scope of this project included rebuilding a multi circuit overhead line crossing Highway 86 due to its poor asset condition.

Expected Benefits

x	Reduced exposure to safety hazards associated with aged plant and equipment.
x	Increased reliability of new distribution equipment and materials.
x	Increased safety of new design standards and clearances.
x	Increased line capacity / lower line losses via added circuits or voltage conversions.

WNH 2009 CAPITAL PROJECT HISTORICAL > MATERIALITY

TABLE #:	2-29.40				
WR #:	WF0003637				
PROJECT #:	06EN11				
WR DESCRIPTION:	485 Wes Graham Way, UOW RAC II building				
	1850	1855			Total \$
WR Costs by USoA	53,340	71,989			125,328

Business Need

This category includes the connection costs to service new large commercial and industrial customers. Also captured here are the costs to upgrade the capacity of existing services. The cost per service can vary widely with the nature and capacity of each service. Total expenditures vary with the level of economic activity in the WNH service area.

There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.

Project Details / Scope

This project includes the installation of new primary conductors, transformers, and other plant required to service new underground connection.

Expected Benefits

☒ Supply new customers and growth area.

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.01				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	WF3369				
PROJECT DESCRIPTION:	Lexington & Bridge (Colonial Acres) - Conversion				
	1830	1835	1850		Total \$
Costs by USoA	86,221	46,559	39,662		172,442
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes rebuilding sections of overhead lines that are in poor condition and have reached the end of their life. The work will include 4 kV voltage conversions as part of WNH's Asset Management strategy. Transformers, conductors, poles, guys/anchors, and other equipment will be replaced as each conversion dictates.					
Expected Benefits					
☒ Reduced exposure to safety hazards associated with aged plant and equipment. ☒ Increased reliability of new plant and materials. ☒ Increased safety of new design standards and clearances. ☒ Increased line capacity / lower line losses from voltage conversions.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.02				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	WF3805				
PROJECT DESCRIPTION:	Fountain St., Menno St. to Kossuth Rd.				
	1830	1835	1850		Total \$
Costs by USoA	229,526	123,944	105,582		459,051
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes reconductoring approximately 3.8 km of overhead lines. Some poles will remain and some will be replaced as needed. All porcelain insulators and undersized conductor will be replaced. This project is one of several that will increase the feeder capacity in the Breslau / South Woolwich area.					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				
x	Increased line capacity for future growth areas.				

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.03				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	WF3807				
PROJECT DESCRIPTION:	Weimar Line Overhead Rebuild Ph3				
	1830	1835	1850		Total \$
Costs by USoA	176,188	95,141	81,046		352,375
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes rebuilding and converting approximately 2.4 km of overhead distribution that is in poor condition and has reached the end of its life. All equipment including poles, conductors, transformers, and guying will be replaced. This project is one of several that will allow WNH to convert existing 8 kV lines to 27.6 kV and provide a second point of supply to Wellesley area.					
Expected Benefits					
☒ Reduced exposure to safety hazards associated with aged plant and equipment. ☒ Increased reliability of new plant and materials. ☒ Increased safety of new design standards and clearances. ☒ Increased line capacity / lower line losses from voltage conversions.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.04				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	WF3808				
PROJECT DESCRIPTION:	Kossuth Pole Line Rebuild				
	1830	1835	1850		Total \$
Costs by USoA	141,050	76,167	64,883		282,100
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes the final stage of rebuilding approximately 6 km of overhead distribution that is in poor condition and has reached the end of its life. Work will also allow for an additional circuit and the future conversion of the existing 8 kV circuit to 27.6 kV. All equipment including poles, conductors, transformers, and guying will be replaced.					
Expected Benefits					
x Reduced exposure to safety hazards associated with aged plant and equipment. x Increased reliability of new plant and materials. x Increased safety of new design standards and clearances. x Provision for Increased line capacity / lower line losses from voltage conversions.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.05				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	1				
PROJECT DESCRIPTION:	2010 Distribution Automation				
	1835				Total \$
Costs by USoA Contributed Capital	233,032				233,032 -
Business Need					
Traditionally WNH's utilized manually operated load break switches for the operation and configuration of the distribution system. Automated devices existed mainly at the substations. Through the use of remotely controlled reclosers and distribution switching devices, operating benefits are being realized by improving response times to system faults and disturbances, improved protection and control functionality, increased reliability, decreased outage times, and greater protection selectivity allowing for improved safety to the public in case of downed power lines. These devices also provide valuable system (load, voltage, fault current) data that supports system operating, engineering and planning processes. Projects being captured in this category include specification, procurement, make ready work (pole replacements, if necessary), installation, configuration, testing and commissioning of the reclosers and switching devices. Tying these devices to the WNH SCADA system is covered under 06SN05 project costs. Not proceeding with deployment of remotely controlled switching devices would result in decrease in reliability due to slower response time during outages and larger areas being affected by a single fault. It would also result in higher operating costs due to the travel time required to manually operate devices for regular system switching or manually collect information from the field.					
Project Details / Scope					
This project includes all costs for procurement and installation of 5 new remotely controllable switching devices. This work includes all the labour, material, trucking, and equipment required to specify, procure, configure, install, test and commission the new switches. The work also includes any necessary modifications to the existing distribution system such as any required pole installations, phase rotations, lightning arrestor upgrades, installations of any required isolation and or by-pass switches.					
Expected Benefits					
☒ Increased reliability of power to customers. ☒ Increased safety to workers and public. ☒ Reduced operating costs. ☒ Increased system information to improve system operation and design.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.06				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	3				
PROJECT DESCRIPTION:	HS New 13.8 kV Feeder Weber, Dutton to Parkside				
	1830	1835	1850		Total \$
Costs by USoA	103,138	55,694	47,443		206,275
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes rebuilding overhead distribution that is in poor condition and converting overhead circuits from 4 kV to 13.8 kV. Feeder capacity to the City of Waterloo growth areas will be increased. Where required, all equipment including poles, conductors, transformers, and guying will be replaced.					
Expected Benefits					
☒	Reduced exposure to safety hazards associated with aged plant and equipment.				
☒	Increased reliability of new plant and materials.				
☒	Increased safety of new design standards and clearances.				
☒	Increased line capacity / lower line losses from voltage conversions.				

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.07				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	4				
PROJECT DESCRIPTION:	Kings St., Bridge to Expressway Rebuild Line				
	1830	1835	1850		Total \$
Costs by USoA Contributed Capital	133,693	72,194	61,499		267,385 -
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes adding a new 27.6 kV circuit tie in the north part of Waterloo. This tie will allow additional 27.6 kV capacity from MTS #3 to be utilized in the east side of Waterloo, as well as, additional capability to transfer load between 27.6 kV supplies in the event of a system contingency. Poles, conductor, guying/anchoring and other equipment will be replaced. In addition, load break switches will be installed as required.					
Expected Benefits					
☒ Reduced exposure to safety hazards associated with aged plant and equipment. ☒ Increased reliability of new plant and materials. ☒ Increased safety of new design standards and clearances. ☒ Increased line capacity for future growth areas.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.08				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	5				
PROJECT DESCRIPTION:	Reconductoring at Fountain St., Breslau 2 of 2				
	1830	1835	1850		Total \$
Costs by USoA	355,620	192,035	163,585		711,240
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes reconductoring approximately 1 km of overhead lines. Some poles will remain and some will be replaced as needed. All porcelain insulators and undersized conductor will be replaced. This project is one of several that will increase the feeder capacity in the Breslau / South Woolwich area.					
Expected Benefits					
☒ Reduced exposure to safety hazards associated with aged plant and equipment. ☒ Increased reliability of new plant and materials. ☒ Increased safety of new design standards and clearances. ☒ Increased line capacity for future growth areas.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.09				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	7				
PROJECT DESCRIPTION:	City #6 Conductor Replacement 2, Somerset Backlot				
	1830	1835	1850		Total \$
Costs by USoA	64,977	35,088	29,889		129,954
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes rebuilding overhead areas consisting of poles and #4/6 primary conductor that are in poor condition and have reached the end of their life. Many of the lines are also located in rear lots making them more difficult to access and maintain. Transformers and primary line will either be eliminated or moved to road accessible locations wherever possible. All equipment including poles, conductors, transformers, and guying will be replaced.					
Expected Benefits					
☒ Reduced exposure to safety hazards associated with aged plant and equipment. ☒ Increased reliability of new plant and materials. ☒ Increased safety of new design standards and clearances. ☒ Elimination of rear lot #6 primary conductor.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.10				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	14				
PROJECT DESCRIPTION:	MS6/10 Overhead Conversions				
	1830	1835	1850		Total \$
Costs by USoA	87,652	47,332	40,320		175,303
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes rebuilding approximately 800m of overhead lines to facilitate 4 kV conversions and 4 kV station decommissioning as part of WNH's Asset Management strategy. Transformers, conductors, poles, guys/anchors, and other equipment will be replaced as each conversion dictates. The conversion area is served by stations MS 6 and 10 which are both scheduled for decommissioning in 2010.					
Expected Benefits					
☒ Reduced exposure to safety hazards associated with aged plant and equipment. ☒ Increased reliability of new plant and materials. ☒ Increased safety of new design standards and clearances. ☒ Increased line capacity / lower line losses from voltage conversions.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.11				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	47				
PROJECT DESCRIPTION:	10 poles - Churchill St (Facilitate Underground Conversions)				
	1830	1835	1850		Total \$
Costs by USoA	75,000	40,500	34,500		150,000
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes rebuilding approximately 600m of overhead line that is in poor condition and has reached the end of its life. Work will include 4 kV voltage conversions and 4 kV station decommissioning as part of WNH's Asset Management strategy. Transformers, conductors, poles, guys/anchors, and other equipment will be replaced as each conversion dictates.					
Expected Benefits					
☒ Reduced exposure to safety hazards associated with aged plant and equipment. ☒ Increased reliability of new plant and materials. ☒ Increased safety of new design standards and clearances. ☒ Increased line capacity / lower line losses from voltage conversions.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.12				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	48				
PROJECT DESCRIPTION:	McDougall 4 kV coversion (Facillitate Underground Project)				
	1830	1835	1850		Total \$
Costs by USoA	140,000	75,600	64,400		280,000
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades/additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes rebuilding approximately 700m of overhead line that is in poor condition and has reached the end of its life. Work will include 4 kV voltage conversions and 4 kV station decommissioning as part of WNH's Asset Management strategy. Transformers, conductors, poles, guys/anchors, and other equipment will be replaced as each conversion dictates.					
Expected Benefits					
☒ Reduced exposure to safety hazards associated with aged plant and equipment. ☒ Increased reliability of new plant and materials. ☒ Increased safety of new design standards and clearances. ☒ Increased line capacity / lower line losses from voltage conversions.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.13				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	15				
PROJECT DESCRIPTION:	Erb St., Erbsville Road to Wilmot Line Conversion				
	1830	1835	1850		Total \$
Costs by USoA	170,320	91,973	78,347		340,640
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes rebuilding overhead distribution that is in poor condition and has reached the end of its life. Voltage conversion from 13.8 kV to 27.6 kV will also take place. Transformers, conductors, poles, guys/anchors, and other equipment will be replaced as part of the line upgrade. This supply in this area is being shifted from 13.8 kV capacity out of EB Rush TS to 27.6 kV out of MTS#3 to better utilized the 13.8 kV supply for the city core growth areas.					
Expected Benefits					
☒ Reduced exposure to safety hazards associated with aged plant and equipment. ☒ Increased reliability of new plant and materials. ☒ Increased safety of new design standards and clearances. ☒ Increased line capacity / lower line losses from voltage conversions.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.14				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	19				
PROJECT DESCRIPTION:	27.6 kV to Wellesley Hessen Strasse, Hergott to Moser Young 1 of 2				
	1830	1835	1850		Total \$
Costs by USoA	190,063	102,634	87,429		380,126
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes rebuilding and converting approximately 2.4 km of overhead distribution that is in poor condition and has reached the end of its life. All equipment including poles, conductors, transformers, and guying will be replaced. This project is one of several that will allow WNH to convert existing 8 kV lines to 27.6 kV and provide a second point of supply to Wellesley area.					
Expected Benefits					
☒	Reduced exposure to safety hazards associated with aged plant and equipment.				
☒	Increased reliability of new plant and materials.				
☒	Increased safety of new design standards and clearances.				
☒	Increased line capacity / lower line losses from voltage conversions.				

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.15				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	20				
PROJECT DESCRIPTION:	27.6 kV to Wellesley Moser Young, Hessen Strasse to Weimar Line 2 of 2				
	1830	1835	1850		Total \$
Costs by USoA	150,063	81,034	69,029		300,126
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes rebuilding and converting approximately 2 km of overhead distribution that is in poor condition and has reached the end of its life. All equipment including poles, conductors, transformers, and guying will be replaced. This project is one of several that will allow WNH to convert existing 8 kV lines to 27.6 kV and provide a second point of supply to Wellesley area.					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				
x	Increased line capacity / lower line losses from voltage conversions.				

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.16				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	23				
PROJECT DESCRIPTION:	Install Reclosers Procured in 2009				
	1830				Total \$
Costs by USoA Contributed Capital	159,092				159,092 -
Business Need					
Traditionally WNH's utilized manually operated load break switches for the operation and configuration of the distribution system. Automated devices existed mainly at the substations. Through the use of remotely controlled reclosers and distribution switching devices, operating benefits are being realized by improving response times to system faults and disturbances, improved protection and control functionality, increased reliability, decreased outage times, and greater protection selectivity allowing for improved safety to the public in case of downed power lines. These devices also provide valuable system (load, voltage, fault current) data that supports system operating , engineering and planning processes. Projects being captured in this category include specification, procurement, make ready work (pole replacements, if necessary), installation, configuration, testing and commissioning of the reclosers and switching devices. Tying these devices to the WNH SCADA system is covered under 06SN05 project costs. Not proceeding with deployment of remotely controlled switching devices would result in decrease in reliability due to slower response time during outages and larger areas being affected by a single fault. It would also result in higher operating costs due to the travel time required to manually operate devices for regular system switching or manually collect information from the field.					
Project Details / Scope					
This project includes remaining progress payments for reclosers placed on order in 2009 and all costs for their installation. This work includes all the labour, material, trucking, and equipment required to configure, install, test and commission the new reclosers. The work also includes any necessary modifications to the existing distribution system such as any required pole installations, phase rotations, lightning arrestor upgrades, installations of any required isolation and or by-pass switches.					
Expected Benefits					
☒ Increased reliability of power to customers. ☒ Increased safety to workers and public. ☒ Reduced operating costs through remote switching. ☒ Increased system information to improve system operation and design.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.17				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	38				
PROJECT DESCRIPTION:	Avondale Avenue				
	1830	1835	1850		Total \$
Costs by USoA	70,000	37,800	32,200		140,000
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes rebuilding sections of line along Avondale Ave that have reached their end of life and have been identified through the WNH inspection program as requiring immediate replacement. Transformers, conductors, poles, guys/anchors, and other equipment will be replaced.					
Expected Benefits					
☒ Reduced exposure to safety hazards associated with aged plant and equipment. ☒ Increased reliability of new plant and materials. ☒ Increased safety of new design standards and clearances. ☒ Provision for Increased line capacity / lower line losses from future voltage conversions.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.18				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	41				
PROJECT DESCRIPTION:	Columbia St., Weber to Marsland - Wire Rebuild				
	1830	1835	1850		Total \$
Costs by USoA	70,000	37,800	32,200		140,000
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes rebuilding a line section on Columbia St. identified through WNH's inspection program as is in poor condition and which has reached its end of life. Transformers, conductors, poles, guys/anchors, and other equipment will be replaced.					
Expected Benefits					
☒ Reduced exposure to safety hazards associated with aged plant and equipment. ☒ Increased reliability of new plant and materials. ☒ Increased safety of new design standards and clearances.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.19				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	43				
PROJECT DESCRIPTION:	2009 Pole Testing Replacements				
	1830	1835	1850		Total \$
Costs by USoA	70,000	37,800	32,200		140,000
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes replacement of poles throughout the WNH service territory that have been identified as requiring replacement under our annual overhead pole testing program. All equipment associated with the pole installation will be replaced including transformers, insulators, and guys/anchors.					
Expected Benefits					
x Reduced exposure to safety hazards associated with aged plant and equipment. x Increased reliability of new plant and materials. x Increased safety of new design standards and clearances.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.20				
PROJECT #:	06EN05				
PROJECT SUB-TYPE:	2				
PROJECT DESCRIPTION:	Bearinger City Pole Relocations				
	1830	1835	1850		Total \$
Costs by USoA	86,800	43,400	9,800		140,000
Contributed Capital					-
Business Need					
This category includes expenditures to relocate/replace pole line assets that conflict with roadway construction activities. The level of spending is driven by the activities of the road authorities and specific projects are rarely known at the time that the budget is developed. Total expenditures can vary greatly from year to year and reimbursement is normally limited to 50% of labour and labour saving devices. There are no alternatives to these activities. These expenditures are not discretionary as compliance is mandated by the Public Service Works on Highways Act, R.S.O. 1990.					
Project Details / Scope					
This work includes the removal of all existing poles, conductors, transformers, guying and all other equipment within the road authority's scope of work and construction of a new distribution line to new construction standards at an alternate location. This work is located on Bearinger Rd. and has been initiated by the City of Waterloo.					
Expected Benefits					
There are seldom any benefits to WNH in relocating existing lines. Experience has shown that assets required to be relocated are rarely at end of life. Although some recovery of materials can occur, most do not comply with current standards for reuse in new construction and are depreciated to the point that the combination of labour cost to recover used materials and the remaining life of the asset often approaches or exceeds the cost to purchase new materials.					
☒ Reduced exposure to safety hazards associated with aged plant and equipment.					
☒ Increased reliability of new plant and materials.					
☒ Increased safety of new design standards and clearances.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.21				
PROJECT #:	06EN05				
PROJECT SUB-TYPE:	4				
PROJECT DESCRIPTION:	University Ave, Lexington to Bridge, City Relocation				
	1830	1835	1850		Total \$
Costs by USoA	93,000	46,500	10,500		150,000
Contributed Capital					-
Business Need					
This category includes expenditures to relocate/replace pole line assets that conflict with roadway construction activities. The level of spending is driven by the activities of the road authorities and specific projects are rarely known at the time that the budget is developed. Total expenditures can vary greatly from year to year and reimbursement is normally limited to 50% of labour and labour saving devices. There are no alternatives to these activities. These expenditures are not discretionary as compliance is mandated by the Public Service Works on Highways Act, R.S.O. 1990.					
Project Details / Scope					
This work includes the removal of all existing poles, conductors, transformers, guying and all other equipment within the road authority's scope of work and construction of a new distribution line to new construction standards at an alternate location. This work is located on University Ave and has been initiated by the City of Waterloo.					
Expected Benefits					
There are seldom any benefits to WNH in relocating existing lines. Experience has shown that assets required to be relocated are rarely at end of life. Although some recovery of materials can occur, most do not comply with current standards for reuse in new construction and are depreciated to the point that the combination of labour cost to recover used materials and the remaining life of the asset often approaches or exceeds the cost to purchase new materials.					
☒	Reduced exposure to safety hazards associated with aged plant and equipment.				
☒	Increased reliability of new plant and materials.				
☒	Increased safety of new design standards and clearances.				

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.22				
PROJECT #:	06EN06				
PROJECT SUB-TYPE:	WF3537				
PROJECT DESCRIPTION:	Ira Needles - Erb St . to University Ave.				
	1830	1835	1850		Total \$
Costs by USoA	142,369	77,429	29,972		249,770
Contributed Capital					-
Business Need					
This category includes the addition of new feeder assets required to provide service to new customers in areas not previously serviced, and to previously serviced areas, to increase capacity where load density has increased. Normally projects are identified through system planning activities which include monitoring and analyzing commercial activities, station and feeder peak loading, municipal development activities, developer activities and land development activities. WNH is located in a region of moderately high growth. As these activities are driven by the level of economic activity in our area, resulting in expenditures that can vary greatly from year to year. Not proceeding with this customer requested work would result in refusal of connection of new customers or overloading of existing lines, both of which are detrimental to WNH and its customers.					
Project Details / Scope					
This project includes construction of a new line to supply 27.6 kV and 13.8 kV capacity to the Ira Needles/University area. This new line will supply new and future development in the area. New poles, conductors, transformers, and other related plant form part of this installation.					
Expected Benefits					
☒	Provision for increased line capacity for growth areas.				
☒	Increased reliability associated with providing an alternate supply to populated or growth areas.				

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.23				
PROJECT #:	06EN06				
PROJECT SUB-TYPE:	WF3705				
PROJECT DESCRIPTION:	Erbsville Road - Columbia Street to Erb St				
	1830	1835	1850		Total \$
Costs by USoA	301,903	164,193	63,559		529,655
Contributed Capital					-
Business Need					
This category includes the addition of new feeder assets required to provide service to new customers in areas not previously serviced, and to previously serviced areas, to increase capacity where load density has increased. Normally projects are identified through system planning activities which include monitoring and analyzing commercial activities, station and feeder peak loading, municipal development activities, developer activities and land development activities. WNH is located in a region of moderately high growth. As these activities are driven by the level of economic activity in our area, resulting in expenditures that can vary greatly from year to year. Not proceeding with this customer requested work would result in refusal of connection of new customers or overloading of existing lines, both of which are detrimental to WNH and its customers.					
Project Details / Scope					
This project includes construction of a new line to supply 27.6 kV and 13.8 kV capacity to the Ira Needles/University area. This new line will supply new and future development in the area. New poles, conductors, transformers, and other related plant form part of this installation.					
Expected Benefits					
☒ Provision for increased line capacity for growth areas. ☒ Increased reliability associated with providing an alternate supply to populated or growth areas.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.24				
PROJECT #:	06EN06				
PROJECT SUB-TYPE:	WF3859				
PROJECT DESCRIPTION:	Hessen Strasse - Willow Way to Moser				
	1830	1835	1850		Total \$
Costs by USoA	185,172	100,707	38,984		324,863
Contributed Capital					-
Business Need					
This category includes the addition of new feeder assets required to provide service to new customers in areas not previously serviced, and to previously serviced areas, to increase capacity where load density has increased. Normally projects are identified through system planning activities which include monitoring and analyzing commercial activities, station and feeder peak loading, municipal development activities, developer activities and land development activities. WNH is located in a region of moderately high growth. As these activities are driven by the level of economic activity in our area, resulting in expenditures that can vary greatly from year to year. Not proceeding with this customer requested work would result in refusal of connection of new customers or overloading of existing lines, both of which are detrimental to WNH and its customers.					
Project Details / Scope					
The scope of this project includes the installation of new lines to facilitate converting from 8 kV to 27.6 kV and the installation of a new 27.6 kV supply to the Wellesley settlement area. All equipment including poles, conductors, transformers, and guying will be replaced.					
Expected Benefits					
☒ Provision for increased line capacity for growth areas. ☒ Increased reliability associated with providing an alternate supply to populated or growth areas.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.25				
PROJECT #:	06EN06				
PROJECT SUB-TYPE:	6				
PROJECT DESCRIPTION:	Chalmers Forest Rd - South of Deborah Glaister Line				
	1830	1835	1850		Total \$
Costs by USoA	79,800	43,400	16,800		140,000
Contributed Capital					-
Business Need					
This category includes the addition of new feeder assets required to provide service to new customers in areas not previously serviced, and to previously serviced areas, to increase capacity where load density has increased. Normally projects are identified through system planning activities which include monitoring and analyzing commercial activities, station and feeder peak loading, municipal development activities, developer activities and land development activities. WNH is located in a region of moderately high growth. As these activities are driven by the level of economic activity in our area, resulting in expenditures that can vary greatly from year to year. Not proceeding with this customer requested work would result in refusal of connection of new customers or overloading of existing lines, both of which are detrimental to WNH and its customers.					
Project Details / Scope					
This project includes construction of a new line to supply a new customer and to connect existing customers who are currently supplied as long term load transfers from Hydro One.					
Expected Benefits					
☒ Provision for increased line capacity for growth areas. ☒ Increased reliability associated with providing an alternate supply to populated or growth areas.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.26				
PROJECT #:	06EN07				
PROJECT SUB-TYPE:	1				
PROJECT DESCRIPTION:	New Overhead Service Connections/Upgrade				
	1855			1995	Total \$
Costs by USoA	905,700				905,700
Contributed Capital				(84,565)	(84,565)
Business Need					
This category includes the connection costs to service new large commercial and industrial customers. Also captured here are the costs to upgrade the capacity of existing services. The cost per service can vary widely with the nature and capacity of each service. Total expenditures vary with the level of economic activity in the WNH service area. There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.					
Project Details / Scope					
This project includes the installation of new services in overhead distribution areas. Also included are services that are installed or replaced as a result of customers requesting upgrades or major modifications to their existing service. The installation of new services include all labour and equipment associated with connecting customer's electrical servicing equipment to WNH lines - wire, poles, transformers, etc.					
Expected Benefits					
☒ Provision for growth. ☒ Reduced exposure to safety hazards associated with aged plant and equipment. ☒ Increased reliability of new distribution equipment and materials. ☒ Increased safety of new design standards and clearances.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.27				
PROJECT #:	06EN08				
PROJECT SUB-TYPE:	WF2918				
PROJECT DESCRIPTION:	TS HS17 Feeder Egress - Conestoga Parkway				
	1845				Total \$
Costs by USoA	445,879				445,879
Contributed Capital					-
Business Need					
This category includes the addition of new feeder assets required to provide service to new customers in areas not previously serviced, and to previously serviced areas, to increase capacity where load density has increased. Normally projects are identified through system planning activities which include monitoring and analyzing commercial activities, station and feeder peak loading, municipal development activities, developer activities and land development activities. WNH is located in a region of moderately high growth. As these activities are driven by the level of economic activity in our area, resulting in expenditures that can vary greatly from year to year. Not proceeding with this customer requested work would result in refusal of connection of new customers or overloading of existing lines, both of which are detrimental to WNH and its customers.					
Project Details / Scope					
In 2006 WNH started a multistage project of rehabilitating the 1960's vintage Scheifele "A" transformer station. The last stage of this upgrade is the installation of new concrete duct banks and power cable. This budget item includes the costs to supply and install new feeder cable.					
Expected Benefits					
☒ Increased reliability of power to customers. ☒ Provision for increased supply for growth areas of Waterloo.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.28				
PROJECT #:	06EN08				
PROJECT SUB-TYPE:	1				
PROJECT DESCRIPTION:	Balsillie School - F.D. Bauer Drive				
	1845				Total \$
Costs by USoA	484,542				484,542
Contributed Capital					-
Business Need					
This category includes the addition of new feeder assets required to provide service to new customers in areas not previously serviced, and to previously serviced areas, to increase capacity where load density has increased. Normally projects are identified through system planning activities which include monitoring and analyzing commercial activities, station and feeder peak loading, municipal development activities, developer activities and land development activities. WNH is located in a region of moderately high growth. As these activities are driven by the level of economic activity in our area, resulting in expenditures that can vary greatly from year to year. Not proceeding with this customer requested work would result in refusal of connection of new customers or overloading of existing lines, both of which are detrimental to WNH and its customers.					
Project Details / Scope					
This project includes the installation of new underground feeders to supply the associated development. New ductbanks, cable, and primary switchgear are to be installed. This project will also include burying existing overhead lines at the request of the City of Waterloo. The developer will provide a capital contribution for this project.					
Expected Benefits					
☒ Increased reliability of power to customers. ☒ Provision for increased supply for growth areas of Waterloo.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.29				
PROJECT #:	06EN08				
PROJECT SUB-TYPE:	4				
PROJECT DESCRIPTION:	TS - HSA New Feeder Cable				
	1845				Total \$
Costs by USoA Contributed Capital	454,121				454,121 -
Business Need					
This category includes the addition of new feeder assets required to provide service to new customers in areas not previously serviced, and to previously serviced areas, to increase capacity where load density has increased. Normally projects are identified through system planning activities which include monitoring and analyzing commercial activities, station and feeder peak loading, municipal development activities, developer activities and land development activities. WNH is located in a region of moderately high growth. As these activities are driven by the level of economic activity in our area, resulting in expenditures that can vary greatly from year to year. Not proceeding with this customer requested work would result in refusal of connection of new customers or overloading of existing lines, both of which are detrimental to WNH and its customers.					
Project Details / Scope					
In 2006 WNH started a multistage project of rehabilitating the 1960's vintage Scheifele "A" transformer station. The last stage of this upgrade is the installation of new concrete duct banks and power cable. This budget item includes the costs to specify, tender and procure new feeder cable. Delivery will be late 2010 and installation in early 2011.					
Expected Benefits					
☒ Increased reliability of power to customers. ☒ Provision for increased supply for growth areas of Waterloo.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.30				
PROJECT #:	06EN09				
PROJECT SUB-TYPE:	WF3368				
PROJECT DESCRIPTION:	Area 15 - Glenburn Dr., Keats Way Pl., Keats Walk				
	1840	1845	1850		Total \$
Costs by USoA	26,124	44,411	60,086		130,622
Contributed Capital					-
Business Need					
This category includes expenditures for the replacement of underground distribution feeder assets. Underground distribution is replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. Cable rehabilitation has been explored, however, it has not yet been found to be cost effective in our URD applications. WNH has three (3) distinct populations of Underground Distribution, most of which is underground residential distribution (URD). 1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been and continues to be the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency and safety are being achieved by retiring the 4 kV distribution system. 2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures 3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continues to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
This area was initially serviced with first generation underground distribution in the early to mid 1970's. This project includes 800 m of primary trenching in the form of directional drilling and the replacement of 13 transformers. Primary cable is replaced with new cable in duct, transformers are replaced in accordance with the latest standards, and additional spare ducts are installed to facillitate the future replacement of streetlighting and secondary conductors.					
Expected Benefits					
x	Increased reliability of new distribution equipment and materials.				
x	Increased safety of new design standards and clearances.				
x	Reduced operational trouble calls.				

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.31				
PROJECT #:	06EN09				
PROJECT SUB-TYPE:	WF 3508				
PROJECT DESCRIPTION:	Area 27 - Carter Willowdale				
	1840	1845	1850		Total \$
Costs by USoA	114,000	193,800	262,200		570,000
Contributed Capital					-
Business Need					
This category includes expenditures for the replacement of underground distribution feeder assets. Underground distribution is replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. Cable rehabilitation has been explored, however, it has not yet been found to be cost effective in our URD applications. WNH has three (3) distinct populations of Underground Distribution, most of which is underground residential distribution (URD). 1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been and continues to be the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency and safety are being achieved by retiring the 4 kV distribution system. 2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures 3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continues to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
This area was initially serviced with first generation underground distribution in the early to mid 1960's.This project includes 1350 m of primary trenching in the form of directional drilling and the replacement of 4 transformers. Primary cable is replaced with new cable in duct, transformers are replaced in accordance with the latest standards, and additional spare ducts are installed to facillitate the future replacement of streetlighting and secondary conductors.					
Expected Benefits					
☒ Increased reliability of new distribution equipment and materials. ☒ Increased safety of new design standards and clearances. ☒ Reduced operational trouble calls.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.32				
PROJECT #:	06EN09				
PROJECT SUB-TYPE:	1				
PROJECT DESCRIPTION:	Area 15 - Glenburn Dr., Keats Way Pl., Keats Walk				
	1840	1845	1850		Total \$
Costs by USoA Contributed Capital	52,200	88,740	120,060		261,000 -
Business Need					
This category includes expenditures for the replacement of underground distribution feeder assets. Underground distribution is replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. Cable rehabilitation has been explored, however, it has not yet been found to be cost effective in our URD applications. WNH has three (3) distinct populations of Underground Distribution, most of which is underground residential distribution (URD). 1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been and continues to be the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency and safety are being achieved by retiring the 4 kV distribution system. 2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures 3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
This area was initially serviced with first generation underground distribution in the early to mid 1970's. This project includes 310 m of primary trenching in the form of directional drilling and the replacement of 4 transformers. Primary cable is replaced with new cable in duct, transformers are replaced in accordance with the latest standards, and additional spare ducts are installed to facilitate the future replacement of streetlighting and secondary conductors.					
Expected Benefits					
☒ Increased reliability of new distribution equipment and materials. ☒ Increased safety of new design standards and clearances. ☒ Reduced operational trouble calls.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.33				
PROJECT #:	06EN09				
PROJECT SUB-TYPE:	2				
PROJECT DESCRIPTION:	Area 14 - Churchill St., Townhouses				
	1840	1845	1850		Total \$
Costs by USoA	45,000	76,500	103,500		225,000
Contributed Capital					-
Business Need					
This category includes expenditures for the replacement of underground distribution feeder assets. Underground distribution is replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. Cable rehabilitation has been explored, however, it has not yet been found to be cost effective in our URD applications. WNH has three (3) distinct populations of Underground Distribution, most of which is underground residential distribution (URD). 1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been and continues to be the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency and safety are being achieved by retiring the 4 kV distribution system. 2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures 3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
This area was initially serviced with first generation underground distribution in the early to mid 1970's. This project includes 620 m of primary trenching in the form of directional drilling and the replacement of 11 transformers. Primary cable is replaced with new cable in duct, transformers are replaced in accordance with the latest standards, and additional spare ducts are installed to facilitate the future replacement of streetlighting and secondary conductors.					
Expected Benefits					
☒ Increased reliability of new distribution equipment and materials. ☒ Increased safety of new design standards and clearances. ☒ Reduced operational trouble calls.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.34				
PROJECT #:	06EN09				
PROJECT SUB-TYPE:	3				
PROJECT DESCRIPTION:	Westcourt Place Secondary - Phase 1 - 54 Units				
	1840	1845	1850		Total \$
Costs by USoA Contributed Capital	29,090	49,455	66,909		145,454 -
Business Need					
This category includes expenditures for the replacement of underground distribution feeder assets. Underground distribution is replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. Cable rehabilitation has been explored, however, it has not yet been found to be cost effective in our URD applications. WNH has three (3) distinct populations of Underground Distribution, most of which is underground residential distribution (URD). 1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been and continues to be the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency and safety are being achieved by retiring the 4 kV distribution system. 2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures 3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
This area was initially serviced with first generation underground distribution in the early to mid 1970's. This project includes replacement of defective secondary conductors that have resulted in numerous trouble calls by Operations. Primary cable and transformers have been converted to 13.8 kV. Some meters have been moved outside through service upgrades.					
Expected Benefits					
☒ Increased reliability of new distribution equipment and materials. ☒ Increased safety of new design standards and clearances. ☒ Reduced operational trouble calls.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.35				
PROJECT #:	06EN09				
PROJECT SUB-TYPE:	7				
PROJECT DESCRIPTION:	Area 28 - 121 University Ave., Waterloo				
	1840	1845	1850		Total \$
Costs by USoA	67,200	114,240	154,560		336,000
Contributed Capital					-
Business Need					
This category includes expenditures for the replacement of underground distribution feeder assets. Underground distribution is replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. Cable rehabilitation has been explored, however, it has not yet been found to be cost effective in our URD applications. WNH has three (3) distinct populations of Underground Distribution, most of which is underground residential distribution (URD). 1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been and continues to be the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency and safety are being achieved by retiring the 4 kV distribution system. 2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures 3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continues to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
This area was initially serviced with first generation underground distribution in the early to mid 1970's. This project includes 700 m of primary trenching in the form of directional drilling and the replacement of 11 transformers. Primary cable is replaced with new cable in duct, transformers are replaced in accordance with the latest standards, and additional spare ducts are installed to facillitate the future replacement of streetlighting and secondary conductors.					
Expected Benefits					
☒ Increased reliability of new distribution equipment and materials. ☒ Increased safety of new design standards and clearances. ☒ Reduced operational trouble calls.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.36				
PROJECT #:	06EN09				
PROJECT SUB-TYPE:	12				
PROJECT DESCRIPTION:	PMH Switchgear Replacements				
	1845				Total \$
Costs by USoA Contributed Capital	132,679				132,679 -
Business Need					
This category includes expenditures for the replacement of underground distribution feeder assets. Underground distribution is replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. Cable rehabilitation has been explored, however, it has not yet been found to be cost effective in our URD applications. WNH has three (3) distinct populations of Underground Distribution, most of which is underground residential distribution (URD). 1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been and continues to be the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency and safety are being achieved by retiring the 4 kV distribution system. 2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures 3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continue to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
Project details include the replacement of defective (due to high partial discharge and tracking) PMH units. Increased maintenance activities attempted to address the problems but were unsuccessful. 2 units are to be replaced 2010. These units were initially installed in the mid to late 1990's.					
Expected Benefits					
☒ Increased reliability of new distribution equipment and materials. ☒ Reduced operational trouble calls.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.37				
PROJECT #:	06EN10				
PROJECT SUB-TYPE:	WF 3292				
PROJECT DESCRIPTION:	Gies Westvale Phase 2				
	1840	1845	1850	1995	Total \$
Costs by USoA	41,809	127,887	76,240		245,937
Contributed Capital				(149,348)	(149,348)
Business Need					
Underground Residential Subdivisions are capital expansions to the WNH distribution system driven solely by customer demand. In accordance with the Distribution System Code, WNH performs an economic evaluation for each project and provides the developer with an Offer to Connect. Developers that meet WNH's Conditions of Service and provide the necessary financial commitments are connected. Total expenditures vary with the level of economic activity in WNH's service area. This spending is customer driven. There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.					
Project Details / Scope					
This project involves the installation of new plant to facilitate electrical servicing of new residential developments. Included are new primary cables, transformers, civil infrastructure, secondary cables, and other necessary plant and equipment. Work is coordinated with developers and other utilities and is completed in accordance with developer's timelines. Included are provisions for 62 lots.					
Expected Benefits					
☒ Increased feeder capacity and distribution assets for growth. ☒ Expansion of system to connect new customers.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.38				
PROJECT #:	06EN10				
PROJECT SUB-TYPE:	11				
PROJECT DESCRIPTION:	Hopewell Heights Phase 3C				
	1840	1845	1850	1995	Total \$
Costs by USoA	34,680	106,080	63,240		204,000
Contributed Capital				(110,160)	(110,160)
Business Need					
Underground Residential Subdivisions are capital expansions to the WNH distribution system driven solely by customer demand. In accordance with the Distribution System Code, WNH performs an economic evaluation for each project and provides the developer with an Offer to Connect. Developers that meet WNH's Conditions of Service and provide the necessary financial commitments are connected. Total expenditures vary with the level of economic activity in WNH's service area. This spending is customer driven. There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.					
Project Details / Scope					
This project involves the installation of new plant to facilitate electrical servicing of new residential developments. Included are new primary cables, transformers, civil infrastructure, secondary cables, and other necessary plant and equipment. Work is coordinated with developers and other utilities and is completed in accordance with developer's timelines. Included are provisions for 34 lots.					
Expected Benefits					
☒ Increased feeder capacity and distribution assets for growth. ☒ Expansion of system to connect new customers.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.39				
PROJECT #:	06EN10				
PROJECT SUB-TYPE:	WF 3956				
PROJECT DESCRIPTION:	Riverland Phase 2A				
	1840	1845	1850	1995	Total \$
Costs by USoA	43,958	134,460	80,159		258,577
Contributed Capital				(139,320)	(139,320)
Business Need					
Underground Residential Subdivisions are capital expansions to the WNH distribution system driven solely by customer demand. In accordance with the Distribution System Code, WNH performs an economic evaluation for each project and provides the developer with an Offer to Connect. Developers that meet WNH's Conditions of Service and provide the necessary financial commitments are connected. Total expenditures vary with the level of economic activity in WNH's service area. This spending is customer driven. There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.					
Project Details / Scope					
This project involves the installation of new plant to facilitate electrical servicing of new residential developments. Included are new primary cables, transformers, civil infrastructure, secondary cables, and other necessary plant and equipment. Work is coordinated with developers and other utilities and is completed in accordance with developer's timelines. Included are provisions for 94 units.					
Expected Benefits					
☒ Increased feeder capacity and distribution assets for growth. ☒ Expansion of system to connect new customers.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.40				
PROJECT #:	06EN10				
PROJECT SUB-TYPE:	13				
PROJECT DESCRIPTION:	Carriage Crossing				
	1840	1845	1850	1995	Total \$
Costs by USoA	54,393	166,379	99,188		319,960
Contributed Capital				(200,880)	(200,880)
Business Need					
Underground Residential Subdivisions are capital expansions to the WNH distribution system driven solely by customer demand. In accordance with the Distribution System Code, WNH performs an economic evaluation for each project and provides the developer with an Offer to Connect. Developers that meet WNH's Conditions of Service and provide the necessary financial commitments are connected. Total expenditures vary with the level of economic activity in WNH's service area. This spending is customer driven. There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.					
Project Details / Scope					
This project involves the installation of new plant to facilitate electrical servicing of new residential developments. Included are new primary cables, transformers, civil infrastructure, secondary cables, and other necessary plant and equipment. Work is coordinated with developers and other utilities and is completed in accordance with developer's timelines. Included are provisions for 124 units.					
Expected Benefits					
☒ Increased feeder capacity and distribution assets for growth. ☒ Expansion of system to connect new customers.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.41				
PROJECT #:	06EN11				
PROJECT SUB-TYPE:	1				
PROJECT DESCRIPTION:	New Underground Services				
	1855			1995	Total \$
Costs by USoA	903,446				903,446
Contributed Capital				(455,000)	(455,000)
Business Need					
This category includes the connection costs to service new customers. Also captured here are the costs to upgrade the capacity of existing services. The cost per service can vary widely with the nature and capacity of each service. Total expenditures vary with the level of economic activity in the WNH service area. There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in conflict with the Distribution System Code and municipal development objectives.					
Project Details / Scope					
This project includes the installation of new services in new subdivisions serviced by underground power distribution. Also included are underground services that are installed or replaced as a result of customers requesting upgrades or major modifications to their existing service.					
Expected Benefits					
☒ Supply new customers and growth areas. ☒ Reduced exposure to safety hazards associated with aged plant and equipment. ☒ Increased reliability of new distribution equipment and materials. ☒ Increased safety of new design standards and clearances.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.42				
PROJECT #:	06SN02				
PROJECT SUB-TYPE:	1				
PROJECT DESCRIPTION:	TS ERTS Switchyard Upgrades				
	1808				Total \$
Costs by USoA	1,131,796				1,131,796
Contributed Capital					-
Business Need					
WNH is supplied primarily through the IESO controlled, Hydro One Transmission System at transmission voltages of 115 kV and 230 kV. WNH owns and operates three (3) transmission grid connected Transformer Stations (TS's) operating at 115 kV - 13.8 kV, 230 kV - 27.6 kV and 230 kV - 13.8 kV. Expenditures in this category are made due to one of the following reasons: - there is a need to increase capacity to meet growth in demand. Such needs are normally identified through system planning activities. - the equipment requires replacement or a major refurbishment due to its condition. In such cases, regular maintenance will not address the problem nor is it cost effective. This is normally identified as a result of a variety of regularly scheduled testing and maintenance activities. - the equipment needs to be replaced due to obsolescence. Such needs are typically identified through the inability to source spare or replacement components. - the equipment needs to be updated to meet regulatory requirements (Transmission System Code, Market Rules, etc) Where at all possible, projects are scheduled such that one project can satisfy more than one need. Projects being captured in this category include new or major refurbishments to existing switches or breakers, transformers, switchgear, protection and control systems, structural support systems and environmental protection systems. The implications of not taking proper actions and improving equipment capacity or condition as required could result in inability to supply power to customers, damage to equipment, increased safety hazards to workers, unreliable or misoperation of equipment, explosive equipment failure and breach of requirements set out in the Transmission System Code.					
Project Details / Scope					
Eby Rush Transformer Station was placed into service in 1963 and much of the switchyard equipment is past end of life. The high voltage disconnecting switches are obsolete and have had operational issues that maintenance cannot correct. The transformers are also near the end of their life and undersized to meet the load growth needs of the station supply area. Both of these components need to be replaced to increase capacity and reliability of that station. The station will also be fitted with oil containment to mitigate the environmental risks of any potential leaks. This budget item includes the civil component associated with transformer replacement and high voltage switch upgrade to circuit switchers as well as installation of new terminating and support structure and oil containment system. Costs in this item include WNH labour, trucking and material, all design and consulting charges, all regulatory filing charges, as well as all construction costs (labour, material, equipment, etc.)					
Expected Benefits					
☒	Increased safety to workers and public.				
☒	Increased reliability of power to customers.				
☒	Provision for increased supply for growth areas of Waterloo.				
☒	Compliance with the Transmission System Code, HONI and/or IESO requirements.				
☒	Reduced risk to the environment.				

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.43				
PROJECT #:	06SN04				
PROJECT SUB-TYPE:	4				
PROJECT DESCRIPTION:	TS ERTS Transformers				
	1815				Total \$
Costs by USoA	3,229,322				3,229,322
Contributed Capital					-
Business Need					
WNH is supplied primarily through the IESO controlled, Hydro One Transmission System at transmission voltages of 115 kV and 230 kV. WNH owns and operates three (3) transmission grid connected Transformer Stations (TS's) operating at 115 kV - 13.8 kV, 230 kV - 27.6 kV and 230 kV - 13.8 kV. Expenditures in this category are made due to one of the following reasons: - there is a need to increase capacity to meet growth in demand. Such needs are normally identified through system planning activities. - the equipment requires replacement or a major refurbishment due to its condition. In such cases, regular maintenance will not address the problem nor is it cost effective. This is normally identified as a result of a variety of regularly scheduled testing and maintenance activities. - the equipment needs to be replaced due to obsolescence. Such needs are typically identified through the inability to source spare or replacement components. - the equipment needs to be updated to meet regulatory requirements (Transmission System Code, Market Rules, etc) Where at all possible, projects are scheduled such that one project can satisfy more than one need. Projects being captured in this category include new or major refurbishments to existing switches or breakers, transformers, switchgear, protection and control systems, structural support systems and environmental protection systems. The implications of not taking proper actions and improving equipment capacity or condition as required could result in inability to supply power to customers, damage to equipment, increased safety hazards to workers, unreliable or misoperation of equipment, explosive equipment failure and breach of requirements set out in the Transmission System Code.					
Project Details / Scope					
Eby Rush Transformer Station's power transformers are near the end of their life and undersized to meet the load growth needs of the station supply area. Their replacement is needed to increase capacity and reliability of this station. This budget item includes the procurement, testing, shipment to site, installation and commissioning of the transformers along with site specific work required to interface the new transformers to the existing switchgear and protection and control system(s).					
Expected Benefits					
☒ Increased safety to workers and public. ☒ Increased reliability of power to customers. ☒ Provision for increased supply for growth areas of Waterloo. ☒ Compliance with the Transmission System Code, HONI and/or IESO requirements.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.44				
PROJECT #:	06SN04				
PROJECT SUB-TYPE:	6				
PROJECT DESCRIPTION:	TS ERTS Protection Upgrades				
	1815				Total \$
Costs by USoA	289,033				289,033
Contributed Capital					-
Business Need					
WNH is supplied primarily through the IESO controlled, Hydro One Transmission System at transmission voltages of 115 kV and 230 kV. WNH owns and operates three (3) transmission grid connected Transformer Stations (TS's) operating at 115 kV - 13.8 kV, 230 kV - 27.6 kV and 230 kV - 13.8 kV. Expenditures in this category are made due to one of the following reasons: - there is a need to increase capacity to meet growth in demand. Such needs are normally identified through system planning activities. - the equipment requires replacement or a major refurbishment due to its condition. In such cases, regular maintenance will not address the problem nor is it cost effective. This is normally identified as a result of a variety of regularly scheduled testing and maintenance activities. - the equipment needs to be replaced due obsolescence. Such needs are typically identified through the inability to source spare or replacement components. - the equipment needs to be updated to meet regulatory requirements (Transmission System Code, Market Rules, etc) Where at all possible, projects are scheduled such that one project can satisfy more than one need. Projects being captured in this category include new or major refurbishments to existing switches or breakers, transformers, switchgear, protection and control systems, structural support systems and environmental protection systems. The implications of not taking proper actions and improving equipment capacity or condition as required could result in inability to supply power to customers, damage to equipment, increased safety hazards to workers, unreliable or misoperation of equipment, explosive equipment failure and breach of requirements set out in the Transmission System Code.					
Project Details / Scope					
This budget item includes changes in the protection systems brought upon by the installation of new transformers and new circuit switchers combined with the need to upgrade the protection systems to meet the newest revision of the Transmission System Code. Costs in this item include WNH labour, trucking and material, all design and consulting charges, all regulatory filing charges, as well as all construction costs (labour, material, equipment, etc.)					
Expected Benefits					
☒ Increased reliability of power to customers. ☒ Compliance with the Transmission System Code, HONI and/or IESO requirements.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.45				
PROJECT #:	06SN04				
PROJECT SUB-TYPE:	7				
PROJECT DESCRIPTION:	TS ERTS Transfer Trip Changes				
	1815				Total \$
Costs by USoA	240,717				240,717
Contributed Capital					-
Business Need					
WNH is supplied primarily through the IESO controlled, Hydro One Transmission System at transmission voltages of 115 kV and 230 kV. WNH owns and operates three (3) transmission grid connected Transformer Stations (TS's) operating at 115 kV - 13.8 kV, 230 kV - 27.6 kV and 230 kV - 13.8 kV. Expenditures in this category are made due to one of the following reasons: - there is a need to increase capacity to meet growth in demand. Such needs are normally identified through system planning activities. - the equipment requires replacement or a major refurbishment due to its condition. In such cases, regular maintenance will not address the problem nor is it cost effective. This is normally identified as a result of a variety of regularly scheduled testing and maintenance activities. - the equipment needs to be replaced due obsolescence. Such needs are typically identified through the inability to source spare or replacement components. - the equipment needs to be updated to meet regulatory requirements (Transmission System Code, Market Rules, etc) Where at all possible, projects are scheduled such that one project can satisfy more than one need. Projects being captured in this category include new or major refurbishments to existing switches or breakers, transformers, switchgear, protection and control systems, structural support systems and environmental protection systems. The implications of not taking proper actions and improving equipment capacity or condition as required could result in inability to supply power to customers, damage to equipment, increased safety hazards to workers, unreliable or misoperation of equipment, explosive equipment failure and breach of requirements set out in the Transmission System Code.					
Project Details / Scope					
This budget item includes changes in the transfer trip systems brought upon by the installation of new transformers and new circuit switchers combined with the need to change the remote trip system to one that meets current compliance requirements of the Transmission System Code. The costs include procurement of the transfer trip devices, communication devices, cabling as well as all the labour, trucking and material required to design, obtain regulatory approval, configure, test and commission the new transfer trip system.					
Expected Benefits					
☒ Increased reliability of power to customers. ☒ Compliance with the Transmission System Code, HONI and/or IESO requirements.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.46				
PROJECT #:	06SN04				
PROJECT SUB-TYPE:	9				
PROJECT DESCRIPTION:	TS ERTS HV Yard Upgrades				
	1815				Total \$
Costs by USoA	195,360				195,360
Contributed Capital					-
Business Need					
WNH is supplied primarily through the IESO controlled, Hydro One Transmission System at transmission voltages of 115 kV and 230 kV. WNH owns and operates three (3) transmission grid connected Transformer Stations (TS's) operating at 115 kV - 13.8 kV, 230 kV - 27.6 kV and 230 kV - 13.8 kV. Expenditures in this category are made due to one of the following reasons: - there is a need to increase capacity to meet growth in demand. Such needs are normally identified through system planning activities. - the equipment requires replacement or a major refurbishment due to its condition. In such cases, regular maintenance will not address the problem nor is it cost effective. This is normally identified as a result of a variety of regularly scheduled testing and maintenance activities. - the equipment needs to be replaced due obsolescence. Such needs are typically identified through the inability to sources spare or replacement components. - the equipment needs to be updated to meet regulatory requirements (Transmission System Code, Market Rules, etc) Where at all possible, projects are scheduled such that one project can satisfy more than one need. Projects being captured in this category include new or major refurbishments to existing switches or breakers, transformers, switchgear, protection and control systems, structural support systems and environmental protection systems. The implications of not taking proper actions and improving equipment capacity or condition as required could result in inability to supply power to customers, damage to equipment, increased safety hazards to workers, unreliable or misoperation of equipment, explosive equipment failure and breach of requirements set out in the Transmission System Code.					
Project Details / Scope					
This budget item includes the electrical component work associated with removal of existing and installation of new terminating structure as well as connecting and commissioning new circuit switchers. Activities covered under these costs include WNH labour, trucking, equipment and material as well as consulting costs and contracting costs to HONI.					
Expected Benefits					
☒ Increased safety to workers and public. ☒ Increased reliability of power to customers. ☒ Provision for increased supply for growth areas of Waterloo. ☒ Compliance with the Transmission System Code, HONI and/or IESO requirements.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.47				
PROJECT #:	06SN04				
PROJECT SUB-TYPE:	WR 2315				
PROJECT DESCRIPTION:	TS ERTS Rehab:Transformers				
	1815				Total \$
Costs by USoA	1,518,825				1,518,825
Contributed Capital					-
Business Need					
WNH is supplied primarily through the IESO controlled, Hydro One Transmission System at transmission voltages of 115 kV and 230 kV. WNH owns and operates three (3) transmission grid connected Transformer Stations (TS's) operating at 115 kV - 13.8 kV, 230 kV - 27.6 kV and 230 kV - 13.8 kV. Expenditures in this category are made due to one of the following reasons: - there is a need to increase capacity to meet growth in demand. Such needs are normally identified through system planning activities. - the equipment requires replacement or a major refurbishment due to its condition. In such cases, regular maintenance will not address the problem nor is it cost effective. This is normally identified as a result of a variety of regularly scheduled testing and maintenance activities. - the equipment needs to be replaced due to obsolescence. Such needs are typically identified through the inability to source spare or replacement components. - the equipment needs to be updated to meet regulatory requirements (Transmission System Code, Market Rules, etc) Where at all possible, projects are scheduled such that one project can satisfy more than one need. Projects being captured in this category include new or major refurbishments to existing switches or breakers, transformers, switchgear, protection and control systems, structural support systems and environmental protection systems. The implications of not taking proper actions and improving equipment capacity or condition as required could result in inability to supply power to customers, damage to equipment, increased safety hazards to workers, unreliable or misoperation of equipment, explosive equipment failure and breach of requirements set out in the Transmission System Code.					
Project Details / Scope					
Eby Rush Transformer Station's power transformers are near the end of their life and undersized to meet the load growth needs of the station supply area. Their replacement is needed to increase capacity and reliability of that station. This budget item includes the procurement and progress payments made up to the end of 2009 for 2 transformers to be delivered and installed in 2010.					
Expected Benefits					
☒ Increased safety to workers and public. ☒ Increased reliability of power to customers. ☒ Provision for increased supply for growth areas of Waterloo. ☒ Compliance with the Transmission System Code, HONI and/or IESO requirements.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.48				
PROJECT #:	06OH01				
PROJECT SUB-TYPE:	1				
PROJECT DESCRIPTION:	2010 Pole and Transformer Capital Replacement				
	1830	1835	1850		Total \$
Costs by USoA	264,722	148,227	4,235		417,184
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes replacing individual poles that are identified by either WNH's overhead plant inspection program or by WNH staff when performing regular work assignments as in poor condition and needing immediate replacement. Poles were replaced as close as possible to their existing locations and all hardware, transformers and other equipment associated with the pole were replaced. Where possible, poles were brought up to today's standards and clearances. Some poles were replaced "like for like" where existing conditions dictated. Transformers that are affected by these pole changes are also changed if the transformer's size is inefficient, upgrade or downsize to match current connected customer requirements, or if the transformer has reached the end of it's life (rusted tank, flashed / cracked bushings, etc.).					
Expected Benefits					
x Reduced exposure to safety hazards associated with aged plant and equipment. x Increased reliability of new distribution equipment and materials. x Increased safety of new design standards and clearances.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:		2-30.49			
PROJECT #:		07OU01			
PROJECT SUB-TYPE:		1			
PROJECT DESCRIPTION:		2010 Ops U/G Distribution Equipment & Transformer Capital Replacement			
	1840	1845	1850		Total \$
Costs by USoA	70,934	192,537	74,314		337,785
Contributed Capital					-
Business Need					
The reliability of supply to most residential customers in WNH's service territory is affected by the age and condition of the underground distribution system supplying their homes. WNH has three (3) distinct populations of Underground Distribution most of which is underground residential distribution (URD). 1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been and continues to be the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency and safety are being achieved by retiring the 4 kV distribution system. 2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continues to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years. 3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continues to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years.					
Project Details / Scope					
The scope of this project includes all costs associated with replacing individual pad-mounted and submersible transformers, switching cubicles and associated components that are identified as hazards requiring immediate replacement either as part of WNH's underground plant inspection program or by WNH staff when completing regular work assignments.					
Expected Benefits					
x Increased reliability of new distribution equipment and materials. x Increased safety of new design standards and clearances. x Reduced operational trouble calls.					

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.50				
PROJECT #:	06MT02				
PROJECT SUB-TYPE:	1				
PROJECT DESCRIPTION:	2010 Commercial & Industrial - Regular Meters > 50 kW				
	1860				Total \$
WR Costs by USoA	386,860				386,860
Business Need					
Waterloo North Hydro is required under the federal Electricity and Gas Inspection Act to use approved Revenue Metering Equipment for the purpose of establishing the basis of a charge for the supply of electricity to its customers. WNH meets this requirement for its Commercial and industrial Customers (C&I > 50 kW) by purchasing Measurement Canada approved meters, instrument transformers and other related equipment. Activity in this work program is driven by new C&I customers, obsolescence of equipment and equipment failure. This activity is mandated.					
Project Details / Scope					
Cost accumulated under this work order include the labour, materials, equipment and contract labour to install revenue metering for Commercial and Industrial customers.					
Expected Benefits					
x	Meets the requirement of the federal Electricity and Gas Inspection Act.				
x	Fulfills the business needs of WNH in establishing the basis of a charge for the supply of electricity to its customers.				

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.51				
PROJECT #:	06EN13				
PROJECT SUB-TYPE:	1				
PROJECT DESCRIPTION:	GIS & Mapping Capital				
	1925				Total \$
Costs by USoA	156,116				156,116
Contributed Capital					-
Business Need					
In 2005 WNH began implementing an ESRI Geographic Information System (GIS) to support its business operations. GIS integrates hardware, software, and data for capturing, managing, analyzing, and displaying asset and customer information. GIS provides critical tools to organize information and knowledge, make informed decisions, improve communications and increase efficiency of work processes. From its inception, much work has been performed in transferring paper based asset data into the GIS data base. WNH currently uses its GIS to assist with engineering design, asset management, supply planning,outage planning and budgeting processes. Data types currently maintained are asset type, quantity, condition, location and results of inspection and maintenance programs. The GIS is constantly being updated and expanded as new assets are installed, as with new construction or replacing assets; and also as new analytical tools are needed. There are plans to integrate the GIS with other enterprise information systems such as outage management, SCADA and engineering analysis tools to provide faster and more efficient analysis and response to power system operational issues. The consequences of not proceeding would be to maintain asset information in paper based formats that are difficult and inefficient to maintain. These formats also do not support the increased asset analysis and reporting required for current asset management and regulatory compliance.					
Project Details / Scope					
Costs collected under this project include all labour, material and equipment require to continue to build WNH's Graphical Information System (GIS). The 2010 GIS program is focused on a number of initiatives. First is to continue to build upon the information data bases to provide better utility to engineering and operations processes. Second is to construct additional tools used by various departments to facilitate and record testing and inspection data to support WNH's asset management strategy. Third is to support the capital design program through the development of design base plans.					
Expected Benefits					
x	Increased efficiency in maintaining information.				
x	Increased efficiency accessing information.				
x	Increased ability to analyze data and develop improvement strategies.				
x	Increased ability to report data to internal and external stakeholders.				

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-30.52				
PROJECT #:	06FL02				
PROJECT SUB-TYPE:	1				
PROJECT DESCRIPTION:	R2 - New Radial Boom Derrick Line Truck in 2010				
	1930				Total \$
Costs by USoA Contributed Capital	621,743				621,743 -
Business Need					
WNH maintains its fleet of vehicles to achieve a typical useful of 14 to 16 years for our large vehicles (bucket trucks, RBDs. workbody trucks) and 8 to 10 years for our small vehicles (pickup trucks, vans, etc). WNH has determined that these time frames represent the most cost efficient replacement schedule and that to extend beyond these timeframes it incurs increased maintenance costs and reduced fleet reliability. WNH is replacing Truck R66, a 1996 Freightliner (14 years old) tandem axle chassis outfitted with a Telect C5048 RDB that is at end of life condition.					
Project Details / Scope					
This project includes all costs associated with developing the specification documents for the truck chassis, work platform, and truck body; completing the tendering process; ordering the vehicle; inspecting the work platform and body during fabrication and assembly of the truck; and commissioning the completed truck at our facility (installing signage and high visibility striping, two way radio system, registering the truck with MTO, completing an in-service training session for our drivers, etc.). WNH is specifying an International tandem axle chassis outfitted with a Telelect 6060 RBD. This is a larger unit that increases the crane's lifting capability from 1,800 lbs at 0 degrees and a 39 foot radius to 3,200 lbs at 0 degrees and a 60 foot radius.					
Expected Benefits					
☒	Replacement of Truck R66 will help to reduce the total annual fleet maintenance costs by eliminating our oldest RBD truck (R66 - 14 years old), from our fleet.				
☒	We require the extra lifting capability provided by the new RBD Truck R2 to be able to safely lift taller (65') poles that are located further off the roadway, often behind a ditch, in our rural line reconstruction projects.				
☒	The larger capacity derrick on Truck R2 that is needed for the extra lifting capacity includes a more powerful hydraulic system which increases the digging capacity of this truck. This features is very beneficial as it allows our crews to excavate pole holes with this new RBD truck 50% faster than using the old RBD truck.				

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:		2-30.53			
PROJECT #:		06SS03			
PROJECT SUB-TYPE:		2			
PROJECT DESCRIPTION:		ODS/OMS Project Implementation			
	1925				Total \$
Costs by USoA	395,026				395,026
Contributed Capital					-
Business Need					
WNH handles vast amounts of data, relevant to the management and operation of its distribution system, within multiple independent systems. These sytems included, at a minimum, the Customer Information System (CIS), Supervisory Control and Data Acquisition System (SCADA), Geographic Information System(GIS), Enterprise Resources Planning System (ERP), Workforce Management System (WMS) and the Smart Meter Information System (SMI). These multiple independent sytems, while providing a large volume of varying data, result in a manual information gathering and limited reporting process restricted to the native systems on which the data resides. WNH has determined that the ODS is the appropriate system to integrate these independent systems. WNH evaluated several options and opted for a third party vendor customized solution. Consequences of not proceeding will not allow WNH to achieve operation efficiencies and achieve its strategic imperatives.					
Project Details / Scope					
A customized system such as this serves as a central repository for operational and financial data from the independent systems and facilitates retrieval of data for analysis and reporting. WNH has hired a third party vendor to customize the integration of the data between the various systems listed above. This is an ongoing project which will involve and impact every department within the organization. As described below in the expected benefits, this project has far reaching effects and benefits.					
Expected Benefits					
x	Barrier-free access to all data across all native systems.				
x	Ability to house 'orphan' data not residing in any one system.				
x	Create intelligence needed to optimize the gathering and and analysis of data from native systems.				
x	Abiity to turn data into information through business intelligence tool sets.				
x	Provide presentment of information in the format needed to work effectively.				
x	Integration of CIS service orders to provide dynamic access to field activity.				
x	Minimize/eliminate duplicate data.				
x	Integrated Outage Management System (OMS) functionality.				
x	Assist with infrastructure planning via load analysis and trending.				

WNH 2010 CAPITAL PROJECT > MATERIALITY					
TABLE #:		2-30.54			
PROJECT #:		06SN05			
PROJECT SUB-TYPE:		2			
PROJECT DESCRIPTION:		TS ERTS New RTU and Fibre LAN			
	1980				Total \$
Costs by USoA	147,459				147,459
Contributed Capital					-
Business Need					
WNH operates a Supervisory Control And Data Acquisition system (SCADA) to be able to respond to the operating needs of the distribution system needs as quickly as possible and to be in compliance with the requirements of the Market Rules and the Transmission System Code. WNH uses a SCADA system comprising of dual master computers and 5 Remote Terminal Units (RTUs) at three (3) transmission connected transformer stations and 23 RTUs at 18 municipal stations, distribution stations and on the distribution lines. The SCADA system reports on over 2000 status points and approximately 4000 analog points and allows remote control for over 400 field points. The communication media for the SCADA system consist of a combination of fibre, leased telephone circuits, and private data radio system including repeater towers. The system provides for the required master-to-master ICCP connections to Hydro One and IESO. The SCADA system is capable of storing and trending past data which is used to make operational decisions as well as in preparation of system expansion plans. Projects in this category include additions of new, upgrades or replacement of the hardware or software associated with the SCADA system itself, the field RTUs, any communication system required to support the SCADA system, or any system that archives or displays the SCADA historical data. Lack of investing in the SCADA system components would eventually lead to loss of remote control of field devices resulting in the need for more manual operations in the field, not being able to respond to customers needs as quickly as possible, increasing customer outage minutes, reduction in public safety in case of downed power lines, and less precise operating and system expansion plans.					
Project Details / Scope					
The scope of this project consist of the installation of a new control system at Eby Rush TS capable of communicating with the new electronic protection relays and the WNH SCADA master as well as provide for local control. The charges accumulated in this work request consist of all labour, material, equipment, trucking, and outside contractor costs for procurement of the RTU, the local control HMI, all the required networking devices, auxiliary equipment and cabling necessary as well as all labour charges to install, configure, test, commission and troubleshoot the new control system. This project is to be completed in conjunction with the Eby Rush TS Protection System Upgrades.					
Expected Benefits					
x	Information supports regulatory reporting requirements, reliability and system supply planning.				
x	Increased reliability of power to customers.				
x	Development of more precise operating and system expansion models.				
x	Compliance with the Transmission System Code, HONI and/or IESO requirements.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:		2-31.01			
PROJECT #:		06EN04			
PROJECT SUB-TYPE:		10-16			
PROJECT DESCRIPTION:		TS HS New 13.8 kV Feeder 3. - Parkside, Weber - Bearinger			
	1830	1835	1850		Total \$
Costs by USoA	165,208	89,212	75,996		330,416
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes rebuilding overhead distribution that is in poor condition and has reached the end of its life. Voltage conversion of overhead circuits from 4 kV to 13.8 kV will also occur. Feeder capacity to the City of Waterloo growth areas will be increased. Where required, all equipment including poles, conductors, transformers, and guying will be replaced.					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				
x	Increased line capacity / lower line losses from voltage conversions.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.02				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	10-17				
PROJECT DESCRIPTION:	TS HS New 13.8 kV Feeder 4 - Quiet Pl., Parkside to Albert				
	1830	1835	1850		Total \$
Costs by USoA	157,313	84,949	72,364		314,625
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes rebuilding overhead distribution that is in poor condition and has reached the end of its life. Voltage conversion of overhead circuits from 4 kV to 13.8 kV will also occur. Feeder capacity to the City of Waterloo growth areas will be increased. Where required, all equipment including poles, conductors, transformers, and guying will be replaced.					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				
x	Increased line capacity / lower line losses from voltage conversions.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:		2-31.03			
PROJECT #:		06EN04			
PROJECT SUB-TYPE:		10-18			
PROJECT DESCRIPTION:		TS HS New 13.8 kV Feeder 5 - Albert, Quiet PI to Columbia			
	1830	1835	1850		Total \$
Costs by USoA	130,923	70,698	60,224		261,845
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes rebuilding overhead distribution that is in poor condition and has reached the end of its life. Voltage conversion of overhead circuits from 4 kV to 13.8 kV will also occur. Feeder capacity to the City of Waterloo growth areas will be increased. Where required, all equipment including poles, conductors, transformers, and guying will be replaced.					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				
x	Increased line capacity / lower line losses from voltage conversions.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.04				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	10-21				
PROJECT DESCRIPTION:	Conestoga Rd Rebuild - 1 of 2 stage				
	1830	1835	1850		Total \$
Costs by USoA	215,504	116,372	99,132		431,008
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes rebuilding and converting overhead lines in the vicinity of HMSTS that are in poor condition and has reached the end of its life. All equipment including poles, conductors, transformers, and guying will be replaced. In addition, the system in close proximity to the station will be re-configured to allow for better station bus and feeder load balancing in addition to more flexibility during system contingencies/emergencies.					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				
x	Better feeder and station bus load balancing in addition to greater flexibility for emergency switching.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.05				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	10-22				
PROJECT DESCRIPTION:	Greenwood Hill Rd, Gerber Rd to 2.1 km N.				
	1830	1835	1850		Total \$
Costs by USoA	115,802	62,533	53,269		231,603
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes rebuilding and converting approximately 2 km of overhead distribution that is in poor condition and has reached the end of its life. All equipment including poles, conductors, transformers, and guying will be replaced. This project is one of several that will allow WNH to convert existing 8 kV lines to 27.6 kV and provide a second point of supply to Wellesley area.					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				
x	Increased line capacity / lower line losses from voltage conversions.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.06				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	10-38				
PROJECT DESCRIPTION:	Greenwood Hill Rd, N of Weimar Line # 4				
	1830	1835	1850		Total \$
Costs by USoA	145,809	78,737	67,072		291,618
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes rebuilding and converting approximately 2 km of overhead distribution that is in poor condition and has reached the end of its life. All equipment including poles, conductors, transformers, and guying will be replaced. This project is one of several that will allow WNH to convert existing 8 kV lines to 27.6 kV and a section of #4 conductor will be removed from the system.					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				
x	Increased line capacity / lower line losses from voltage conversions.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.07				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	10-39				
PROJECT DESCRIPTION:	27.6 kV to Wellesley-Weimar Line-Moser Young to Bamburg Limits				
	1830	1835	1850		Total \$
Costs by USoA	148,239	80,049	68,190		296,478
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes rebuilding and converting approximately 2 km of overhead distribution that is in poor condition and has reached the end of its life. All equipment including poles, conductors, transformers, and guying will be replaced. This project is one of several that will allow WNH to convert existing 8 kV lines to 27.6 kV and provide a second point of supply to Wellesley area.					
Expected Benefits					
x Reduced exposure to safety hazards associated with aged plant and equipment. x Increased reliability of new plant and materials. x Increased safety of new design standards and clearances. x Increased line capacity / lower line losses from voltage conversions.					

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.08				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	1				
PROJECT DESCRIPTION:	2011 Distribution Automation				
	1835				Total \$
Costs by USoA	630,586				630,586
Contributed Capital					-
Business Need					
Traditionally WNH's utilized manually operated load break switches for the operation and configuration of the distribution system. Automated devices existed mainly at the substations. Through the use of remotely controlled reclosers and distribution switching devices, operating benefits are being realized by improving response times to system faults and disturbances, improved protection and control functionality, increased reliability, decreased outage times, and greater protection selectivity allowing for improved safety to the public in case of downed power lines. These devices also provide valuable system (load, voltage, fault current) data that supports system operating, engineering and planning processes. Projects being captured in this category include specification, procurement, make ready work (pole replacements, if necessary), installation, configuration, testing and commissioning of the reclosers and switching devices. Tying these devices to the WNH SCADA system is covered under 06SN05 project costs. Not proceeding with deployment of remotely controlled switching devices would result in decrease in reliability due to slower response time during outages and larger areas being affected by a single fault. It would also result in higher operating costs due to the travel time required to manually operate devices for regular system switching or manually collect information from the field.					
Project Details / Scope					
This project includes all costs for procurement and installation of 5 new remotely controllable switching devices. This work includes all the labour, material, trucking, and equipment required to specify, procure, configure, install, test and commission the new switches. The work also includes any necessary modifications to the existing distribution system such as any required pole installations, phase rotations, lightning arrestor upgrades, installations of any required isolation and or by-pass switches.					
Expected Benefits					
☒ Increased reliability of power to customers. ☒ Increased safety to workers and public. ☒ Reduced operating costs. ☒ Increased system information to improve system operation and design.					

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.09				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	3				
PROJECT DESCRIPTION:	27.6 kV Circuits Snyders Flats to Bloomingdale DS				
	1830	1835	1850		Total \$
Costs by USoA	140,382	75,806	64,576		280,765
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
This project is one of several that includes rebuilding a section of the 8kV overhead distribution that is in poor condition and has reached the end of its life. The work also includes converting from the existing 8 kV to 27.6 kV operating voltage in order to increase supply and serve larger loads in the Township of Woolwich. All equipment including poles, conductors, transformers, and guying will be replaced.					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				
x	Increased line capacity / lower line losses from voltage conversions.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:		2-31.10			
PROJECT #:		06EN04			
PROJECT SUB-TYPE:		4			
PROJECT DESCRIPTION:		Allen St., Railway to Devitt including 3 poles South on Moore			
	1830	1835	1850		Total \$
Costs by USoA	66,584	35,955	30,629		133,168
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
This project is one of several that includes rebuilding a section of the 4 kV overhead distribution that is in poor condition and has reached the end of its life. All equipment including poles, conductors, transformers, and guying will be replaced. This project is part of several that will allow us to convert the existing 4 kV lines to 13.8 kV in order to increase supply and serve larger loads in the City of Waterloo.					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				
x	Increased line capacity / lower line losses from voltage conversions.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.11				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	5				
PROJECT DESCRIPTION:	Reid Woods Dr - Rebuild, Elmira TS to Northfield 1 of 2				
	1830	1835	1850		Total \$
Costs by USoA	352,648	190,430	162,218		705,296
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
This project is one of several that includes rebuilding a section of the 8 kV overhead distribution that is in poor condition and has reached the end of its life. The work also includes converting from the existing 8 kV to 27.6 kV operating voltage in order to increase supply and serve larger loads in the Township of Woolwich. All equipment including poles, conductors, transformers, and guying will be replaced.					
Expected Benefits					
☒ Reduced exposure to safety hazards associated with aged plant and equipment. ☒ Increased reliability of new plant and materials. ☒ Increased safety of new design standards and clearances. ☒ Increased line capacity / lower line losses from voltage conversions.					

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:		2-31.12			
PROJECT #:		06EN04			
PROJECT SUB-TYPE:		6			
PROJECT DESCRIPTION:		44 kV Circuit Rebuild, Bloomingdale to Zubers			
	1830	1835	1850		Total \$
Costs by USoA	206,598	111,563	95,035		413,195
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
This project is one of several that includes rebuilding a section of the 44 kV overhead distribution that is in poor condition and has reached the end of its life. All equipment including poles, conductors, transformers, and guying will be replaced.					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.13				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	7				
PROJECT DESCRIPTION:	2011 Overhead 4 kV Conversions				
	1830	1835	1850		Total \$
Costs by USoA	232,960	125,798	107,161		465,919
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
This project is one of several that includes rebuilding a section of the 4 kV overhead distribution that is in poor condition and has reached the end of its life. The scope of this project also facilitates the conversion of 4 kV lines to 13.8 kV and supports the decommissioning of 4 kV stations, upgrading of 4 kV to 13.8 kV underground and provides additional 13.8 kV capacity on existing overhead lines. Transformers, conductors, poles, guys/anchors, and other equipment will be replaced. The conversion area is served by stations scheduled for decommissioning in 2011.					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				
x	Increased line capacity / lower line losses from voltage conversions.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:		2-31.14			
PROJECT #:		06EN04			
PROJECT SUB-TYPE:		8			
PROJECT DESCRIPTION:		Country Squire Road - Overhead Rebuild			
	1830	1835	1850		Total \$
Costs by USoA	79,901	43,146	36,754		159,801
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
This project is one of several that includes rebuilding a section of the 8 kV overhead distribution that is in poor condition and has reached the end of its life. The work also includes converting from the existing 8 kV to 27.6 kV operating voltage. All equipment including poles, conductors, transformers, and guying will be replaced.					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				
x	Increased line capacity / lower line losses from voltage conversions.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.15				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	9				
PROJECT DESCRIPTION:	2011 Elmira # 6 Conductor Replacement				
	1830	1835	1850		Total \$
Costs by USoA	199,525	107,743	91,781		399,049
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes rebuilding overhead areas consisting of poles and #4/6 primary conductor that are in poor condition and have reached the end of their life. Many of the lines are also located in rear lots making them more difficult to access and maintain. Transformers and primary line will either be eliminated or moved to road accessible locations wherever possible. All equipment including poles, conductors, transformers, and guying will be replaced.					
Expected Benefits					
x Reduced exposure to safety hazards associated with aged plant and equipment. x Increased reliability of new plant and materials. x Increased safety of new design standards and clearances. x Elimination of rear lot #6 primary conductor.					

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.16				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	10				
PROJECT DESCRIPTION:	2011 City of Waterloo #6/4 Replacement				
	1830	1835	1850		Total \$
Costs by USoA	96,908	52,330	44,577		193,815
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes rebuilding overhead areas consisting of poles and #4/6 primary conductor that are in poor condition and have reached the end of their life. Many of the lines are also located in rear lots making them more difficult to access and maintain. Transformers and primary line will either be eliminated or moved to road accessible locations wherever possible. All equipment including poles, conductors, transformers, and guying will be replaced.					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				
x	Elimination of rear lot #6 primary conductor.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.17				
PROJECT #:	06EN04				
PROJECT SUB-TYPE:	11				
PROJECT DESCRIPTION:	27.6 kV Tie - Woolwich 1 - Victoria St., Breslau Stn. to 2 km East				
	1830	1835	1850		Total \$
Costs by USoA	129,456	69,906	59,550		258,913
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
This project is one of several that includes rebuilding a section of the 8 kV overhead distribution that is in poor condition and has reached the end of its life. The work also includes converting from the existing 8 kV to 27.6 kV operating voltage in order to increase supply and serve larger loads in the Township of Woolwich. All equipment including poles, conductors, transformers, and guying will be replaced.					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new plant and materials.				
x	Increased safety of new design standards and clearances.				
x	Increased line capacity / lower line losses from voltage conversions.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.18				
PROJECT #:	06EN05				
PROJECT SUB-TYPE:	1				
PROJECT DESCRIPTION:	Road Relocation Projects				
	1830	1835	1850	1995	Total \$
Costs by USoA	181,897	90,948	20,537		293,382
Contributed Capital				(65,000)	(65,000)
Business Need					
This category includes expenditures to relocate/replace pole line assets that conflict with roadway construction activities. The level of spending is driven by the activities of the road authorities and specific projects are rarely known at the time that the budget is developed. Total expenditures can vary greatly from year to year and reimbursement is normally limited to 50% of labour and labour saving devices. There are no alternatives to these activities. These expenditures are not discretionary as compliance is mandated by the Public Service Works on Highways Act, R.S.O. 1990.					
Project Details / Scope					
This work includes the removal of all existing poles, conductors, transformers, guying and all other equipment within the road authority's scope of work and construction of a new distribution line to new construction standards at an alternate location. Although no specific projects can be identified at this time, the funds allocated represent a budgeted amount based on past activity by the municipalities in WNH's service area.					
Expected Benefits					
There are seldom any benefits to WNH in relocating existing lines. Experience has shown that assets required to be relocated are rarely at end of life. Although some recovery of materials can occur, most do not comply with current standards for reuse in new construction and are depreciated to the point that the combination of labour cost to recover used materials and the remaining life of the asset often approaches or exceeds the cost to purchase new materials.					
☒	Reduced exposure to safety hazards associated with aged plant and equipment.				
☒	Increased reliability of new plant and materials.				
☒	Increased safety of new design standards and clearances.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.19				
PROJECT #:	06EN05				
PROJECT SUB-TYPE:	10-5				
PROJECT DESCRIPTION:	Park St. - City Rebuild				
	1830	1835	1850		Total \$
Costs by USoA	165,736	82,868	18,712		267,316
Contributed Capital					
Business Need					
This category includes expenditures to relocate/replace pole line assets that conflict with roadway construction activities. The level of spending is driven by the activities of the road authorities and specific projects are rarely known at the time that the budget is developed. Total expenditures can vary greatly from year to year and reimbursement is normally limited to 50% of labour and labour saving devices. There are no alternatives to these activities. These expenditures are not discretionary as compliance is mandated by the Public Service Works on Highways Act, R.S.O. 1990.					
Project Details / Scope					
This work includes the removal of all existing poles, conductors, transformers, guying and all other equipment within the road authority's scope of work and construction of a new distribution line to new construction standards at an alternate location. Although no specific projects can be identified at this time, the funds allocated represent a budgeted amount based on past activity by the municipalities in WNH's service area.					
Expected Benefits					
There are seldom any benefits to WNH in relocating existing lines. Experience has shown that assets required to be relocated are rarely at end of life. Although some recovery of materials can occur, most do not comply with current standards for reuse in new construction and are depreciated to the point that the combination of labour cost to recover used materials and the remaining life of the asset often approaches or exceeds the cost to purchase new materials.					
☒	Reduced exposure to safety hazards associated with aged plant and equipment.				
☒	Increased reliability of new plant and materials.				
☒	Increased safety of new design standards and clearances.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.20				
PROJECT #:	06EN06				
PROJECT SUB-TYPE:	10-8				
PROJECT DESCRIPTION:	Cober Rd - New Line for Airport Supply				
	1830	1835	1850		Total \$
Costs by USoA	116,355	63,281	24,496		204,132
Contributed Capital					-
Business Need					
This category includes expenditures for the addition of new feeder assets required to provide service to new customers in areas not previously serviced, and to previously serviced areas, to increase capacity where load density has increased. Normally projects are identified through system planning activities which include monitoring and analyzing commercial activities, station and feeder peak loading, municipal development activities, developer activities and land development activities. WNH is located in a region of moderately high growth. As these activities are driven by the level of economic activity in our area, resulting in expenditures that can vary greatly from year to year. Not proceeding with this customer requested work would result in refusal of connection of new customers or overloading of existing lines, both of which are detrimental to WNH and its customers.					
Project Details / Scope					
This project includes the installation of new overhead conductors, poles, transformers, guying and other plant associated with providing new 27.6 kV system capacity to the area south of the regional airport in Breslau.					
Expected Benefits					
☒ New line for growth area.					

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.21				
PROJECT #:	06EN06				
PROJECT SUB-TYPE:	10-1				
PROJECT DESCRIPTION:	Columbia St. Extension - Rhine Fall Dr. to Wilmot Line				
	1830	1835	1850		Total \$
Costs by USoA	180,129	97,965	37,922		316,016
Contributed Capital					-
Business Need					
This category includes expenditures for the addition of new feeder assets required to provide service to new customers in areas not previously serviced, and to previously serviced areas, to increase capacity where load density has increased. Normally projects are identified through system planning activities which include monitoring and analyzing commercial activities, station and feeder peak loading, municipal development activities, developer activities and land development activities. WNH is located in a region of moderately high growth. As these activities are driven by the level of economic activity in our area, resulting in expenditures that can vary greatly from year to year. Not proceeding with this customer requested work would result in refusal of connection of new customers or overloading of existing lines, both of which are detrimental to WNH and its customers.					
Project Details / Scope					
This project includes the installation of new overhead conductors, poles, transformers, guying and other plant associated with providing new 27.6 kV system capacity to the West side of Waterloo to service new development.					
Expected Benefits					
☒	Provision for increased line capacity for growth areas.				
☒	Increased reliability associated with providing an alternate supply to populated or growth areas.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.22				
PROJECT #:	06EN06				
PROJECT SUB-TYPE:	1				
PROJECT DESCRIPTION:	Conestoga Rd. Feeder Egress/Rebuild 2 of 2				
	1830	1835	1850		Total \$
Costs by USoA	254,396	138,355	53,557		446,308
Contributed Capital					-
Business Need					
This category includes expenditures for the addition of new feeder assets required to provide service to new customers in areas not previously serviced, and to previously serviced areas, to increase capacity where load density has increased. Normally projects are identified through system planning activities which include monitoring and analyzing commercial activities, station and feeder peak loading, municipal development activities, developer activities and land development activities. WNH is located in a region of moderately high growth. As these activities are driven by the level of economic activity in our area, resulting in expenditures that can vary greatly from year to year. Not proceeding with this customer requested work would result in refusal of connection of new customers or overloading of existing lines, both of which are detrimental to WNH and its customers.					
Project Details / Scope					
The scope of this project includes rebuilding overhead distribution that is in poor condition and has reached the end of its life. The project will also improve the intertie capabilities between HMSTS station feeders and make provisions for three new feeders. All equipment including poles, conductors, transformers, and guying will be replaced. This project includes the installation of new overhead conductors, poles, and other plant associated with feeder egress work and expansion at HMSTS.					
Expected Benefits					
☒ Increased feeder capacity for growth. ☒ Reduced exposure to safety hazards associated with aged plant and equipment. ☒ Increased reliability of new plant and materials. ☒ Increased safety of new design standards and clearances. ☒ Increase intertie capabilities between station feeders.					

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.23				
PROJECT #:	06EN06				
PROJECT SUB-TYPE:	2				
PROJECT DESCRIPTION:	TS HS New 13.8 kV Feeder University Ave., King to Albert				
	1830	1835	1850		Total \$
Costs by USoA	91,208	49,604	19,202		160,014
Contributed Capital					-
Business Need					
This category includes expenditures for the addition of new feeder assets required to provide service to new customers in areas not previously serviced, and to previously serviced areas, to increase capacity where load density has increased. Normally projects are identified through system planning activities which include monitoring and analyzing commercial activities, station and feeder peak loading, municipal development activities, developer activities and land development activities. WNH is located in a region of moderately high growth. As these activities are driven by the level of economic activity in our area, resulting in expenditures that can vary greatly from year to year. Not proceeding with this customer requested work would result in refusal of connection of new customers or overloading of existing lines, both of which are detrimental to WNH and its customers.					
Project Details / Scope					
This project includes the installation of new overhead conductors, poles, transformers, guying and other plant associated with providing new 13.8 kV system capacity to the high load growth and development area of the City of Waterloo.					
Expected Benefits					
☒	Provision for increased line capacity for future growth areas.				
☒	Increased reliability associated with providing an alternate supply to populated or growth areas.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.24				
PROJECT #:	06EN06				
PROJECT SUB-TYPE:	4				
PROJECT DESCRIPTION:	27.6 kV Feeder to Elmira				
	1830	1835	1850		Total \$
Costs by USoA	77,570	42,187	16,331		136,088
Contributed Capital					-
Business Need					
This category includes expenditures for the addition of new feeder assets required to provide service to new customers in areas not previously serviced, and to previously serviced areas, to increase capacity where load density has increased. Normally projects are identified through system planning activities which include monitoring and analyzing commercial activities, station and feeder peak loading, municipal development activities, developer activities and land development activities. WNH is located in a region of moderately high growth. As these activities are driven by the level of economic activity in our area, resulting in expenditures that can vary greatly from year to year. Not proceeding with this customer requested work would result in refusal of connection of new customers or overloading of existing lines, both of which are detrimental to WNH and its customers.					
Project Details / Scope					
This project includes the installation of new overhead conductors, poles, transformers, guying and other plant associated with providing new 27.6 kV system capacity and switching ability to the Elmira area.					
Expected Benefits					
☒	Provision for increased line capacity for future growth areas.				
☒	Increased reliability associated with providing an alternate supply to populated or growth areas.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.25				
PROJECT #:	06EN07				
PROJECT SUB-TYPE:	1				
PROJECT DESCRIPTION:	New Overhead Service Connections / Upgrades				
	1830	1850	1855	1990	Total \$
Costs by USoA	95,045	449,302	319,696		864,042
Contributed Capital				(88,750)	(88,750)
Business Need					
This category includes the connection costs to service new large commercial and industrial customers. Also captured here are the costs to upgrade the capacity of existing services. The cost per service can vary widely with the nature and capacity of each service. Total expenditures vary with the level of economic activity in the WNH service area. There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.					
Project Details / Scope					
This project includes the installation of new services in overhead distribution areas. Also included are services that are installed or replaced as a result of customers requesting upgrades or major modifications to their existing service. The installation of new services include all labour and equipment associated with connecting customer's electrical servicing equipment to WNH lines - wire, poles, transformers, etc.					
Expected Benefits					
x Provision for growth. x Reduced exposure to safety hazards associated with aged plant and equipment. x Increased reliability of new distribution equipment and materials. x Increased safety of new design standards and clearances.					

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.26				
PROJECT #:	06EN08				
PROJECT SUB-TYPE:	3				
PROJECT DESCRIPTION:	Barrel Yards - F.D. Bauer Dr.				
	1845			1990	Total \$
Costs by USoA	640,439				640,439
Contributed Capital				(500,122)	(500,122)
Business Need					
This category includes expenditures for the addition of new feeder assets required to provide service to new customers in areas not previously serviced, and to previously serviced areas, to increase capacity where load density has increased. Normally projects are identified through system planning activities which include monitoring and analyzing commercial activities, station and feeder peak loading, municipal development activities, developer activities and land development activities. WNH is located in a region of moderately high growth. As these activities are driven by the level of economic activity in our area, resulting in expenditures that can vary greatly from year to year. Not proceeding with this customer requested work would result in refusal of connection of new customers or overloading of existing lines, both of which are detrimental to WNH and its customers.					
Project Details / Scope					
This project includes the installation of new underground feeders to supply the associated development. New ductbanks, cable, and primary switchgear are to be installed. This project will also include burying existing overhead lines at the request of the City of Waterloo. The developer will provide a capital contribution for this project.					
Expected Benefits					
☒	Increased reliability of power to customers.				
☒	Provision for increased supply for growth areas of Waterloo.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.27				
PROJECT #:	06EN08				
PROJECT SUB-TYPE:	4				
PROJECT DESCRIPTION:	TS HS A New Feeder Cable Installation				
	1840	1845			Total \$
Costs by USoA	50,154	284,205			334,359
Contributed Capital					-
Business Need					
This category includes expenditures for the addition of new feeder assets required to provide service to new customers in areas not previously serviced, and to previously serviced areas, to increase capacity where load density has increased. Normally projects are identified through system planning activities which include monitoring and analyzing commercial activities, station and feeder peak loading, municipal development activities, developer activities and land development activities. WNH is located in a region of moderately high growth. As these activities are driven by the level of economic activity in our area, resulting in expenditures that can vary greatly from year to year. Not proceeding with this customer requested work would result in refusal of connection of new customers or overloading of existing lines, both of which are detrimental to WNH and its customers.					
Project Details / Scope					
In 2006 WNH started a multistage project of rehabilitating the 1960's vintage Scheifele "A" transformer station. The last stage of this upgrade is the installation of the power cable in new concrete duct banks. The costs associated with this project cover all labour, material including terminations, trucking, and equipment to provide isolation, pull out existing cables, pull in the cable in the ducts, terminate the cable, rack it into place and test it.					
Expected Benefits					
x	Increased safety to workers and public.				
x	Increased reliability of power to customers.				
x	Provision for increased supply for growth areas of Waterloo.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.28				
PROJECT #:	06EN09				
PROJECT SUB-TYPE:	1				
PROJECT DESCRIPTION:	Bluevale St. N.				
	1840	1845	1850		Total \$
Costs by USoA	90,441	153,751	208,015		452,207
Contributed Capital					-
Business Need					
This category includes expenditures for the replacement of underground distribution feeder assets. Underground distribution is replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. Cable rehabilitation has been explored, however, it has not yet been found to be cost effective in our URD applications. WNH has three (3) distinct populations of Underground Distribution, most of which is underground residential distribution (URD). 1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been and continues to be the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency and safety are being achieved by retiring the 4 kV distribution system. 2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continues to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditure replacement in subsequent years. 3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continues to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
This area was initially serviced with first generation underground distribution in the early to mid 1970's. Due to age and condition, replacement includes 1990 m of primary trenching in the form of directional drilling and the replacement of 33 transformers. Primary cable is replaced with new cable in duct, transformers are replaced in accordance with the latest standards, and additional spare ducts are installed to facilitate the future replacement of street lighting and secondary conductors.					
Expected Benefits					
x	Increased reliability of new distribution equipment and materials.				
x	Increased safety of new design standards and clearances.				
x	Reduced operational trouble calls.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.29				
PROJECT #:	06EN09				
PROJECT SUB-TYPE:	10-15				
PROJECT DESCRIPTION:	Heidelberg - Wellesley Side				
	1840	1845	1850		Total \$
Costs by USoA	89,332	151,864	205,463		446,658
Contributed Capital					-
Business Need					
This category includes expenditures for the replacement of underground distribution feeder assets. Underground distribution is replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. Cable rehabilitation has been explored, however, it has not yet been found to be cost effective in our URD applications. WNH has three (3) distinct populations of Underground Distribution, most of which is underground residential distribution (URD). 1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been and continues to be the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency and safety are being achieved by retiring the 4 kV distribution system. 2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continues to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditure replacement in subsequent years. 3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continues to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
This area was initially serviced with first generation underground distribution in the early to mid 1970's. This project includes 3200 m of primary trenching in the form of directional drilling and the replacement of 12 transformers. Primary cable is replaced with new cable in duct, transformers are replaced in accordance with the latest standards, and additional spare ducts are installed to facilitate future replacement of secondary conductors.					
Expected Benefits					
☒ Increased reliability of new distribution equipment and materials. ☒ Increased safety of new design standards and clearances. ☒ Reduced operational trouble calls.					

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.30				
PROJECT #:	06EN09				
PROJECT SUB-TYPE:	10-16				
PROJECT DESCRIPTION:	Heidelberg - Woolwich Side				
	1840	1845	1850		Total \$
Costs by USoA	110,335	187,569	253,770		551,674
Contributed Capital					-
Business Need					
This category includes expenditures for the replacement of underground distribution feeder assets. Underground distribution is replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. Cable rehabilitation has been explored, however, it has not yet been found to be cost effective in our URD applications. WNH has three (3) distinct populations of Underground Distribution, most of which is underground residential distribution (URD). 1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been and continues to be the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency and safety are being achieved by retiring the 4 kV distribution system. 2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continues to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditure replacement in subsequent years. 3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continues to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
This area was initially serviced with first generation underground distribution in the early to mid 1970's. This project includes 3800m primary trenching in the form of directional drilling and the replacement of 16 transformers. Primary cable is replaced with new cable in duct, transformers are replaced in accordance with the latest standards, and additional spare ducts are installed to facilitate future replacement of secondary conductors.					
Expected Benefits					
x	Increased reliability of new distribution equipment and materials.				
x	Increased safety of new design standards and clearances.				
x	Reduced operational trouble calls.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:		2-31.31			
PROJECT #:		06EN09			
PROJECT SUB-TYPE:		3			
PROJECT DESCRIPTION:		Westcourt Place Secondary - PH 2 - 45 Units			
	1840	1845	1850		Total \$
Costs by USoA	25,224	42,881	58,015		126,119
Contributed Capital					-
Business Need					
This category includes expenditures for the replacement of underground distribution feeder assets. Underground distribution is replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. Cable rehabilitation has been explored, however, it has not yet been found to be cost effective in our URD applications. WNH has three (3) distinct populations of Underground Distribution, most of which is underground residential distribution (URD). 1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been and continues to be the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency and safety are being achieved by retiring the 4 kV distribution system. 2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continues to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditure replacement in subsequent years. 3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continues to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years.					
Project Details / Scope					
This area was initially serviced with first generation underground distribution in the early to mid 1970's. This project includes trenching and replacement of failing secondary conductor. Primary Cable and transformers have been replaced on an earlier project.					
Expected Benefits					
x	Increased reliability of new distribution equipment and materials.				
x	Increased safety of new design standards and clearances.				
x	Reduced operational trouble calls.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.32				
PROJECT #:	06EN09				
PROJECT SUB-TYPE:	12				
PROJECT DESCRIPTION:	PMH switchgear Replacements Y2				
	1840	1845	1850		Total \$
Costs by USoA	25,030	42,550	57,568		125,148
Contributed Capital					-
Business Need					
This category includes expenditures for the replacement of underground distribution feeder assets. Underground distribution is replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. Cable rehabilitation has been explored, however, it has not yet been found to be cost effective in our URD applications. WNH has three (3) distinct populations of Underground Distribution, most of which is underground residential distribution (URD). 1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been and continues to be the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency and safety are being achieved by retiring the 4 kV distribution system. 2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continues to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditure replacement in subsequent years. 3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continues to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
Project details include the replacement of defective (due to high partial discharge and tracking) PMH units. Increased maintenance activities attempted to address the problems but were unsuccessful. 2 units are to be replaced in 2011. These units were initially installed in the mid to late 1990's.					
Expected Benefits					
☒ Increased reliability of new distribution equipment and materials. ☒ Reduced operational trouble calls.					

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.33				
PROJECT #:	06EN10				
PROJECT SUB-TYPE:	1				
PROJECT DESCRIPTION:	Vista Hills - Wilmot Line				
	1840	1845	1850	1990	Total \$
Costs by USoA	58,533	179,041	106,736		344,309
Contributed Capital				(239,743)	(239,743)
Business Need					
Underground Residential Subdivisions are capital expansions to the WNH distribution system driven solely by customer demand. In accordance with the Distribution System Code, WNH performs an economic evaluation for each project and provides the developer with an Offer to Connect. Developers that meet WNH's Conditions of Service and provide the necessary financial commitments are connected. Total expenditures vary with the level of economic activity in WNH's service area. This spending is customer driven. There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.					
Project Details / Scope					
This project involves the installation of new plant to facilitate electrical servicing of new residential developments. Included are new primary cables, transformers, civil infrastructure, secondary cables, and other necessary plant and equipment. Work is coordinated with developers and other utilities and is completed in accordance with developer's timelines. Included are provisions for 100 Lots.					
Expected Benefits					
☒	Increased feeder capacity and distribution assets for growth.				
☒	Expansion of system to connect new customers.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.34				
PROJECT #:	06EN10				
PROJECT SUB-TYPE:	3				
PROJECT DESCRIPTION:	Galantai - Cook Homes - Woolwich St.				
	1840	1845	1850	1990	Total \$
Costs by USoA	50,336	153,969	91,789		296,094
Contributed Capital				(206,172)	(206,172)
Business Need					
Underground Residential Subdivisions are capital expansions to the WNH distribution system driven solely by customer demand. In accordance with the Distribution System Code, WNH performs an economic evaluation for each project and provides the developer with an Offer to Connect. Developers that meet WNH's Conditions of Service and provide the necessary financial commitments are connected. Total expenditures vary with the level of economic activity in WNH's service area. This spending is customer driven. There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.					
Project Details / Scope					
This project involves the installation of new plant to facilitate electrical servicing of new residential developments. Included are new primary cables, transformers, civil infrastructure, secondary cables, and other necessary plant and equipment. Work is coordinated with developers and other utilities and is completed in accordance with developer's timelines. Included are provisions for 86 Lots.					
Expected Benefits					
x	Increased feeder capacity and distribution assets for growth.				
x	Expansion of system to connect new customers.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.35				
PROJECT #:	06EN10				
PROJECT SUB-TYPE:	4				
PROJECT DESCRIPTION:	Greyerbiehl Ph 2 - Wilmot Line				
	1840	1845	1850	1990	Total \$
Costs by USoA	58,533	179,041	106,736		344,309
Contributed Capital				(239,743)	(239,743)
Business Need					
Underground Residential Subdivisions are capital expansions to the WNH distribution system driven solely by customer demand. In accordance with the Distribution System Code, WNH performs an economic evaluation for each project and provides the developer with an Offer to Connect. Developers that meet WNH's Conditions of Service and provide the necessary financial commitments are connected. Total expenditures vary with the level of economic activity in WNH's service area. This spending is customer driven. There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.					
Project Details / Scope					
This project involves the installation of new plant to facilitate electrical servicing of new residential developments. Included are new primary cables, transformers, civil infrastructure, secondary cables, and other necessary plant and equipment. Work is coordinated with developers and other utilities and is completed in accordance with developer's timelines. Included are provisions for 100 Lots.					
Expected Benefits					
☒ Increased feeder capacity and distribution assets for growth. ☒ Expansion of system to connect new customers.					

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.36				
PROJECT #:	06EN10				
PROJECT SUB-TYPE:	10				
PROJECT DESCRIPTION:	Lunor Lands - Church Sr. - Elmira				
	1840	1845	1850	1990	Total \$
Costs by USoA	58,533	179,041	106,736		344,309
Contributed Capital				(239,743)	(239,743)
Business Need					
Underground Residential Subdivisions are capital expansions to the WNH distribution system driven solely by customer demand. In accordance with the Distribution System Code, WNH performs an economic evaluation for each project and provides the developer with an Offer to Connect. Developers that meet WNH's Conditions of Service and provide the necessary financial commitments are connected. Total expenditures vary with the level of economic activity in WNH's service area. This spending is customer driven. There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.					
Project Details / Scope					
This project involves the installation of new plant to facilitate electrical servicing of new residential developments. Included are new primary cables, transformers, civil infrastructure, secondary cables, and other necessary plant and equipment. Work is coordinated with developers and other utilities and is completed in accordance with developer's timelines. Included are provisions for 100 Lots.					
Expected Benefits					
☒ Increased feeder capacity and distribution assets for growth. ☒ Expansion of system to connect new customers.					

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.37				
PROJECT #:	06EN10				
PROJECT SUB-TYPE:	10-5				
PROJECT DESCRIPTION:	Owen - Wideman Rd.				
	1840	1845	1850	1990	Total \$
Costs by USoA	28,822	88,163	52,559		169,544
Contributed Capital				(118,056)	(118,056)
Business Need					
Underground Residential Subdivisions are capital expansions to the WNH distribution system driven solely by customer demand. In accordance with the Distribution System Code, WNH performs an economic evaluation for each project and provides the developer with an Offer to Connect. Developers that meet WNH's Conditions of Service and provide the necessary financial commitments are connected. Total expenditures vary with the level of economic activity in WNH's service area. This spending is customer driven. There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.					
Project Details / Scope					
This project involves the installation of new plant to facilitate electrical servicing of new residential developments. Included are new primary cables, transformers, civil infrastructure, secondary cables, and other necessary plant and equipment. Work is coordinated with developers and other utilities and is completed in accordance with developer's timelines. Included are provisions for 49 lots.					
Expected Benefits					
☒	Increased feeder capacity and distribution assets for growth.				
☒	Expansion of system to connect new customers.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.38				
PROJECT #:	06EN10				
PROJECT SUB-TYPE:	10-6				
PROJECT DESCRIPTION:	Activa - Rural East				
	1840	1845	1850	1990	Total \$
Costs by USoA	43,646	133,505	79,590		256,741
Contributed Capital				(179,024)	(179,024)
Business Need					
Underground Residential Subdivisions are capital expansions to the WNH distribution system driven solely by customer demand. In accordance with the Distribution System Code, WNH performs an economic evaluation for each project and provides the developer with an Offer to Connect. Developers that meet WNH's Conditions of Service and provide the necessary financial commitments are connected. Total expenditures vary with the level of economic activity in WNH's service area. This spending is customer driven. There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.					
Project Details / Scope					
This project involves the installation of new plant to facilitate electrical servicing of new residential developments. Included are new primary cables, transformers, civil infrastructure, secondary cables, and other necessary plant and equipment. Work is coordinated with developers and other utilities and is completed in accordance with developer's timelines. Included are provisions for 200 lots.					
Expected Benefits					
☒ Increased feeder capacity and distribution assets for growth. ☒ Expansion of system to connect new customers.					

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.39				
PROJECT #:	06EN10				
PROJECT SUB-TYPE:	10-7				
PROJECT DESCRIPTION:	Woolwich Estates - Kraus				
	1840	1845	1850	1990	Total \$
Costs by USoA	29,398	89,923	53,608		172,928
Contributed Capital				(120,447)	(120,447)
Business Need					
Underground Residential Subdivisions are capital expansions to the WNH distribution system driven solely by customer demand. In accordance with the Distribution System Code, WNH performs an economic evaluation for each project and provides the developer with an Offer to Connect. Developers that meet WNH's Conditions of Service and provide the necessary financial commitments are connected. Total expenditures vary with the level of economic activity in WNH's service area. This spending is customer driven. There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in WNH being in conflict with the Distribution System Code and municipal development objectives.					
Project Details / Scope					
This project involves the installation of new plant to facilitate electrical servicing of new residential developments. Included are new primary cables, transformers, civil infrastructure, secondary cables, and other necessary plant and equipment. Work is coordinated with developers and other utilities and is completed in accordance with developer's timelines. Included are provisions for 100 lots.					
Expected Benefits					
☒ Increased feeder capacity and distribution assets for growth. ☒ Expansion of system to connect new customers.					

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.40				
PROJECT #:	06EN11				
PROJECT SUB-TYPE:	1				
PROJECT DESCRIPTION:	New Underground Services				
	1850	1855		1990	Total \$
Costs by USoA	513,887	357,108			870,995
Contributed Capital				(455,000)	(455,000)
Business Need					
This category includes the connection costs to service new customers. Also captured here are the costs to upgrade the capacity of existing services. The cost per service can vary widely with the nature and capacity of each service. Total expenditures vary with the level of economic activity in the WNH service area. There are no alternatives to proceeding with this customer requested work, and the consequences of not proceeding would result in conflict with the Distribution System Code and municipal development objectives.					
Project Details / Scope					
This project includes the installation of new services in new subdivisions serviced by underground power distribution. Also included are underground services that are installed or replaced as a result of customers requesting upgrades or major modifications to their existing service.					
Expected Benefits					
x Supply new customers and growth areas x Reduced exposure to safety hazards associated with aged plant and equipment. x Increased reliability of new distribution equipment and materials. x Increased safety of new design standards and clearances.					

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.41				
PROJECT #:	06MT02				
PROJECT SUB-TYPE:	1				
PROJECT DESCRIPTION:	2011 Commercial & Industrial - Regular Meters > 50 kW				
	1860				Total \$
WR Costs by USoA	315,250				315,250
Business Need					
Waterloo North Hydro is required under the federal Electricity and Gas Inspection Act to use approved Revenue Metering Equipment for the purpose of establishing the basis of a charge for the supply of electricity to its customers. WNH meets this requirement for its Commercial and industrial Customers (C&I > 50 kW) by purchasing Measurement Canada approved meters, instrument transformers and other related equipment. Activity in this work program is driven by new C&I customers, obsolescence of equipment and equipment failure. This activity is mandated.					
Project Details / Scope					
Cost accumulated under this work order include the labour, materials, equipment and contract labour to install revenue metering for Commercial and Industrial customers.					
Expected Benefits					
x	Meets the requirement of the federal Electricity and Gas Inspection Act.				
x	Fulfills the business needs of WNH in establishing the basis of a charge for the supply of electricity to its customers.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.42				
PROJECT #:	06OH01				
PROJECT SUB-TYPE:	1				
PROJECT DESCRIPTION:	2011 Pole and Tx Capital Replacement				
	1830	1835	1850		Total \$
Costs by USoA	286,649	156,761	4,479		447,889
Contributed Capital					-
Business Need					
Waterloo North Hydro (WNH) has a population of approximately 24,000 overhead line poles. WNH recognizes that the condition of these assets deteriorate over time and takes a proactive approach to their replacement. Programs are in place to inspect all poles on a 6 year cycle in rural areas and a 3 year cycle in urban areas and to test all poles over 25 years of age. Asset information is stored and analyzed with the help of WNH's Geographic Information System (GIS). Projects are prioritized using condition assessment data, asset age, reliability, supply and safety considerations. Where possible, depreciated line replacements are combined with voltage conversions or feeder capacity upgrades / additions. Alternatives such as Antifungal and Pesticide Pole Treatments are employed where needed to extend pole life. Overhead lines are replaced when alternatives such as maintenance or rehabilitation are not possible or cost effective. The consequences of not proceeding would be to allow the condition of these assets to deteriorate into a state negatively impacting public safety and/or system reliability.					
Project Details / Scope					
The scope of this project includes replacing individual poles that are identified by either WNH's overhead plant inspection program or by WNH staff when performing regular work assignments as in poor condition and needing immediate replacement. Poles were replaced as close as possible to their existing locations and all hardware, transformers and other equipment associated with the pole were replaced. Where possible, poles were brought up to today's standards and clearances. Some poles were replaced "like for like" where existing conditions dictated. Transformers that are affected by these pole changes are also changed if the transformer's size is inefficient, upgrade or downsize to match current connected customer requirements, or if the transformer has reached the end of it's life (rusted tank, flashed / cracked bushings, etc.).					
Expected Benefits					
x	Reduced exposure to safety hazards associated with aged plant and equipment.				
x	Increased reliability of new distribution equipment and materials.				
x	Increased safety of new design standards and clearances.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.43				
PROJECT #:	06SN04				
PROJECT SUB-TYPE:	6				
PROJECT DESCRIPTION:	TS ERTS Protection Upgrades				
	1815				Total \$
Costs by USoA	153,862				153,862
Contributed Capital					-
Business Need					
WNH is supplied primarily through the IESO controlled, Hydro One Transmission System at transmission voltages of 115 kV and 230kV. WNH owns and operates three (3) transmission grid connected Transformer Stations (TS's) operating at 115 kV - 13.8 kV, 230 kV - 27.6 kV and 230 kV - 13.8 kV. Expenditures in this category are made due to one of the following reasons: - there is a need to increase capacity to meet growth in demand. Such needs are normally identified through system planning activities. - the equipment requires replacement or a major refurbishment due to its condition. In such cases, regular maintenance will not address the problem nor is it cost effective. This is normally identified as a result of a variety of regularly scheduled testing and maintenance activities. - the equipment needs to be replaced due obsolescence. Such needs are typically identified through the inability to source spare or replacement components. - the equipment needs to be updated to meet regulatory requirements (Transmission System Code, Market Rules, etc) Where at all possible, projects are scheduled such that one project can satisfy more than one need. Projects being captured in this category include new or major refurbishments to existing switches or breakers, transformers, switchgear, protection and control systems, structural support systems, environmental protection systems. The implications of not taking proper actions and improving equipment capacity or condition as required could result in inability to supply power to customers, damage to equipment, increased safety hazards to workers, unreliable or misoperation of equipment, explosive equipment failure and breach of requirements set out in the Transmission System Code.					
Project Details / Scope					
The protective relays used at Eby Rush for bus protection are 15 years of age and have been discontinued by their manufacturer and are no longer supported with spare parts. There is a need to replace those with current day version to reduce the risks of a long outage in case of unplanned relay failures. This project involves changing the existing relays and control systems for tap changer, main breaker, tie breaker control and bus protection with newer hardware and operating characteristics.					
Expected Benefits					
☒ Increased reliability of power to customers. ☒ Compliance with the Transmission System Code, HONI and/or IESO requirements.					

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.44				
PROJECT #:	07OU01				
PROJECT SUB-TYPE:	1				
PROJECT DESCRIPTION:	2011 Ops U/G Distribution Equipment & TX Capital Replacement				
	1840	1845	1850		Total \$
Costs by USoA Contributed Capital	68,473	185,856	71,734		326,063 -
Business Need					
The reliability of supply to most residential customers in WNH's service territory is affected by the age and condition of the underground distribution system supplying their homes. WNH has three (3) distinct populations of Underground Distribution, most of which is underground residential distribution (URD). 1) WNH's first generation of underground distribution was installed in the early 1960's and through to the end of the 1970's. The majority of activity in this area has been and continues to be the replacement of these 40 to 50 year old assets with new higher voltage distribution. Improved reliability, efficiency and safety are being achieved by retiring the 4 kV distribution system. 2) WNH's second generation of underground distribution began in the early 1980's. Currently the failure rate of the 15 kV underground distribution system is relatively low and it is being replaced only as it fails. WNH will continues to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years. 3) WNH's third generation of underground distribution began around 2000. Currently the failure rate of the 27 kV underground distribution system is extremely low and it is being replaced only as it fails. WNH will continues to monitor the performance of these assets and, as they deteriorate, will need to ramp up expenditures for their replacement in subsequent years.					
Project Details / Scope					
The scope of this project includes all costs associated with replacing individual pad-mounted and submersible transformers, switching cubicles and associated components that are identified as hazards requiring immediate replacement either as part of WNH's underground plant inspection program or by WNH staff when completing regular work assignments.					
Expected Benefits					
☒ Increased reliability of new distribution equipment and materials. ☒ Increased safety of new design standards and clearances. ☒ Reduced operational trouble calls.					

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.46				
PROJECT #:	06EN13				
PROJECT SUB-TYPE:	1				
PROJECT DESCRIPTION:	GIS & Mapping Capital				
	1925				Total \$
Costs by USoA	166,752				166,752
Contributed Capital					-
Business Need					
In 2005 WNH began implementing an ESRI Geographic Information System (GIS) to support its business operations. GIS integrates hardware, software, and data for capturing, managing, analyzing, and displaying asset and customer information. GIS provides critical tools to organize information and knowledge, make informed decisions, improve communications and increase efficiency of work processes. From its inception, much work has been performed in transferring paper based asset data into the GIS data base. WNH currently uses its GIS to assist with engineering design, asset management, supply planning, outage planning and budgeting processes. Data types currently maintained are asset type, quantity, condition, location and results of inspection and maintenance programs. The GIS is constantly being updated and expanded as new assets are installed, such as with new construction or replacing assets; and also as new analytical tools are needed. There are plans to integrate the GIS with other enterprise information systems such as outage management, SCADA and engineering analysis tools to provide faster and more efficient analysis and response to power system operational issues. The consequences of not proceeding would be to maintain asset information in paper based formats that are difficult and inefficient to maintain. These formats also do not support the increased asset analysis and reporting required for current asset management and regulatory compliance.					
Project Details / Scope					
Costs collected under this project include all labour, material and equipment require to continue to build WNH's Graphical Information System (GIS). The 2011 GIS program is focused on a number of initiatives. First is to continue to build upon the information data bases to provide better utility to engineering and operations processes. Second is to construct additional tools used by various departments to facilitate and record testing and inspection data to support WNH's asset management strategy. Third is to support the capital design program through the development of design base plans.					
Expected Benefits					
☒	Increased efficiency in maintaining information.				
☒	Increased efficiency accessing information.				
☒	Increased ability to analyze data and develop improvement strategies.				
☒	Increased ability to report data to internal and external stakeholders.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.47				
PROJECT #:	06FL02				
PROJECT SUB-TYPE:	1				
PROJECT DESCRIPTION:	R11 - New Material Handler Single Bucket Truck in 2011				
	1930				Total \$
Costs by USoA Contributed Capital	285,000				285,000 -
Business Need					
WNH maintains its vehicles to achieve a useful life of 14 to 16 years for our large vehicles (bucket trucks, RBDs) and 8 to 10 years for small vehicles (pickup trucks, vans, etc.). WNH has determined that these time frames represent the most cost efficient replacement schedule and to extend beyond these timeframes incurs increased maintenance costs and reduce fleet reliability. WNH is replacing Truck R78, a 1997 Freightliner chassis with a 50 foot, single bucket truck with a material handling Posi-Plus boom (14 years old) that is at end of life condition. The cost of this vehicle has been budgeted at \$285,000. Truck R78 is at the end of its useful life. It was retrofitted with a secondary rear axle to increase its allowable registered vehicle weight. As a result the secondary rear axle's suspension has limited (12 inches) clearance which limits the ability to use the vehicle in rural laneways, uneven road surfaces and off road work locations.					
Project Details / Scope					
This project includes all costs associated with developing the specification documents for the truck chassis, work platform, and truck body; completing the tendering process; ordering the vehicle; inspecting the work platform and body during fabrication and assembly of the truck; and commissioning the completed truck at our facility (installing signage and high visibility striping, two way radio system, registering the truck with MTO, completing an in-service training session for our drivers, etc.). WNH specified an International tandem axle chassis outfitted with a Posi-Plus Model 400 boom. This unit will provide a device with a maximum working height of 50 ft and will be able to lift material loads up to 800 lbs.					
Expected Benefits					
x	Replacement of Truck R78 will help to reduce our total annual fleet maintenance costs by eliminating our oldest (R78 - 14 year old) single bucket material handling truck from our fleet.				
x	The International tandem chassis we specified for Truck R11 has a conventional undercarriage. It will not have the clearance problems that Truck R78 has. This will allow us to use the new truck R11 without any ground clearance limitations in rural laneways, uneven road surfaces and off road work locations.				
x	The Pos-Plus Model 400 boom we have specified for the new Truck R11 has 12 ft more side reach than the old Truck R78 is capable of. This feature will allow our Powerline Maintainers additional flexibility when setting up the truck in rural situations where the poles are further off the road and the stability of the shoulder of the road limits truck setup locations.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.48				
PROJECT #:	06PS01				
PROJECT SUB-TYPE:	1				
PROJECT DESCRIPTION:	Purchase and installation of modular pole bunk system for storage yard at new service centre				
	1935				Total \$
Costs by USoA Contributed Capital	275,000				275,000
Business Need					
WNH will be moving into a new service centre at 526 Country Squire Road in the fall of 2011. This new facility will include secure outside storage for our major distribution system inventory items including wire, cable, transformers and poles. We require storage facilities for our inventory of poles to ensure they are kept off the ground to reduce moisture damage and limit migration of pole treatment products into the ground. We also need to ensure we store poles in a manner such that they are both mechanically secure for safety reasons and are also readily accessible to be used for emergency pole replacements in all weather conditions. WNH's outdoor pole storage system at our present service centre (300 Northfield Drive E.) was built in 1983 when the present building was constructed. This system was created using a system of poured in place concrete foundations which cannot be relocated to the storage yard at the new service centre. WNH considered the alternative of having the new pole bunk storage system constructed in place using a system of poured on site concrete foundations as part of the new service centre's building contract. We chose to proceed with the modular pole bunk system because it was comparable in total installed cost and provides us with the flexibility to modify the design layout of our pole bunk storage system within our new storage yard in the future at minimal cost.					
Project Details / Scope					
The scope of this project includes all costs associated with the purchase, delivery and installation of a system of precast modular reinforced concrete beams with galvanized metal retaining brackets. These components will be assembled to create a system of outdoor hydro pole storage bunks. The completed installation will result in a segregated storage location by pole material (such as wood, concrete, metal etc.) and by pole height in 5 foot length increments.					
Expected Benefits					
☒	Maintain pole inventory in good condition to limit moisture damage as well as migration of pole treatment materials into the ground				
☒	Maintain efficient access to pole inventory in all weather conditions				
☒	Improved staff safety. Ensure stored poles are properly secured to minimize risk to WNH staff during pole loading and unloading operations.				

WNH 2011 CAPITAL PROJECT > MATERIALITY					
TABLE #:	2-31.49				
PROJECT #:	06SN05				
PROJECT SUB-TYPE:	4				
PROJECT DESCRIPTION:	SCADA System Replacement				
	1980				Total \$
Costs by USoA	834,356				834,356
Contributed Capital					-
Business Need					
WNH operates a Supervisory Control And Data Acquisition System (SCADA) to be able to respond to the operating needs of the distribution system needs as quickly as possible and to be in compliance with the requirements of the Market Rules and the Transmission System Code. WNH uses a SCADA system comprising of dual master computers and 5 Remote Terminal Units (RTUs) at three (3) transmission connected transformer stations and 23 RTUs at 18 municipal stations, distribution stations and on the distribution lines. The SCADA system reports on over 2,000 status points and approximately 4,000 analog points and allows remote control for over 400 field points. The communication media for the SCADA system consist of a combination of fibre, leased telephone circuits, and private data radio system including repeater towers. The system provides for the required master-to-master ICCP connections to Hydro One and IESO. The SCADA system is capable of storing and trending past data which is used to make operational decisions, as well as, in preparation of system expansion plans. Projects in this category include addition of new, upgraded or replacement of the hardware or software associated with the SCADA system itself, the field RTUs, any communication system required to support the SCADA system, or any system that archives or displays the SCADA historical data. Lack of investing in the SCADA system components would eventually lead to loss of remote control of field devices resulting in the need for more manual operations in the field, not being able to respond to customers needs as quickly as possible, increasing customer outage minutes, reduction in public safety in case of downed power lines, and less precise operating and system expansion plans.					
Project Details / Scope					
WNH operates a 1993 vintage SCADA system which runs on obsolete hardware and software that is no longer supported with vendor enhancements. The software is of a vintage that does not easily support integration with other information system such as GIS and Outage Management. Absent are also the data collection, analytical tools and reporting required to improve system operation through other process such as reliability analysis. In 2009 WNH through the services of a consultant has issued a RFI for SCADA system replacement. After analysis of the responses, the consultant recommended the replacement of the SCADA system in 2011. The costs included in project comprise of all labour, material, equipment, trucking, and consulting costs required to prepare the new SCADA system specifications, procure the new software and hardware, perform factory acceptance testing, and install the system at the new WNH office including all the necessary fibre, radio, and telephone communication infrastructure procurement, installation, configuration and commissioning costs as well as perform final on-site testing and commissioning.					
Expected Benefits					
☒ Increased safety to workers and public. ☒ Information supports regulatory reporting requirements, reliability and system supply planning. ☒ Increased reliability of power to customers. ☒ Development of more precise operating and system expansion models. ☒ Compliance with the Transmission System Code, HONI and/or IESO requirements.					

WNH 2011 CAPITAL PROJECT > MATERIALITY													
TABLE #:													
		2-31.50											
PROJECT #:													
		06SS02											
PROJECT SUB-TYPE:													
		1											
PROJECT DESCRIPTION:													
		Hardware - Systems											
		1920			Total \$								
Costs by USoA		225,000			225,000								
Contributed Capital					-								
Business Need													
WNH requires an upgrade to the corporate ERP Server in 2011. This server primarily supports our legacy systems which include: 1. ERP Software Solution (Inventory Control, Requisition & P.O.s, Financial Accounting, Costing, Bill of Materials, Work Order Processing) 2. Customer Information System (CIS) and Billing. The current server was purchased at the end of 2005. New hardware permits WNH to progressively remain current with both hardware technology solutions and software solutions as well. (Note: Current software solutions require current hardware to support their performance and processing requirements). Newer hardware also translates to lower operational annual maintenance fees and reduced risk of disrupted operations.													
Project Details / Scope													
WNH's current ERP and CIS/Billing Vendors are deploying software upgrades which require different hardware platforms as well as more robust and powerful hardware to support their upgraded software applications. These corporate legacy application upgrades provide WNH with improved functionality which will translate to increased efficiencies in day to day operations. On another note, if WNH chose not remain current on a regular basis and become stagnant with old hardware equipment and older software releases, this would increase the complexity and cost of the inevitable need to move forward with both hardware and software technology solutions. Furthermore, remaining with old hardware and software increases operational costs as well as the risk of disruption to operation due to the higher potential for hardware failure and potential lack of adequate support for 'old' software releases.													
Expected Benefits													
<table border="1"> <tbody> <tr> <td>☒</td> <td>Increased business efficiency of the organization in providing up to date computer hardware.</td> </tr> <tr> <td>☒</td> <td>Current hardware allows the implementation of current software.</td> </tr> <tr> <td>☒</td> <td>Lower operational annual maintenance fees.</td> </tr> <tr> <td>☒</td> <td>Reduced risk of disrupted operations.</td> </tr> </tbody> </table>						☒	Increased business efficiency of the organization in providing up to date computer hardware.	☒	Current hardware allows the implementation of current software.	☒	Lower operational annual maintenance fees.	☒	Reduced risk of disrupted operations.
☒	Increased business efficiency of the organization in providing up to date computer hardware.												
☒	Current hardware allows the implementation of current software.												
☒	Lower operational annual maintenance fees.												
☒	Reduced risk of disrupted operations.												

Waterloo North Hydro Inc.
Application for Approval of 2011 Electricity Distribution Rates

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EXHIBIT 3 - OVERVIEW OF OPERATING REVENUE:

Waterloo North Hydro Inc.

EB-2010-0144

Filed: August 27, 2010

Exhibit 3 - Page 1 of 55

This Exhibit provides the details of WNH's Operating Revenue for the 2006 Board Approved, 2006 Actual, 2007 Actual, 2008 Actual, 2009 Actual Years, the 2010 Bridge Year and the 2011 Test Year. This Exhibit also provides a detailed variance analysis by rate class of the Operating Revenue components. Distribution Revenue does not include revenue from commodity sales.

A summary of Operating Revenue is presented in Table 3-1.

Throughput Revenue:

Throughput Revenue in this application includes fixed charges revenue from monthly charges multiplied by the average number of customers plus variable charges revenue from the consumption of WNH's six major classes (Residential, General Service<50 kW, General Service>50 kW, Large User, Street Lighting and Unmetered Scattered Load). Data related to WNH's Throughput Revenue includes details such as the weather normalized forecasting methodology, normalized volume based on the historical number of customers billed throughout the year, conservation effects and known economic conditions. Detailed variance analysis on the Throughput Revenue is set out Tables 3-22, 3-23 and 3-24.

Other Revenue:

Other Revenue includes Late Payment Charges, Specific Service Charges, Other Distribution Revenue and Other Income and Deductions. A summary of Other Operating Revenue together with a variance analysis is presented in Table 3-27.

Table 3-1
Summary of Operating Revenue

	2006 Board Approved	2006 Actual	2006 Actual vs. 2006 Board Approved	2007 Actual	2007 Actual vs. 2006 Actual	2008 Actual	2008 Actual vs. 2007 Actual	2009 Actual	2009 Actual vs. 2008 Actual	2010 Bridge	2010 Bridge vs. 2009 Actual	2011 Test	2011 Test vs. 2010 Bridge
Throughput Revenue													
Residential	12,584,541	12,474,198	(110,342)	13,161,992	13,272,334	13,269,383	(2,951)	13,405,234	13,408,186	13,085,005	(323,180)	15,705,681	2,620,676
GS<50	3,879,492	3,838,382	(41,110)	3,853,585	3,894,694	3,843,387	(51,307)	3,837,056	3,888,363	3,827,123	(61,240)	4,581,871	754,748
GS>50	6,879,858	7,031,351	151,493	7,370,276	7,218,783	7,461,869	243,086	7,368,609	7,125,523	7,343,079	217,556	8,391,936	1,048,856
Large User	699,447	695,052	(4,395)	646,219	650,614	607,186	(43,428)	714,805	758,233	481,496	(276,737)	581,384	99,889
Street Lighting	184,240	185,522	1,282	193,998	192,717	195,567	2,850	196,902	194,052	194,982	931	259,710	64,727
Unmetered Scattered Load	138,158	76,352	(61,806)	105,665	167,470	117,730	(49,740)	120,883	170,623	117,351	(53,272)	131,840	14,489
Embedded Distributor			-		-		-		-		-	846	846
Transformer Ownership Allowance	(744,464)	(759,210)	(14,746)	(776,514)	(761,768)	(776,374)	(14,606)	(776,628)	(762,022)	(776,628)	(14,606)	(672,628)	104,000
Other Distribution Charges													
Other Revenue													
Late Payment Charges	160,296	187,406	27,110	186,505	159,395	168,746	9,351	180,266	170,915	180,000	9,085	180,000	-
Specific Service Charges	304,646	140,903	(163,743)	386,267	550,010	279,258	(270,751)	301,799	572,550	244,155	(328,395)	245,845	1,690
Other Distribution Revenue	91,451	304,576	213,125	282,082	68,957	281,083	212,127	268,081	55,954	277,719	221,765	278,819	1,100
Other Income and Deductions	323,902	813,011	489,109	1,016,119	527,010	904,858	377,848	362,282	(15,566)	396,770	412,336	390,786	(5,984)
SSS Administration Charge	121,602	125,369	3,767	125,369	121,602	130,942	9,340	132,653	123,314	135,000	11,686	135,000	-
Low Voltage Charges	95,727	75,115	(20,612)	111,721	132,333	117,199	(15,134)	114,317	129,451	153,000	23,549	165,000	12,000
Total Operating Revenue	24,718,896	25,188,028	469,132	26,663,282	26,194,150	26,600,834	406,684	26,226,260	25,819,576	25,659,053	(160,523)	30,376,090	4,717,037

VARIANCE ANALYSIS ON OPERATING REVENUE

WNNH's 2010 Throughput Revenue has been calculated using its most recently approved rates and estimated number of customers and consumption (see details in Table 3-22). In particular, delivery rates are based on the EB-2009-0210 dated March 25, 2010. The 2011 Throughput Revenue is determined by the revenue requirement calculation from Exhibit 6.

2006 Board Approved:

WNNH's 2006 Board Approved Throughput Revenue was forecast to be \$23.6 M and Total Revenue was estimated for \$24.7M.

2006 Actual:

WNNH's Throughput Revenue in fiscal 2006 was \$23.5M, .3% lower than the 2006 Board Approved. Total Revenue was \$25.2M. This represents a 1.9% increase from the 2006 Board Approved amount. Other Revenue increased by \$0.55M (see Table 3-1 for details).

2007 Actual:

WNNH's Throughput Revenue in the fiscal year 2007 was \$24.6M, which was 4.3% higher than the 2006 Actual due to the load growth (i.e. 5.5% consumption increase in the Residential class). Total Revenue was \$26.7M, representing a 5.9% increase from the 2006 Actual. Other Revenue increased \$0.46M in the year.

2008 Actual:

WNNH's Throughput Revenue in the fiscal year 2008 was \$24.7M, 0.7% higher than 2007 Actual due to an increase in customers (i.e. 5.4%% growth in the number of customers in the GS>50kW rate class). Total Revenue was \$26.6M, representing a 0.2% decrease from the 2007 Actual. Other Revenue decreased \$0.23M.

2009 Actual:

WNNH's Throughput Revenue in the fiscal year 2009 was \$24.9M, 0.6% higher than 2008 Actual due to load growth. Total Revenue was \$26.2M, representing a 1.4% decrease from the 2008 Actual. Other Revenue decreased \$0.52M.

1 2010 Bridge Year:

2 WNH's Throughput Revenue is forecast to be \$24.3M (based on Board Approved 2010 rates
3 and weather normalized load forecast), as shown in Table 3-1 (excluding transformer
4 allowance). Total Revenue is forecast to be \$25.7M in the 2010 Bridge Year.

6 Comparison to 2009 Actual:

7 Total Revenue in 2010 is expected to be \$.56M lower than the 2009 Actual year level. This
8 decrease is the result of load reductions projected in this period.

10 2011 Test Year:

11 WNH's Throughput Revenue is forecast to be \$28.9M or 95% of Total Revenue. Total Operating
12 Revenue is forecast to be \$30.3M. Other Revenue is forecast to be \$1.4M, including Low
13 Voltage Charges and SSS Administration charges.

15 Comparison to 2010 Bridge Year:

16 Total Revenue in 2011 is forecast to be \$4.7M higher than the 2010 Bridge Year. This increase
17 comes from increased revenue as required through the Revenue Deficiency determination of
18 \$5.0M. WNH expects a decrease in transformer allowance. In 2011, as a result of this rate
19 application, WNH expects to increase its rate base by \$22.65M (see Exhibit 2). The need to
20 generate a return on its increased rate base resulted in a revenue deficiency.

WEATHER NORMALIZATION METHODOLOGY:

The purpose of weather normalization is to predict future customer consumption based on normal weather conditions. To achieve this goal, the relationship between weather change and customer consumption must be defined. WNH reviewed the various processes used by the 2010 Cost of Service applicants and is proposing to adopt a weather normalization methodology using Multifactor Regression (MR) for weather normalization and customer numbers for its load forecast. WNH is proposing to adopt a weather normalization forecasting method similar to the one approved by the Board in a number of 2009 and 2010 cost of service rate applications.

In summary, WNH has used the regression analysis methodology to determine a prediction model. With regards to the overall process of load forecasting, it is WNH's view that conducting a regression analysis on historical purchases to produce an equation that will predict energy purchases is appropriate. WNH knows by month the exact number of kWhs purchased from the IESO for use by customers of WNH. With a regression analysis these purchases can be related to other monthly explanatory variables such as heating degree days and cooling degree days which occur in the same month. The result of the regression analysis produces an equation that predicts the purchases based on the explanatory variables. This prediction model is then used as the basis to forecast the total level of weather normalized purchases for WNH for the bridge and test year, which is converted to Billed kWh by rate class. A detail explanation of the process is provided later on in this evidence.

During the review process of recent cost of service applications, Intervenor expressed concerns with the load forecasting weather normalization process being proposed by WNH. Intervenor suggested the weather normalization should be conducted on an individual rate class basis and the regression analysis on an individual rate class basis. WNH prepared its purchases and billed energy on the monthly "consumed" basis, in which purchases are recorded on the basis of actual meter data in the month and monthly billed energy is adjusted for its calculation of estimated unbilled energy. However, based on the R square values shown in Table 3-2, WNH concluded using the equation resulting from the individual rate class regression analysis would not be satisfactory for forecasting purposes.

WEATHER NORMALIZATION METHODOLOGY:

Table 3-2
R Square Values for Individual Class Regression Analysis

Class	R ² Values
Residential	44.3%
GS < 50 kW	41.7%
GS > 50 kW	59.0%

The accuracy will improve when smart meters are fully deployed and actual monthly consumption by rate class and individual customer can be determined. In addition, WNH does not have as many years of monthly historical billed data by rate class as it does for the kWh purchased. As a result, conducting the regression analysis on purchases provides better results since a higher level of historical data increases the accuracy of the regression analysis.

WNH understands that to a certain degree the process of developing a load forecast for a cost of service rate application is an evolving science for electricity distributors in the province. WNH expects to include additional improvements to the load forecasting methodology in future cost of service rate applications by taking into consideration data provided by smart meters and the experience of others conducting load forecasts in future cost of service rate applications.

The following provides the material to support the weather normalized load forecast used by WNH in this application. Tables 3-3, 3-4 and 3-5 below provide a summary of the weather normalized load and customer/connection forecast used in this section.

Table 3-3
Summary of Load and Customer/Connection Forecast

Year	Billed Energy (GWh) and Customer Count/Connections					
	Billed (GWh)	Change over Previous Year	% Change	Customer / Connection Count	Change over Previous Year	% Change
2006 Board Approved	1,242.8			59,454		
2003 Actual	1,216.5			57,592		
2004 Actual	1,249.4	32.8	2.7%	59,453	1,861	3.2%
2005 Actual	1,304.2	54.8	4.4%	60,904	1,451	2.4%
2006 Actual	1,325.7	21.5	1.6%	61,927	1,023	1.7%
2007 Actual	1,367.1	41.4	3.1%	62,816	889	1.4%
2008 Actual	1,370.2	3.1	0.2%	63,774	958	1.5%
2009 Actual	1,360.0	(10.2)	-0.7%	64,528	754	1.2%
2010 Normalized Bridge	1,379.9	19.9	1.5%	65,222	694	1.1%
2011 Normalized Test	1,373.7	(6.2)	-0.5%	65,921	699	1.1%

The years 2003 to 2009 are weather actual, 2010 and 2011 are weather normalized and adjusted by a CDM factor. WNH currently does not have a process to adjust weather actual data to a weather normal basis. However, based on the process outlined in this Exhibit, a process to forecast energy on a weather normalized basis has been developed and used in this application.

Total Customers are as of year-end and street light and unmetered scattered loads are measured as connections.

On a rate class basis actual and forecasted billed amount and number of customers are shown in Table 3-4 and customer usage is shown in Table 3-5.

Table 3-4
Billed Energy and Number of Customers / Connections by Rate Class

Year	Billed Energy (GWh)						Total
	Residential	GS<50	GS>50	Large User	St Lt	USL	
2006 Board Approved	397.4	188.2	551.0	95.9	6.9	3.3	1,242.8
2003 Actual	381.2	178.7	581.1	65.4	6.8	3.2	1,216.5
2004 Actual	385.1	181.7	606.6	66.1	6.7	3.2	1,249.4
2005 Actual	408.1	187.4	627.7	70.6	7.3	3.2	1,304.2
2006 Actual	391.9	189.3	660.3	73.7	7.3	3.1	1,325.7
2007 Actual	405.1	192.0	682.8	77.1	7.4	2.8	1,367.1
2008 Actual	405.5	185.0	693.6	76.7	7.5	1.8	1,370.2
2009 Actual	397.1	179.8	697.1	76.5	7.5	1.9	1,360.0
2010 Normalized Bridge	394.5	179.7	717.9	78.4	7.7	1.8	1,379.9
2011 Normalized Test	382.6	175.3	727.7	78.6	7.8	1.6	1,373.7

Year	Number of Customers / Connections						Total
	Residential	GS<50	GS>50	Large User	St Lt	USL	
2006 Board Approved	41,215	5,025	626	2	12,091	495	59,454
2003 Actual	39,847	4,977	637	1	11,645	485	57,592
2004 Actual	41,215	5,025	626	1	12,091	495	59,453
2005 Actual	42,322	5,098	619	1	12,378	486	60,904
2006 Actual	43,013	5,140	624	1	12,575	574	61,927
2007 Actual	43,750	5,162	630	1	12,740	533	62,816
2008 Actual	44,593	5,205	664	1	12,777	534	63,774
2009 Actual	45,113	5,300	661	1	12,919	534	64,528
2010 Normalized Bridge	45,513	5,356	665	1	13,144	543	65,222
2011 Normalized Test	45,913	5,412	669	1	13,374	551	65,921

Please note that included in the 2006 Board Approved # were 2 Large Users. One Large User moved to the GS>50kW Class in September 2009, all of this customer's consumption has been restated for 2003 Actual to 2011 Normalized Test and is reflected in the GS>50 Class statistics

Table 3-5
Annual Usage per Customers / Connections by Rate Class

Energy Usage per Customer/Connection (kWh per Customer/Connection)						
Year	Residential	GS<50	GS>50	Large User	St Lt	USL
2006 Board Approved	9,643	37,460	880,243	47,947,949	572	6,573
2003 Actual	9,566	35,912	912,299	65,433,586	588	6,605
2004 Actual	9,343	36,150	969,014	66,067,057	556	6,510
2005 Actual	9,642	36,755	1,014,076	70,553,960	592	6,555
2006 Actual	9,112	36,826	1,058,217	73,668,918	583	5,464
2007 Actual	9,259	37,204	1,083,787	77,115,461	577	5,203
2008 Actual	9,094	35,549	1,044,601	76,733,608	591	3,328
2009 Actual	8,802	33,923	1,054,653	76,507,951	584	3,645
2010 Normalized Bridge	8,681	33,603	1,080,451	78,527,942	583	3,301
2011 Normalized Test	8,562	33,285	1,106,880	80,601,265	583	2,990

Annual Growth Rate in Usage per Customer/Connection						
Year	Residential	GS<50	GS>50	Large User	St Lt	USL
2006 Actual vs. 2006 Board Approved	-5.5%	-1.7%	20.2%	53.6%	1.9%	-16.9%
2003 Actual						
2004 Actual	-2.3%	0.7%	6.2%	1.0%	-5.4%	-1.4%
2005 Actual	3.2%	1.7%	4.7%	6.8%	6.4%	0.7%
2006 Actual	-5.5%	0.2%	4.4%	4.4%	-1.4%	-16.6%
2007 Actual	1.6%	1.0%	2.4%	4.7%	-1.0%	-4.8%
2008 Actual	-1.8%	-4.4%	-3.6%	-0.5%	2.3%	-36.0%
2009 Actual	-3.2%	-4.6%	1.0%	-0.3%	-1.2%	9.5%
2010 Normalized Bridge	-1.4%	-0.9%	2.4%	2.6%	-0.1%	-9.4%
2011 Normalized Test	-1.4%	-0.9%	2.4%	2.6%	-0.1%	-9.4%

Please note that included in the 2006 Board Approved # were 2 Large Users. One Large User moved to the GS>50kW Class in September 2009, all of this customer's consumption has been restated for 2003 Actual to 2011 Normalized Test and is reflected in the GS>50 Class statistics

LOAD FORECAST AND METHODOLOGY

WNH's weather normalized load forecast is developed in a three-step process. First, a total system weather normalized purchased energy forecast is developed based on a multifactor regression model that incorporates historical load, weather, and economic data. Second, the weather normalized purchased energy forecast is adjusted by a historical loss factor to produce a weather normalized billed energy forecast. Finally, the forecast of billed energy by rate class is developed based on a forecast of customer numbers and historical usage patterns per customer. For the rate classes that have weather sensitive load, their forecasted billed energy is adjusted to ensure that the total billed energy forecast by rate class is equivalent to the total weather normalized billed energy forecast that has been determined from the regression model. The forecast of customers by rate class is determined using a geometric mean analysis, except for the residential class in which the geometric mean is not a reasonable predictor for the future, as customer number growth has declined in recent years and will continue to do so in the future as discussed below. For those rate classes that use kW for the distribution volumetric billing determinant, a trend analysis was determined to be the most reasonable predictor of future kW. The following will explain the forecasting process in more detail.

Purchased kWh Load Forecast

An equation to predict total system purchased energy is developed using a multifactor regression model with the following independent variables: weather (heating and cooling degree days), economic output (GDP growth), total customer numbers and calendar variables (days in month, seasonal). The regression model uses monthly kWh and monthly values of independent variables from January 1996 to December 2009 to determine the monthly regression coefficients.

Data for WNH's total system load is available as far back as January 1996. This provides a reasonable data set for use in a multiple regression analysis. Based on the recent global activity surrounding climate change, historical weather data is showing that there is a warming of the global climate system. In this regard, it is WNH's view that it is appropriate to review the impact of weather since 1996 on the energy usage, and then determine the average weather conditions from January 1996 to December 2009, which would be applied in the forecasting process to determine a weather normalized forecast.

1 WNH notes that Purchases from the IESO were adjusted by Long-Term Load Transfers,
2 Embedded Generation and the correction of a Hydro One Networks Inc. (HONI) billing error in
3 which incorrect meters were being attributed to, and purchases were being charged to WNH, by
4 the IESO. The error covered the period February 2001 through April 2006 and totalled
5 29,439,703 kWh. The error was discovered in 2006 and purchases commencing May 1, 2006
6 were free of this error.

7
8 However, in accordance with the filing requirement WNH has also provided a comparison of the
9 14 year average of heating and cooling days used in this application, with a 7, 10 and 20 year
10 trend of data in Table 3-6. As is demonstrated in this table and Table 3-6A, WNH's use of a 14
11 year average is a reasonable assumption. WNH has provided the load forecasts based on a
12 10-year and 20-year trend HDD and CDD in Table 3-6A.

13
14 The multifactor regression model has determined that the drivers of year-over-year changes in
15 WNH's load growth are economic growth, weather and "calendar" factors. These factors are
16 captured within the multifactor regression model.

17
18 Economic growth – which encompasses trends in the WNH service area, as well as general
19 economic conditions, are captured in the model using an index of economic output, Ontario
20 Real Gross Domestic Product ("GDP") and historical customer numbers.

21
22 Weather impacts on load are apparent in both the winter heating season, and in the summer
23 cooling season. For that reason, both Heating Degree Days (i.e. a measure of coldness in
24 winter) and Cooling Degree Days (i.e. a measure of summer heat) are modeled.

25
26 The third main factor determining energy use in the monthly model can be classified as
27 "calendar" factors. For example, the number of days in a particular month will impact energy
28 use. The modeling of purchased energy uses number of days in the month and a "flag" variable
29 to capture the typically lower usage in the spring and fall months.

30
31
32
33
34

Table 3-6
Comparison of Weather Data

Summary of All Cooling Degree Days												
Month	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
January	-	-	-	-	-	-	-	-	-	-	-	-
February	-	-	-	-	-	-	-	-	-	-	-	-
March	-	-	-	-	-	-	-	-	-	-	-	-
April	11.30	1.30	-	-	-	-	-	-	-	-	-	-
May	0.60	54.90	2.50	1.50	6.90	1.70	10.00	-	16.80	10.50	18.70	7.70
June	29.10	56.50	12.70	21.90	61.60	70.80	38.60	50.40	63.70	76.50	35.40	62.40
July	57.30	72.70	13.60	81.10	77.70	105.90	41.90	59.80	64.80	138.90	44.80	65.70
August	44.40	65.30	19.90	79.90	27.30	101.90	55.20	21.90	83.10	30.90	46.30	94.20
September	10.10	19.50	16.40	9.50	7.50	10.80	12.60	5.40	26.00	27.70	23.80	19.20
October	2.20	0.10	-	1.40	-	-	-	1.60	-	-	-	-
November	-	-	-	-	-	-	-	-	-	-	-	-
December	-	-	-	-	-	-	-	-	-	-	-	-
Total	155.00	270.30	65.10	195.30	181.00	291.10	158.30	139.10	254.40	284.50	169.00	249.20

Summary of All Heating Degree Days												
Month	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
January	625.80	776.00	704.10	704.00	968.60	667.50	789.40	777.90	652.80	789.60	773.00	715.00
February	633.70	602.00	665.80	766.70	774.20	735.30	712.60	615.00	547.10	578.40	643.80	620.20
March	543.60	531.00	604.30	659.30	619.90	523.70	670.40	619.10	505.10	592.50	446.90	618.70
April	318.90	297.30	393.80	362.40	343.80	434.40	421.90	391.90	312.00	332.60	358.30	324.60
May	220.90	115.30	181.60	199.50	226.70	171.90	216.10	289.00	77.10	126.70	152.40	140.30
June	53.20	25.70	92.30	60.10	38.40	25.90	29.40	30.40	66.70	44.40	41.10	47.00
July	12.20	9.30	44.70	3.70	6.30	17.30	18.90	22.10	6.90	3.20	18.60	22.30
August	18.90	10.30	59.60	15.20	39.20	4.30	6.20	49.40	12.10	28.80	29.70	2.30
September	128.70	149.90	134.80	177.30	105.40	143.60	102.20	115.20	63.00	88.90	134.00	118.80
October	303.50	267.20	352.30	345.50	263.70	245.50	301.40	288.90	257.60	319.00	251.60	276.70
November	425.10	500.80	480.50	479.70	405.30	539.20	548.10	471.40	440.10	405.10	470.90	370.80
December	622.20	656.50	639.50	681.80	591.10	741.30	596.50	630.70	572.10	623.70	826.50	563.30
Total	3,906.70	3,941.30	4,353.30	4,455.20	4,382.60	4,249.90	4,413.10	4,301.00	3,512.60	3,932.90	4,146.80	3,820.00

Summary of All Cooling Degree Days

Month	2002	2003	2004	2005	2006	2007	2008	2009	Model (14 Yr Avg)	7 Year Avg	10 Year Avg	20 Year Trend
January	-	-	-	-	-	-	-	0.00	0.00	0.00	0.00	0.00
February	-	-	-	-	-	-	-	0.00	0.00	0.00	0.00	0.00
March	-	-	-	-	-	-	-	0.00	0.00	0.00	0.00	0.00
April	6.60	0.70	-	-	-	-	-	3.20	0.75	0.56	1.05	-0.04
May	5.30	-	6.70	-	17.70	11.20	0.70	2.30	7.69	5.51	7.03	3.24
June	54.50	25.50	16.30	104.80	32.20	51.20	53.00	26.20	49.34	44.17	46.15	51.19
July	129.00	50.10	49.30	105.40	117.20	53.80	75.80	14.50	72.21	66.59	70.56	74.59
August	72.30	72.40	30.60	67.90	45.50	65.10	29.50	57.30	55.16	52.61	58.11	56.35
September	47.00	6.00	13.70	13.70	2.30	28.00	12.00	5.50	17.35	11.60	17.12	16.68
October	1.00	-	-	2.60	-	10.90	-	0.00	1.15	1.93	1.45	2.09
November	-	-	-	-	-	-	-	0.00	0.00	0.00	0.00	0.00
December	-	-	-	-	-	-	-	0.00	0.00	0.00	0.00	0.00
Total	315.70	154.70	116.60	294.40	214.90	220.20	171.00	109.00				

Summary of All Heating Degree Days

Month	2002	2003	2004	2005	2006	2007	2008	2009	Model (14 Yr Avg)	7 Year Avg	10 Year Avg	20 Year Trend
January	625.70	868.40	879.20	814.70	590.60	698.30	676.80	891.80	753.09	774.26	753.35	766.59
February	592.00	755.90	699.20	683.50	651.20	785.10	651.20	649.60	656.06	696.53	673.17	673.11
March	581.20	638.70	540.90	680.50	562.40	582.00	686.10	562.60	591.94	607.60	590.00	605.81
April	356.20	397.40	354.10	354.60	322.50	403.00	297.90	341.50	354.89	353.00	351.01	348.77
May	266.80	217.00	196.20	244.90	177.80	166.40	243.10	192.80	193.33	205.46	199.77	205.46
June	53.10	65.30	92.50	27.30	44.10	35.50	40.60	75.70	49.51	54.43	52.22	52.90
July	4.70	12.50	21.30	6.80	6.50	28.00	7.60	37.60	15.50	17.19	16.59	17.35
August	11.00	18.90	55.00	11.90	27.50	19.70	36.20	18.20	23.35	26.77	23.04	23.83
September	50.20	104.10	71.30	63.40	130.30	74.70	93.20	88.80	92.72	89.40	92.88	68.44
October	349.30	331.90	287.50	259.90	335.10	184.70	325.70	329.10	292.74	293.41	293.15	290.98
November	486.40	434.40	432.90	433.10	415.90	511.80	499.70	396.50	451.22	446.33	445.24	436.32
December	675.60	610.00	700.10	721.60	545.20	686.60	694.00	669.50	651.10	661.00	669.24	669.92
Total	4,052.20	4,454.50	4,330.20	4,302.20	3,809.10	4,175.80	4,252.10	4,253.70				

Table 3-6
Comparison of Predicted Purchases

	2011 kWh Predicted Purchases (before CDM Adjustment)		
	14 year	10 Year	20 Year
2011 kWh Predicted Purchases before CDM Adjustment	1,463,438,206	1,464,016,910	1,464,486,184
\$ Variance between 14 Years Used in Application and 10 / 20 Years		578,704	1,047,978
% Variance between 14 Years Used in Application and 10 / 20 Years		0.04%	0.07%

The following historical monthly data were used as inputs in the regression model:

- Monthly total system purchased energy data from January 1996 to December 2009;
- Weather data: heating degree-days (HDD) and cooling degree-days (CDD) (WNH uses the degree-days count for the Region of Waterloo International Airport data point as published by Environment Canada);
- Real gross domestic product (GDP) for Ontario (1988 to 2006: 2003 and 2008 Ontario Economic Outlook and Fiscal Review, Ontario Ministry of Finance, 2007 to 2011: 2010 Ontario Budget March 25, 2010, Ontario Ministry of Finance);
- Customer numbers in the month;
- Number of days in the month;
- Number of peak hours (16* number of business days in any given month, excluding weekends and holidays)
- Spring fall flag (1 for Spring and Fall, and 0 for Summer and Winter)

The prediction formula has the following statistical results in Table 3-7, which indicates the formula has a very good fit to the actual data set.

Table 3-7
Statistical Results

Statistic	Value
R Square	95.9%
Adjusted R Square	95.8%
F Test	540.4
T-stats by Coefficient	
Intercept	(10.7)
Heating Degree Days	23.2
Cooling Degree Days	14.2
Ontario Real GDP Monthly %	2.8
Number of Days in Month	7.5
Spring Fall Flag	(3.9)
Number of Customers	8.6
Number of Peak Hours	4.3

The monthly data used in the regression model and the resulting monthly prediction for the actual and forecasted years are provided in Appendix A.

The annual results of the above prediction formula compared to the actual annual purchases from 1996 to 2009 are shown in Chart 3-1 below.

Chart 3-1
Actual vs. Predicted Purchases (GWh)

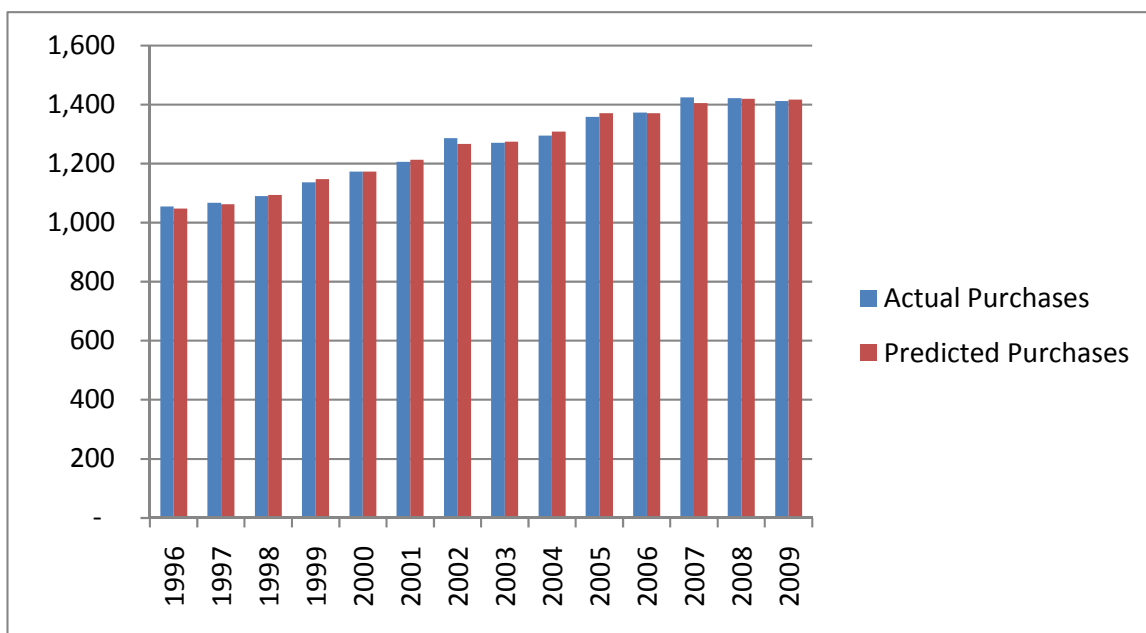


Table 3-8 outlines the data that supports the above chart. In addition, the predicted total system purchases for WNH are provided for the years 2010 and 2011. For, 2010 and 2011, the system purchases reflect a weather normalized forecast for the full year.

Table 3-8
Actual vs. Predicted Purchases (GWh)

Year	Actual Total Purchased (GWh)	Predicted Purchases (GWh)	% Difference
1996	1,055	1,047	-0.7%
1997	1,067	1,062	-0.5%
1998	1,090	1,094	0.4%
1999	1,137	1,147	0.9%
2000	1,174	1,172	-0.1%
2001	1,206	1,213	0.6%
2002	1,286	1,266	-1.6%
2003	1,270	1,274	0.3%
2004	1,294	1,308	1.0%
2005	1,359	1,371	0.9%
2006	1,373	1,371	-0.1%
2007	1,424	1,405	-1.3%
2008	1,421	1,419	-0.2%
2009	1,412	1,417	0.4%
2010 Weather Normal		1,445	
2011 Weather Normal - 14 year average		1,463	

The weather normalized amount for 2011 is determined by using 2011 dependent variables in the prediction formula on a monthly basis, along with the average monthly heating degree days and cooling degree days which has occurred from January 1996 to December 2009 (i.e. 14 years).

Billed kWh Load Forecast

To determine the total weather normalized energy billed forecast, the total system weather normalized purchases forecast is adjusted by a historical loss factor. WNH has applied the loss factor applied for in this application, 1.0404 as detailed in Exhibit 8, Tables 8-10 and 8-11.

With this average loss factor the total weather normalized billed energy will be 1,379.9 (GWh) for 2010 (i.e. 1,435.7/1.0404) and 1,373.7 (GWh) for 2011 (i.e. 1,429.2/1.0404).

Billed kWh Load Forecast and Customer/Connection Forecast by Rate Class

Since the total weather normalized billed energy amount is known, this amount needs to be distributed by rate class for rate design purposes taking into consideration the customer/connection forecast and expected usage per customer by rate class.

The next step in the forecasting process is to determine a customer/connection forecast. The customer/connection forecast is based on reviewing historical customer/connection data that is available as shown in Table 3-9.

Table 3-9
Historical Customer / Connection Data

Year	Residential	GS<50	GS>50	Large User	St Lt	USL	Total
2003	39,847	4,977	637	1	11,645	485	57,592
2004	41,215	5,025	626	1	12,091	495	59,453
2005	42,322	5,098	619	1	12,378	486	60,904
2006	43,013	5,140	624	1	12,575	574	61,927
2007	43,750	5,162	630	1	12,740	533	62,816
2008	44,593	5,205	664	1	12,777	534	63,774
2009	45,113	5,300	661	1	12,919	534	64,528

From the historical customer/connection data the growth rate in customer/connection can be evaluated which is provided in Table 3-10. The geometric mean growth rate in number of customers is also provided. The geometric mean approach provides the average growth rate on a compounding basis.

Table 3-10
Growth Rate in Customers / Connections

Year	Residential	GS<50	GS>50	Large User	St Lt	USL
2003						
2004	3.4%	1.0%	-1.7%	0.0%	3.8%	2.1%
2005	2.7%	1.5%	-1.1%	0.0%	2.4%	-1.8%
2006	1.6%	0.8%	0.8%	0.0%	1.6%	18.1%
2007	1.7%	0.4%	1.0%	0.0%	1.3%	-7.1%
2008	1.9%	0.8%	5.4%	0.0%	0.3%	0.2%
2009	1.2%	1.8%	-0.5%	0.0%	1.1%	0.0%
Geometric Mean	2.1%	1.1%	0.6%	0.0%	1.7%	1.6%

The resulting geometric mean is applied to the 2009 customer/connection numbers to determine the forecast of customer/connections in 2010 and 2011. Table 3-11 outlines the forecast of customers by rate class for 2010 and 2011 before and after a residential customer adjustment.

Residential Customer Adjustment

WNH has adjusted the Residential Customers to an increase of only 400 customers in each of 2010 and 2011, thus, arriving at the figures of 45,513 and 45,913 respectively. This is a decrease from the geometric mean of 46,056 and 47,019 in 2010 and 2011 respectively. This adjustment has been made to reflect the decrease in development in WNH's service area due to the economic slowdown, the lack of available building lots in the City of Waterloo and the development restrictions on the west side of the City of Waterloo.

Table 3-11
Customer / Connection Forecast

Year	Residential	GS<50	GS>50	Large User	St Lt	USL	Total
2010 Normalized Bridge ²	46,056	5,356	665	1	13,144	543	65,765
2011 Normalized Test ²	47,019	5,412	669	1	13,374	551	67,026

² Prior to Residential Customer Adjustment

Customer / Connection Forecast - After Residential Customer Adjustment

Year	Residential	GS<50	GS>50	Large User	St Lt	USL	Total
2010 Normalized Bridge ³	45,513	5,356	665	1	13,144	543	65,222
2011 Normalized Test ³	45,913	5,412	669	1	13,374	551	65,921

³ After Residential Customer Adjustment

The next step in the process is to review the historical customer/connection usage and to reflect this usage per customer in the forecast. Table 3-12 provides the average annual usage per customer by rate class from 2003 to 2009.

Table 3-12
Historical Annual Usage per Customer

Annual kWh Usage per Customer / Connection						
Year	Residential	GS<50	GS>50	Large User	St Lt	USL
2003	9,566	35,912	912,299	65,433,586	588	6,605
2004	9,343	36,150	969,014	66,067,057	556	6,510
2005	9,642	36,755	1,014,076	70,553,960	592	6,555
2006	9,112	36,826	1,058,217	73,668,918	583	5,464
2007	9,259	37,204	1,083,787	77,115,461	577	5,203
2008	9,094	35,549	1,044,601	76,733,608	591	3,328
2009	8,802	33,923	1,054,653	76,507,951	584	3,645

As can be seen from Table 3-12 above, usage per customer/connection declines in the Residential class after 2005 (with a slight increase in 2007, however, decreases again thereafter). It is WNH's view, that this decline is partially due to the CDM programs initiated in 2005.

From the historical usage per customer/connection data the growth rate in usage per customer/connection can be reviewed which is provided in Table 3-13. The geometric mean growth rate has also been shown.

Table 3-13
Growth Rate in Usage per Customer / Connection

Year	Residential	GS<50	GS>50	Large User	St Lt	USL
2003						
2004	-2.3%	0.7%	6.2%	1.0%	-5.4%	-1.4%
2005	3.2%	1.7%	4.7%	6.8%	6.4%	0.7%
2006	-5.5%	0.2%	4.4%	4.4%	-1.4%	-16.6%
2007	1.6%	1.0%	2.4%	4.7%	-1.0%	-4.8%
2008	-1.8%	-4.4%	-3.6%	-0.5%	2.3%	-36.0%
2009	-3.2%	-4.6%	1.0%	-0.3%	-1.2%	9.5%
Geometric Mean	-1.4%	-0.9%	2.4%	2.6%	-0.1%	-9.4%

For the forecast of usage per customer/connection the historical geometric mean was adjusted by a Conservation and Demand Management Adjustment as described below. The resulting usage forecast is shown in Table 3-14.

Conservation and Demand Management Adjustment

WNH supports the Provincial Government's Conservation and Demand Management ("CDM") initiatives and from 2005 to 2007 delivered CDM programs funded through 3rd tranche revenue and is currently delivering CDM programs that are funded through the Ontario Power Authority ("OPA"). The impact of these historical programs on the load in future years is incorporated in the load forecast presented in this Exhibit, through the modeling process.

On March 31, 2010, the Minister of Energy and Infrastructure issued a Directive to the Ontario Energy Board (the "Board") to establish electricity conservation and demand management targets for each local distribution company ("LDC"). These targets must total 1,330 MW of provincial peak demand and 6,000 GWh of reduced electricity consumption over a four year period starting in 2011. The OEB (EB-2010-0216) issued proposed CDM Targets for each distributor on June 22, 2010 and WNH has been given a proposed CDM Target reduction of 68 GWh.

In this application WNH has reflected a decrease of 17 GWh in 2011 of its CDM Target. The decrease was calculated as follows: WNH annualized the Target (68 GWh total divided by 4 years). WNH will be further refining its strategy which will be filed with the OEB in the proposed November 1, 2010 Strategy Document Filing (EB-2010-0216) and will update this application if there are any material changes. WNH has attached its proposed CDM Targets as Appendix B. WNH will adjust its savings if the final OEB CDM Targets are different than the currently proposed targets.

WNH has also adjusted its kW and kWh in 2010 and 2011 in the amount of the OPA achieved reductions based on its 2006 – 2009 OPA program activities. OPA has determined that WNH's Annual kWh savings are 9,160,344 and 8,095,238 for 2010 and 2011 respectively. This adjustment takes into account Preliminary 2009 OPA Program activities' results released by the OPA. WNH has attached the applicable excerpt of its 2006 – 2009 OPA Conservation Results as Appendix B.

The CDM adjustments have not been assigned to a specific rate class; it has been applied on a prorated basis by class energy and demand. Table 3-13A details the application of the CDM Adjustment.

**Table 3-13A
CDM Adjustment**

CDM Adjustment	2010 Weather Normal	2011 Weather Normal
Predicted kWh Purchases prior to CDM Adjustment	1,444,835,419	1,463,438,206
OPA kWh Savings 2010	(9,160,344)	(9,160,344)
OPA kWh Savings 2011		(8,095,238)
CDM kWh Target Savings 2011		(17,000,000)
Predicted kWh Purchases after CDM Adjustment	1,435,675,075	1,429,182,624
Purchases kWh Divide by Loss Factor 1.0404	1.0404	1.0404
kWh to Allocate to Rate Classes	1,379,926,062	1,373,685,721

Table 3-14
Forecast Annual kWh Usage per Customer / Connection

Year	Residential	GS<50	GS>50	Large User	St Lt	USL
2010 Non-Normalized Bridge ⁴	8,681	33,603	1,080,451	78,527,942	583	3,301
2011 Non-Normalized Test ⁴	8,562	33,285	1,106,880	80,601,265	583	2,990

⁴ After CDM Adjustment

With the preceding information, the non-normalized weather billed energy forecast can be determined by applying the forecast number of customer/connection from Table 3-11 (after Residential Customer Adjustment) by the forecast of annual non-normalized usage per customer/connection from Table 3-14. The resulting non-normalized weather billed energy forecast is shown in Table 3-15.

Table 3-15
Non-Normalized Weather Billed Energy Forecast (GWh)

Year	Residential	GS<50	GS>50	Large User	St Lt	USL	Total
2010 Not Normalized Bridge ⁵	395.1	180.0	718.6	78.5	7.7	1.8	1,381.7
2011 Not Normalized Test ⁵	393.1	180.1	740.7	80.6	7.8	1.6	1,404.0

⁵ After Residential Customer and CDM Adjustment

The non-normalized weather billed energy forecast has been determined, after the Residential Customer and CDM Adjustments, however, this needs to be adjusted in order to be aligned with the total weather normalized billed energy forecast.

The difference between non-normalized and normalized forecast is assumed to be the amount related to moving the forecast to a weather normal basis. This difference will be assigned to those rate classes that are weather sensitive. WNH used the weather normalization work completed by Hydro One for WNH for its 2007 Cost Allocation Study as a starting point and has shown its weather sensitivity by rate classes in Table 3-16. WNH has reviewed 2010 applications and has noted the concern of Intervenor that the Residential and GS <50kW Classes are not 100% weather sensitive. WNH has, thus, applied a weather sensitivity factor of 76.2%, which is the mid-point between the 100% HONI reported for these two classes and the GS>50kW sensitivity factor of 52.4% (which was the percentage prior to subsequently transferring a large user to this rate class).

Table 3-16
Weather Sensitivity by Rate Class

Weather Sensitivity for 2011 Application					
Residential	GS<50	GS>50 ⁶	Large User ⁶	St Lt	USL
76.2%	76.2%	49.9%	69.3%	0.0%	0.0%

⁶ Weather Sensitivity adjusted to reflect transfer of one Large Use customer to GS>50kW in 2009

As a result, the difference of (1.7) GWh in 2010 and (30.3) GWh in 2011 has been assigned on a prorated basis to each rate classes based on the above level of weather sensitivity. Table 3-17 outlines how the weather sensitive rate classes have been adjusted to align the non-normalized forecast with the normalized forecast. WNH notes that the nature of the business of the Large Use customer is weather sensitive, which has been reflected in the above weather sensitivity factor.

Table 3-17
Alignment of Non-Normal to Weather Normal Forecast

Non-Normalized Weather Billed Energy Forecast (GWh)							
Year	Residential	GS<50	GS>50	Large User	St Lt	USL	Total
2010 Not Normalized Bridge ⁵	395.1	180.0	718.6	78.5	7.7	1.8	1,381.7
2011 Not Normalized Test ⁵	393.1	180.1	740.7	80.6	7.8	1.6	1,404.0

Adjustment for Weather (GWh)							
Year	Residential	GS<50	GS>50	Large User	St Lt	USL	Total
2010 Normalized Bridge ⁵	- 0.6	- 0.3	- 0.7	- 0.1	-	-	1.7
2011 Normalized Test ⁵	- 10.5	- 4.8	- 13.0	- 2.0	-	-	30.3

Weather Normalized Billed Energy Forecast (GWh)							
Year	Residential	GS<50	GS>50	Large User	St Lt	USL	Total
2010 Normalized Bridge ⁵	394.5	179.7	717.9	78.4	7.7	1.8	1,379.9
2011 Normalized Test ⁵	382.6	175.3	727.7	78.6	7.8	1.6	1,373.7

⁵ After Residential Customer and CDM Adjustment

Billed kW Load Forecast

There are three rate classes that charge volumetric distribution on per a kW basis. These include General Service > 50kW, Large User and Street Lighting. As a result, the energy forecast for these classes needs to be converted to a kW basis for rate setting purposes. The forecast of kW for these classes is based on a trend analysis of the historical ratio of kW to kWhs and applying this ratio to the forecasted kWh to produce the required kW. WNH notes that as the CDM Adjustment was applied to kWh, and kWh is being converted to kW, the kW, thus, already reflects the CDM Adjustment, and WNH has not applied any additional CDM adjustments to its forecasted kW.

Table 3-18 outlines the annual demand units by applicable rate class.

Table 3-18
Historical Annual kW per Rate Class

Historical Annual kW per Rate Class				
Year	GS>50	Large User	St Lt	Total
2003	1,578,391	120,391	19,111	1,717,893
2004	1,578,377	136,143	19,526	1,734,046
2005	1,609,887	138,634	20,183	1,768,704
2006	1,625,474	144,512	20,478	1,790,464
2007	1,650,921	147,258	20,688	1,818,866
2008	1,665,645	145,766	20,906	1,832,318
2009	1,682,115	144,355	21,063	1,847,534

Table 3-19 outlines the historical ratio of kW/kWh as well as the trend analysis.

Table 3-19
Historical kW / kWh Ratio by Rate Class

Year	Ratio of kW to kWh		
	GS>50	Large User	St Lt
2003	0.2716%	0.1840%	0.2792%
2004	0.2602%	0.2061%	0.2903%
2005	0.2565%	0.1965%	0.2756%
2006	0.2462%	0.1962%	0.2792%
2007	0.2418%	0.1910%	0.2812%
2008	0.2401%	0.1900%	0.2770%
2009	0.2413%	0.1887%	0.2792%
2010 Trend Analysis	0.2303%	0.1898%	0.2773%
2010 Trend Analysis	0.2251%	0.1890%	0.2765%

WNH first applied the average ratio methodology to the weather normalized billed energy forecast in Table 3-17 to provide a forecast of kW by rate class, however, the average was not a reasonable predictor of future kW. WNH then performed trend analysis and determined that its results were reasonable and thus, has adopted this methodology. WNH notes that trend analysis was raised in the October 26, 2009, EB-2009-0267 Kitchener-Wilmot Hydro Inc. – 2010 Cost of Service Application Interrogatories of Energy Probe, Interrogatory # 14. Table 3-20 outlines the forecast of kW for the applicable rate classes.

Table 3-20
kW Forecast by Rate Class

Year	Predicted Billed kW			
	GS>50	Large User	St Lt	Total
2010 Normalized Bridge	1,653,058	148,840	21,257	1,823,155
2011 Normalized Test	1,637,891	148,593	21,547	1,808,031

Table 3-21 provides a summary of the billing determinants by rate class that has been used to develop the proposed rates.

**Table 3-21
Summary of Forecast**

	2006 Board Approved	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Weather Normal Bridge	2011 Weather Normal Test
ACTUAL AND PREDICTED KWH PURCHASES							
Actual kWh Purchases		1,376,670,068	1,425,989,175	1,423,307,327	1,413,835,312		
Predicted kWh Purchases		1,370,624,789	1,404,917,327	1,418,931,095	1,417,239,702	1,435,675,075	1,429,182,624
% Difference between Actual and Predicted Purchases		-0.4%	-1.5%	-0.3%	0.2%		
BILLING DETERMINANTS BY CLASS							
Residential							
Customers	41,215	43,013	43,750	44,593	45,113	45,513	45,913
kWh	397,420,107	391,947,395	405,071,612	405,533,476	397,106,489	394,497,567	382,563,062
GS < 50kW							
Customers	5,025	5,140	5,162	5,205	5,300	5,356	5,412
kWh	188,237,948	189,284,333	192,047,825	185,031,934	179,794,279	179,691,688	175,321,434
GS > 50kW							
Customers	626	624	630	664	661	665	669
kWh	551,032,408	660,327,538	682,785,512	693,615,296	697,125,703	717,861,720	727,723,747
kW	1,518,361	1,625,474	1,650,921	1,665,645	1,682,115	1,653,058	1,637,891
Large User ⁸							
Customers	2	1	1	1	1	1	1
kWh	95,895,898	73,668,918	77,115,461	76,733,608	76,507,951	78,416,825	78,636,807
kW	196,235	144,512	147,258	145,766	144,355	148,840	148,593
Street Lighting							
Connections	12,091	12,575	12,740	12,777	12,919	13,144	13,374
kWh	6,918,387	7,335,288	7,356,113	7,547,793	7,543,734	7,666,865	7,792,006
kW	19,681	20,478	20,688	20,906	21,063	21,257	21,547
Unmetered Scattered Load							
Connections	495	574	533	534	534	543	551
kWh	3,253,875	3,136,305	2,772,944	1,777,380	1,946,487	1,791,398	1,648,666
Total							
Customer / Connections	59,454	61,927	62,816	63,774	64,528	65,222	65,921
kWh	1,242,758,623	1,325,699,776	1,367,149,466	1,370,239,488	1,360,024,644	1,379,926,062	1,373,685,721
kW	1,734,277	1,790,464	1,818,866	1,832,318	1,847,534	1,823,155	1,808,031

⁸ Please note that included in the 2006 Board Approved # were 2 Large Users. One Large User moved to the GS>50kW Class in September 2009, all of this customer's consumption has been restated for 2003 Actual to 2011 Normalized Test and is reflected in the GS>50 Class statistics

2010 THROUGHPUT REVENUE

WNNH's Throughput Revenue for the 2010 Bridge Year has been calculated using its most recently approved rates and estimated number of customers (average for the year) and consumption (see details in Table 3-22). In particular, delivery rates are based on the EB-2009-0210 dated March 25, 2010. Note that there is a slight difference between the Throughput Revenue in Exhibit 6 – Calculation of Revenue Deficiency or Surplus – due to the fact that transformer allowance credits and low voltage charges are not included in Table 3-22.

2011 THROUGHPUT REVENUE

WNNH's throughput Revenue **at existing rates** for the 2011 Test Year has been calculated using its most recently approved rates and estimated number of customers (average for the year) and consumption (see details in Table 3-23). In particular, delivery rates are based on the EB-2009-0210 dated March 25, 2010. Note that there is a slight difference between the Throughput Revenue in Exhibit 6 – Calculation of Revenue Deficiency or Surplus – due to the fact that transformer allowance credits and low voltage charges are not included in Table 3-23.

WNNH's Throughput Revenue **at proposed rates** for the 2011 Test Year has been calculated using its proposed rates and estimated number of customers (average for the year) and consumption (see details in Table 3-24). In particular, delivery rates are based on Exhibit 8 – Rate Design. Note that there is a slight difference between the Throughput Revenue in Exhibit 6 – Calculation of Revenue Deficiency or Surplus – due to the fact that transformer allowance credits and low voltage charges are not included in Table 3-24.

Table 3-22
2010 Throughput Revenue at Existing 2010 Rates

Class	Fixed Rate	Variable Rate	Number of Customers (Avg)	kWh / kW Sales	Fixed Charge	Variable Charge	Throughput Revenue
Residential	\$ 14.56	\$ 0.0131	45,313	394,497,567	\$ 7,917,087	\$ 5,167,918	\$ 13,085,005
GS<50	\$ 30.63	\$ 0.0104	5,328	179,691,688	\$ 1,958,329	\$ 1,868,794	\$ 3,827,123
GS>50	\$ 187.01	\$ 3.5420	663	1,653,058	\$ 1,487,949	\$ 5,855,130	\$ 7,343,079
Large User	\$ 6,686.47	\$ 2.6959	1	148,840	\$ 80,238	\$ 401,258	\$ 481,496
Street Lighting	\$ 0.33	\$ 6.7448	13,032	21,257	\$ 51,606	\$ 143,377	\$ 194,982
Unmetered Scattered Load	\$ 15.31	\$ 0.0103	538	1,791,398	\$ 98,900	\$ 18,451	\$ 117,351
Total 2010 Throughput Revenue					\$ 11,594,109	\$ 13,454,928	\$ 25,049,037

Table 3-23
2011 Throughput Revenue at Existing 2010 Rates

Class	Fixed Rate	Variable Rate	Number of Customers (Avg)	kWh / kW Sales	Fixed Charge	Variable Charge	Throughput Revenue
Residential	\$ 14.56	\$ 0.0131	45,713	382,563,062	\$ 7,986,975	\$ 5,011,576	\$ 12,998,551
GS<50	\$ 30.63	\$ 0.0104	5,384	175,321,434	\$ 1,978,961	\$ 1,823,343	\$ 3,802,303
GS>50	\$ 187.01	\$ 3.5420	667	1,566,291	\$ 1,496,027	\$ 5,547,804	\$ 7,043,831
Large User	\$ 6,686.47	\$ 2.6959	1	148,593	\$ 80,238	\$ 400,591	\$ 480,829
Street Lighting	\$ 0.33	\$ 6.7448	13,259	21,547	\$ 52,506	\$ 145,327	\$ 197,834
Unmetered Scattered Load	\$ 15.31	\$ 0.0103	547	1,648,666	\$ 100,499	\$ 16,981	\$ 117,480
Embedded Distributor	\$ -	\$ -	1	71,600			
Total 2011 Throughput Revenue					\$ 11,695,206	\$ 12,945,622	\$ 24,640,829

Table 3-24
2011 Throughput Revenue at Proposed 2011 Rates

Class	Fixed Rate	Variable Rate	Number of Customers	kWh / kW Sales	Fixed Charge	Variable Charge	Throughput Revenue
Residential	\$ 14.56	\$ 0.0202	45,713	382,563,062	\$ 7,986,975	\$ 7,713,206	\$ 15,700,181
GS<50	\$ 30.63	\$ 0.0148	5,384	175,321,434	\$ 1,978,961	\$ 2,603,247	\$ 4,582,208
GS>50	\$ 187.01	\$ 4.4043	667	1,566,291	\$ 1,496,027	\$ 6,898,407	\$ 8,394,434
Large User	\$ 6,686.47	\$ 3.3752	1	148,593	\$ 80,238	\$ 501,526	\$ 581,764
Street Lighting	\$ 0.33	\$ 9.6165	13,259	21,547	\$ 52,506	\$ 207,203	\$ 259,710
Unmetered Scattered Load	\$ 15.31	\$ 0.0204	547	1,648,666	\$ 100,499	\$ 33,627	\$ 134,126
Embedded Distributor	\$ -	\$ 0.0118	1	71,600	\$ -	\$ 846	\$ 846
Total 2011 Throughput Revenue					\$ 11,695,206	\$ 17,958,062	\$ 29,653,269

EMBEDDED DISTRIBUTOR

WNH became a Host Distributor on May 1, 2006 and Hydro One Networks Inc. (HONI) became embedded to WNH at the Elmira Transformer Station. Prior to this date, WNH was embedded to HONI at this metering point.

WNH has not previously applied for a distribution charge for the Embedded Distributor Class, nor has it charged any distribution charges to this customer. WNH did not incur any capital costs to become a Host Distributor. HONI owns the circuits that cross into WNH's service territory and resides on WNH's poles. WNH receives pole rental revenue from HONI. The only costs for this customer are to issue 1 bill per month and perform 1 meter read per month.

As required by the Board's minimum filing guidelines, WNH has modeled the Embedded Distributor in its Cost Allocation Model. WNH notes that the Cost Allocation Model has assigned \$846 in base revenue to this rate class as shown in Table 3-24.

TRANSFORMER OWNERSHIP ALLOWANCE

When customers maintain ownership of their own transformers, they are entitled to receive a credit equivalent to the cost of transformation. WNH currently gives a Transformer Ownership Allowance Credit at its Board Approved rate of \$0.60 per kW of demand per month to all its customers who own their transformers.

WNH is proposing to maintain the rate of \$0.60 per kW of demand to all its customers who own their transformers, except for those rate classes where the entire rate class owns its transformer. In cases where all customers in a rate class own their transformers, no transformation costs were allocated to this class in the Cost Allocation Model, thus, the proposed distribution rates reflect this absence of costs. As the distribution rates do not contain transformation costs, no Transformer Ownership Allowance would be paid.

The result of this change will mean that WNH's Large Use rate class will no longer receive the transformer ownership allowance, as the customer in this rate class owns its transformer, commencing May 1, 2011, as WNH moves its rates in line with the Cost Allocation study.

Estimated future volumes are calculated by using the 2009 kW associated with the transformer ownership for each class for the 2010 Bridge Year and 2011 Test Year.

The total Transformer Allowance for the 2011 Test Year will be a credit to customers of \$672,628, which is lower than the \$759,210 of 2006 Board Approved amount due to the fact that the Large User class will not longer receive the transformer allowance.

SSS ADMINISTRATIVE CHARGE

WNH proposes to maintain the current Board Approved SSS Administrative charge rate of \$0.25 per customer per month and estimates revenue of \$135,000 for 2010 and \$135,000 for the 2011 Test Year.

Table 3-25
Transformer Ownership Allowance

	2006 Actual			2007 Actual			2008 Actual			2009 Actual			2010 Bridge			2011 Test		
	kW	\$ / kW	\$	kW	\$ / kW	\$	kW	\$ / kW	\$	kW	\$ / kW	\$	kW	\$ / kW	\$	kW	\$ / kW	\$
Residential	799	(0.60)	(479)	741	(0.60)	(445)	1,067	(0.60)	(640)	797	(0.60)	(478)	797	(0.60)	(478)	797	(0.60)	(478)
GS <50	111,269	(0.60)	(66,761)	115,714	(0.60)	(69,428)	126,620	(0.60)	(75,972)	123,159	(0.60)	(73,895)	124,353	(0.60)	(74,612)	124,353	(0.60)	(74,612)
GS >50	1,008,769	(0.60)	(605,262)	1,030,667	(0.60)	(618,400)	1,033,381	(0.60)	(620,029)	997,153	(0.60)	(598,292)	995,897	(0.60)	(597,538)	995,897	(0.60)	(597,538)
Large User	144,513	(0.60)	(86,708)	147,068	(0.60)	(88,241)	132,890	(0.60)	(79,734)	173,272	(0.60)	(103,963)	173,333	(0.60)	(104,000)		(0.60)	-
Total	1,265,350		(759,210)	1,294,190		(776,514)	1,293,957		(776,374)	1,294,380		(776,628)	1,294,381		(776,628)	1,121,047		(672,628)

OTHER REVENUE:

Other Distribution Revenue includes Late Payment Charges, Specific Service Charges, Other Distribution Revenues and Other Income and Expenses. Table 3-26 provides the details of Other Revenue in the Board's format of Appendix 2-C.

Note that there is a \$39,847 difference between the Total Other Revenues in Table 3-26 and Exhibit 6 – Revenue Deficiency Determination Table 6-5 (\$) due to USoA account 4355-Gain on Disposition of Utility and Other Property, USoA account 4375 Non-Distribution Revenue and USoA 4080 SSS Administration Charges. WNH has detailed these differences in Table 3-26A.

Interest income on regulatory asset variance accounts is not included in the 2011 Test Year.

Table 3-26
Other Operating Revenue

USoA	Description	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Bridge	2011 Test ¹
4235	Specific Service Charges	140,903	386,267	279,258	301,799	244,155	245,845
4225	Late Payment Charges	187,406	186,505	168,746	180,266	180,000	180,000
4082	RSVA Retail	39,718	16,500	17,842	19,464	25,000	26,000
4084	RSVA STR	3,635	-	-	-	-	-
4210	Rent from Electric Property	227,711	239,066	241,571	242,420	243,719	243,819
4220	Other Electric Revenues	33,512	26,516	21,670	6,197	9,000	9,000
4355	Gain on Disposition of Utility and Other Property	17,415	41,927	37,654	16,430	65,000	22,000
4360	Loss on Disposition of Utility and Other Property	-	-	-	52,127	20,000	-
4375	Revenues from Non-Utility Operations	1,447,163	1,662,789	1,574,461	2,991,041	1,779,211	1,798,894
4380	Expenses of Non-Utility Operations	(1,400,201)	(1,507,676)	(1,379,202)	(2,813,266)	(1,586,211)	(1,604,598)
4390	Miscellaneous Non-Operating Income	69,063	66,282	95,807	95,073	70,000	85,720
4405	Interest and Dividend Income	679,571	752,797	576,138	125,131	88,770	88,770
Total		1,445,896	1,870,972	1,633,946	1,112,428	1,098,644	1,095,450
	Specific Service Charges	140,903	386,267	279,258	301,799	244,155	245,845
	Late Payment Charges	187,406	186,505	168,746	180,266	180,000	180,000
	Other Distribution Revenues	304,576	282,082	281,083	268,081	277,719	278,819
	Other Income and Expenses	813,011	1,016,119	904,858	362,282	396,770	390,786
Total		1,445,896	1,870,972	1,633,946	1,112,428	1,098,644	1,095,450

¹ See Actual Revenue Difference to Revenue Offsets on the following page

Table 3-26A
Other Operating Revenue

¹ USoA	2011 Actual Revenue Differs from Revenue Offset by		
	Revenue Above		1,095,450
4355	Above	22,000	
	Revenue Offset - 50% to be included	11,000	
	Difference		11,000
4375	Above	1,798,894	
	Revenue Offset (not include OPA incentives)	1,709,405	
	Difference		89,489
4405	Above	88,770	
	Revenue Offset (not include Regulatory Interest Income)	14,772	
	Difference		73,998
		174,487	(174,487)
4080	SSS Administration Revenue		135,000
Revenue Offset			1,055,963

VARIANCE ANALYSIS OF OTHER REVENUE:

Table 3-27
Summary of Other Revenue

	2006 Actual	2007 Actual	2007 Actual vs. 2006 Actual	2008 Actual	2008 Actual vs. 2007 Actual	2009 Actual	2009 Actual vs. 2008 Actual	2010 Bridge	2010 Bridge vs. 2009 Actual	2011 Test	2011 Test vs. 2010 Bridge
Other Revenue											
Specific Service Charges	140,903	386,267	174.1%	279,258	-27.7%	301,799	8.1%	244,155	-19.1%	245,845	0.7%
Late Payment Charges	187,406	186,505	-0.5%	168,746	-9.5%	180,266	6.8%	180,000	-0.1%	180,000	0.0%
Other Distribution Revenues	304,576	282,082	-7.4%	281,083	-0.4%	268,081	-4.6%	277,719	3.6%	278,819	0.4%
Other Income and Expenses	813,011	1,016,119	25.0%	904,858	-10.9%	362,282	-60.0%	396,770	9.5%	390,786	-1.5%
Total Other Revenue	1,445,896	1,870,972		1,633,946		1,112,428		1,098,644		1,095,450	

WNH has provided variance analysis in the categories Specific Service Charges, Late Payment Charges, Other Distribution Revenues and Other Income and Expenses below.

Table 3-28
Specific Service Charges

Specific Service Charges							
	USoA	Actual				Bridge	Test
		2006	2007	2008	2009	2010	2011
Miscellaneous Revenue	4235	40,014	13,637	38,944	11,538	16,455	14,000
Change of Occupancy Charges	4235	80,670	216,480	218,280	213,610	210,000	210,000
MSP - HONI	4235	-	141,807	-	-	-	-
Easement Letter	4235	-	255	510	300	1,200	1,200
Duplicate Invoice Charge	4235	-	-	-	-	-	1,950
Income Tax Letter	4235	-	-	-	-	-	495
Discounts Taken	4235	20,219	14,088	21,524	19,118	16,500	18,200
Property Tax Rebate for Previous Years'	4235	-	-	-	57,233	-	-
Total		140,903	386,267	279,258	301,799	244,155	245,845

The introduction of the Change of Occupancy Charge in May 2006 accounts for the majority of the revenue in this account. The MSP – HONI program, in which WNH received revenue in 2007, is no longer in operation, thus, no revenue has been projected.

In addition, WNH proposes to introduce 2 new Specific Service Charges for 2011:

- Duplicate Invoice Charge
- Income Tax Letter

4235 – Duplicate Invoice for Previous Billing

WNH has a number of requests from customers for copies of their invoices, many spanning a long time frame, as they have not kept their originals. To reproduce and forward these invoices requires considerable effort and in order to have the customers requesting the service, fund it, WNH requests that the Board authorizes a charge of \$15 to customers for this service with an estimated annual revenue of \$1,950. The calculation of this Specific Service Charge was selected from the standard table developed during the 2006 EDR (#4).

4235 – Income Tax Letter

WNN has a number of requests from customers for an Income Tax Letter. In order that other customers are not subsidizing these efforts, WNN requests that the Board authorizes a charge of \$15 to customers for this service with estimated annual revenue of \$495. The calculation of this Specific Service Charge was selected from the standard table developed during the 2006 EDR (#7).

WNN proposes to maintain the current Specific Service Charges rates and forecasts \$244,155 for the 2010 Bridge Year at the existing specific charges. Including the new Specific Service Charges requested above WNN expects \$245,845 in the 2011 Test Year.

Table 3-29
Late Payment Charges

4225 Late Payment Charges							
	USoA	Actual				Bridge	Test
		2006	2007	2008	2009	2010	2011
Late Payment Charges	4225	187,406	186,505	168,746	180,266	180,000	180,000
Total		187,406	186,505	168,746	180,266	180,000	180,000

Late Payment Charges increased 12.5% from the 2006 Board Approved \$160,296 to \$180,266 Actual 2009. WNN has estimated Late Payment Charges at \$180,000 for the 2010 Bridge Year, as well as the 2011 Test Year, which is comparable to its 2009 revenue.

Table 3-30
Other Distribution Expenses

	USoA	Actual				Bridge	Test
		2006	2007	2008	2009	2010	2011
Retailer Services Revenue ¹¹	4082	39,718	16,500	17,842	19,464	25,000	26,000
Service Transaction Request Revenue ¹¹	4084	3,635	-	-	-	-	-
Pole Rentals	4210	224,340	235,693	238,206	238,628	239,819	239,819
Rent Revenue	4210	3,371	3,373	3,365	3,792	3,900	4,000
Call Centre	4220	3,500	-	-	-	-	-
Bond Connections	4220	6,089	-	168	670	3,000	3,000
Service Wire Lay In	4220	23,923	26,516	21,503	5,527	6,000	6,000
Total		304,576	282,082	281,083	268,081	277,719	278,819

¹¹ As per APH for RRR 2.1.7 - as revenue is higher than cost, revenue is adjusted to lower of revenue or cost, above figures are revenue after the adjustment as the cost has already been removed from USoA 5315; 2006 was incorrectly recorded on the 2.1.7, amounts corrected above

The significant revenue in this category is Pole Rental Revenue and it has remained quite constant over the period and there have been no significant variances.

Service Wire Lay In revenue decreased in 2009 due to a decrease in construction activity and WNH expects this to continue.

Table 3-31
Other Income and Expenses

Other Income and Expenses							
	USoA	Actual				Bridge	Test
		2006	2007	2008	2009	2010	2011
Gain on Disposal	4355	17,415	41,927	37,654	16,431	65,000	22,000
Loss on Disposal	4360	-	-	-	(52,127)	(20,000)	-
Street Light Capital & Maintenance Services	4375	715,303	473,345	347,918	856,064	637,082	691,524
Water & Sewer Billings ¹²	4375	652,945	681,515	720,602	690,371	-	-
Ontario Power Authority Programs Revenue	4375	-	274,413	278,747	1,235,080	1,235,080	1,235,080
Ontario Power Authority Incentive Revenue	4375	-	-	43,854	89,489	89,489	89,489
Meter Data Services	4375	22,296	194,994	139,158	69,126	58,000	58,000
Rental Revenue	4375	4,200	4,200	4,200	4,200	4,200	4,200
Locate Services	4375	5,442	-	-	-	-	-
Other	4375	15	213	1,437	13,449	360	600
Water & Sewer Late Payment Charges	4375	46,962	34,108	38,544	33,261	-	-
Expenses of Above Activities in 4375	4380	(1,400,201)	(1,507,676)	(1,379,202)	(2,813,266)	(1,831,211)	(1,884,598)
Sale of Scrap	4390	69,063	66,282	95,807	95,073	70,000	85,720
Bank Interest Income	4405	618,544	673,872	496,103	52,922	120	120
Loan Interest Income	4405	61,027	-	-	-	14,500	14,500
Other Interest Income	4405	-	8,644	2,577	28,782	152	152
Regulatory Interest Income	4405	-	70,282	77,459	43,427	73,998	73,998
Total		813,011	1,016,119	904,859	362,283	396,770	390,786

¹² WNH ceased Water & Billing Services for the City of Waterloo in 2010

Gain / Loss on Disposal USoA Accounts 4355 & 4360

Assets are rarely disposed of until they are fully depreciated and past their useful life. Typically if there is a net book value remaining, it will be as the asset is no longer usable or, in the case of trucks, where a rebuilt aerial device has not lasted as long as expected. Assets other than trucks and power operated equipment are typically scrapped with a zero net book value. Trucks are generally traded in during replacement; or are occasionally sold to a third-party. The revenue in this account is immaterial and fluctuates from year to year. In 2009 WNH sold the majority of its Tantalus Smart Meters to another distributor at a loss. The Tantalus meters were used in a smart meter pilot operated under the Third Tranche CDM Program. WNH chose Sensus as its vendor of choice, as part of the London Smart Meter RFP Process, for its full rollout to customers, thus, the Tantalus meters were not needed.

In 2010, WNH has estimated the gain on sale of vehicles of \$32,000 and transformers of \$33,000, offset by the loss in the sale of MS#11 of (\$20,000). Using an average of 2007 - 2010, WNH has estimated the gain on disposal of assets for 2011 to be \$22,000.

1 WNH is in the process of decommissioning some of its Distribution/Municipal Stations, and at
2 the time of this filing, WNH has projected a loss on the sale of MS#11 in 2010, however, no
3 sales have been projected in 2011. The decommissioning of a DS/MS is an involved process,
4 including waiting until the load is minimal, WNH removing any equipment that can be used
5 elsewhere, having a third party remove any remaining equipment, environmental
6 assessment/clean up (if applicable) and determining if those who have first right of refusal wish
7 to purchase the property.

8
9 As discussed in Exhibit 2, WNH is in the process of construction of a new administration
10 building and service centre and has a construction end schedule date of October 31, 2011, a
11 one month "air out process" required for the LEEDS standard and a move-in date of December
12 1, 2011. At the time of this filing, WNH cannot estimate either the gain or loss on disposition of
13 its existing service centre, nor the timing of such a sale. In today's current commercial real
14 estate market, WNH would hope to realize a gain on disposal; however, this is subject to any
15 environmental clean up costs that may be necessary. WNH is proposing to place 50% of any
16 after tax gain or loss on the sale of its existing building in a Deferral Account to be disposed of
17 to its customers in a future rate filing. WNH is proposing the after tax gain or loss as the tax
18 impact of such a sale has not been included in this application. WNH also notes that its existing
19 administration building and service centre is not included in rate base, nor any amortization
20 expense, in 2011.

21
22 **Street Light Capital and Maintenance Services, part of USoA 4375 (expenses part of**
23 **USoA 4380)**

24
25 WNH provides street lighting capital and maintenance services to the City of Waterloo, and the
26 Townships of Wellesley and Woolwich. For these services, WNH charges for all labour,
27 material and overheads (plus a 15% administration charge) as it would for any other service
28 provided to any other customer. For 2010 and 2011, WNH has calculated revenues based on
29 the 2010 and 2011 budgeted activity levels plus a profit equivalent to the rate of return allowed
30 by the OEB for affiliated transactions. Details are provided in Table 3-32.

Table 3-32
Street Light Revenue Determination

Street Lighting Revenue Determination	Actual				Bridge	Test
	2006	2007	2008	2009	2010	2011
Street Lighting Capital & Maintenance Revenue ¹³	298,912	409,737	281,976	369,317	350,359	367,733
Profit on Street Lighting (9.85% ¹⁴ Rate of Return)					34,510	36,222
PILs					7,212	7,570
Revenue including PILs	298,912	409,737	281,976	369,317	392,082	411,524
Unaffiliated Transactions	416,391	63,608	65,942	486,747	245,000	280,000
Total Street Lighting Revenue	715,303	473,345	347,918	856,064	637,082	691,524

¹³ Revenue from City of Waterloo and the Townships of Wellesley & Woolwich

¹⁴ Rate of Return was applicable for 2010 applications, to be adjusted at the time of Board determination of rates for 2011 applications

OPA Programs

Since 2007, WNH has run conservation and demand management programs on behalf of the OPA. Details are provided in Table 3-33. WNH expects that these activities will continue as the OPA continues with its CDM activities and programs. For expenses, WNH uses fully-allocated costing for labour as per the OEB's CDM guidelines. All third-party costs are a direct flow-through charged directly to the OPA. For that reason, the dollar amount of OPA Program expenses for 2011 OPA Program revenues are matched dollar for dollar. WNH has budgeted the same revenue and expense for 2010 and 2011 that it received/paid in 2009.

WNH has also provided details of its OPA Incentive Revenue in Table 3-33. Also, as per the Board's CDM guidelines, CDM incentives are not to be shared with customers but rather are to be kept by the shareholder; these amounts have been shown separately.

Table 3-33
OPA Programs Cost / Revenue

OPA Program Cost/Revenue	Actual			Bridge	Test
	2007	2008	2009	2010	2011
The Great Refrigerator Roundup	20,343	30,688	39,154	39,154	39,154
Electricity Retrofit Incentive Program	27,360	35,974	32,854	32,854	32,854
Summer Sweeps	178,471	24,082	-	-	-
Peaksaver	48,238	164,648	274,141	274,141	274,141
Small Commercial Install	-	12,086	888,931	888,931	888,931
Community Initiative	-	11,268	-	-	-
Total	274,413	278,747	1,235,080	1,235,080	1,235,080

OPA Incentive Revenue	-	43,854	89,489	89,489	89,489
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Sale of Scrap Material USoA 4390

Given the nature of this account, WNH has used an average of 2007 through 2009 to determine its 2011 Budget. The sale of scrap material is variable and the revenue has been higher in 2008 and 2009 due to an increased number of scrapped transformers.

Table 3-34
Interest and Dividend Income

Interest and Dividend Income	Actual				Bridge	Test
	2006	2007	2008	2009	2010	2011
Bank Interest Income	618,544	673,872	496,103	52,922	14,620	14,620
Loan Interest Income	61,027	-	-	-	-	-
Other Interest Income	-	8,644	2,577	28,782	152	152
Total before Regulatory Interest Income	679,571	682,516	498,680	81,704	14,772	14,772
Regulatory Interest Income	-	70,282	77,459	43,427	73,998	73,998
Total	679,571	752,797	576,139	125,131	88,770	88,770

Interest income on regulatory asset variance accounts is not included in the 2011 Test Year revenue requirement calculation. Interest Income has decreased substantially over the past years, due to lower interest rates and fewer cash reserves available to earn interest income, and this trend is expected to continue. WNH is in a position in 2010, and will continue to be in 2011, that it is in a borrowing position, rather than holding cash reserves and does not expect to earn bank interest income. The cost of purchasing and installing Smart Meters, and constructing a new administration building and service centre, has resulted in WNH being in a borrowing position.

Table 3-35
SSS Administration Income

SSS Administration Charge

SSS Administration Charge							
	USoA	Actual				Bridge	Test
		2006	2007	2008	2009	2010	2011
Standard Supply Services Admin Charge ¹⁰	4080	125,369	125,597	130,942	132,653	135,000	135,000
Total		125,369	125,597	130,942	132,653	135,000	135,000

¹⁰ SSS Charges are recorded in USoA 4080

SSS Administration Charges have been stable over the period, no major variance has been experienced.

Appendix A

Monthly Inputs and Outputs into Regression Model

Appendix A Monthly Inputs and Outputs in Regression Model

Month	Net Purchased	Heating Degree Days	Cooling Degree Days	Ontario Real GDP Monthly %	Number of Days in Month	Spring Fall Flag	Number of Customers	Number of Peak Hours	Predicted Purchases
Jan-96	103,954,859	789.4	-	94.72	31	0	36,997	352	99,196,174
Feb-96	96,665,949	712.6	-	94.80	29	0	37,049	336	92,211,247
Mar-96	92,774,496	670.4	-	94.89	31	1	37,100	336	93,065,810
Apr-96	84,044,233	421.9	-	94.97	30	1	37,152	336	84,123,574
May-96	79,216,347	216.1	10.0	95.06	31	1	37,204	352	83,115,502
Jun-96	80,132,570	29.4	38.6	95.14	30	0	37,256	320	81,316,019
Jul-96	81,995,993	18.9	41.9	95.23	31	0	37,307	352	85,558,507
Aug-96	85,820,034	6.2	55.2	95.32	31	0	37,359	336	86,794,099
Sep-96	80,630,998	102.2	12.6	95.40	30	1	37,411	320	76,960,781
Oct-96	84,343,305	301.4	-	95.49	31	1	37,463	352	84,283,135
Nov-96	91,174,479	548.1	-	95.57	30	1	37,514	320	87,562,658
Dec-96	93,830,890	596.5	-	95.66	31	0	37,566	320	93,102,447
Jan-97	104,564,098	777.9	-	96.01	31	0	37,653	352	100,309,578
Feb-97	90,640,676	615.0	-	96.37	28	0	37,740	320	88,077,351
Mar-97	94,664,618	619.1	-	96.73	31	1	37,827	304	91,441,153
Apr-97	84,994,330	391.9	-	97.08	30	1	37,914	352	85,969,084
May-97	81,469,843	289.0	-	97.44	31	1	38,001	336	84,354,256
Jun-97	84,907,947	30.4	50.4	97.81	30	0	38,088	336	86,401,010
Jul-97	88,284,242	22.1	59.8	98.17	31	0	38,174	352	91,004,838
Aug-97	82,627,988	49.4	21.9	98.53	31	0	38,261	320	83,322,918
Sep-97	81,983,559	115.2	5.4	98.90	30	1	38,348	336	79,297,035
Oct-97	87,043,828	288.9	1.6	99.26	31	1	38,435	352	86,682,932
Nov-97	90,691,021	471.4	-	99.63	30	1	38,522	304	87,048,816
Dec-97	95,556,669	630.7	-	100.00	31	0	38,609	336	97,686,552
Jan-98	99,385,699	652.8	-	100.39	31	0	38,689	336	98,547,678
Feb-98	87,971,466	547.1	-	100.79	28	0	38,769	320	88,826,565
Mar-98	95,785,773	505.1	-	101.18	31	1	38,849	352	93,630,171
Apr-98	82,669,646	312.0	-	101.58	30	1	38,929	336	85,469,517
May-98	84,741,274	77.1	16.8	101.98	31	1	39,009	320	83,118,754
Jun-98	90,275,824	66.7	63.7	102.38	30	0	39,089	352	93,416,413
Jul-98	93,189,935	6.9	64.8	102.78	31	0	39,168	352	94,126,103
Aug-98	94,093,214	12.1	83.1	103.18	31	0	39,248	320	95,964,870
Sep-98	86,839,813	63.0	26.0	103.59	30	1	39,328	336	84,193,716
Oct-98	87,632,215	257.6	-	104.00	31	1	39,408	336	87,241,848
Nov-98	91,211,579	440.1	-	104.40	30	1	39,488	336	90,640,447
Dec-98	96,142,158	572.1	-	104.81	31	0	39,568	336	98,665,726
Jan-99	105,956,094	789.6	-	105.45	31	0	39,656	320	104,176,857
Feb-99	91,902,952	578.4	-	106.09	28	0	39,744	320	92,458,458
Mar-99	99,161,823	592.5	-	106.73	31	1	39,833	368	99,852,243
Apr-99	85,393,787	332.6	-	107.38	30	1	39,921	336	88,916,748
May-99	84,688,074	126.7	10.5	108.03	31	1	40,009	320	86,311,134
Jun-99	96,519,946	44.4	76.5	108.68	30	0	40,097	352	98,079,161
Jul-99	101,986,666	3.2	138.9	109.34	31	0	40,185	336	109,556,731
Aug-99	91,789,512	28.8	30.9	110.00	31	0	40,273	336	91,052,391
Sep-99	90,325,755	88.9	27.7	110.67	30	1	40,362	336	88,403,592
Oct-99	90,874,789	319.0	-	111.34	31	1	40,450	320	91,276,137
Nov-99	95,469,031	405.1	-	112.01	30	1	40,538	352	93,847,776
Dec-99	102,567,968	623.7	-	112.69	31	0	40,626	336	103,486,237
Jan-00	108,238,479	773.0	-	113.21	31	0	40,716	320	107,043,030
Feb-00	99,267,320	643.8	-	113.73	29	0	40,805	336	100,566,866
Mar-00	98,885,769	446.9	-	114.25	31	1	40,895	368	99,019,001
Apr-00	89,683,486	358.3	-	114.77	30	1	40,984	304	91,069,004
May-00	91,112,756	152.4	18.7	115.30	31	1	41,074	352	93,617,173
Jun-00	95,253,519	41.1	35.4	115.83	30	0	41,163	352	93,801,264
Jul-00	94,939,500	18.6	44.8	116.36	31	0	41,253	320	95,275,934
Aug-00	97,610,937	29.7	46.3	116.90	31	0	41,342	352	97,956,591
Sep-00	92,868,596	134.0	23.8	117.43	30	1	41,432	320	91,209,735
Oct-00	94,036,040	251.6	-	117.97	31	1	41,521	336	93,460,529
Nov-00	100,539,536	470.9	-	118.52	30	1	41,611	352	98,853,444
Dec-00	111,076,880	826.5	-	119.06	31	0	41,700	304	110,524,969

Appendix A Monthly Inputs and Outputs in Regression Model

Month	Net Purchased	Heating Degree Days	Cooling Degree Days	Ontario Real GDP Monthly %	Number of Days in Month	Spring Fall Flag	Number of Customers	Number of Peak Hours	Predicted Purchases
Jan-01	112,140,533	715.0	-	119.23	31	0	41,817	352	110,336,221
Feb-01	99,292,412	620.2	-	119.40	28	0	41,934	320	100,057,361
Mar-01	106,169,706	618.7	-	119.58	31	1	42,051	352	106,038,979
Apr-01	91,023,242	324.6	-	119.75	30	1	42,168	320	94,090,142
May-01	91,415,058	140.3	7.7	119.92	31	1	42,285	352	94,343,267
Jun-01	100,004,911	47.0	62.4	120.10	30	0	42,402	336	100,982,268
Jul-01	100,623,949	22.3	65.7	120.27	31	0	42,519	336	103,125,597
Aug-01	107,820,684	2.3	94.2	120.45	31	0	42,636	352	108,849,092
Sep-01	93,585,299	118.8	19.2	120.62	30	1	42,753	304	92,041,256
Oct-01	98,808,837	276.7	-	120.80	31	1	42,870	352	98,056,345
Nov-01	100,185,339	370.8	-	120.97	30	1	42,987	352	98,984,593
Dec-01	104,777,445	563.3	-	121.15	31	0	43,104	304	106,011,043
Jan-02	112,455,640	625.7	-	121.50	31	0	43,198	352	110,750,138
Feb-02	102,007,798	592.0	-	121.86	28	0	43,293	320	102,197,414
Mar-02	108,876,083	581.2	-	122.22	31	1	43,387	320	106,072,757
Apr-02	100,595,731	356.2	6.6	122.59	30	1	43,482	352	100,961,678
May-02	99,143,600	266.8	5.3	122.95	31	1	43,576	352	100,417,192
Jun-02	103,716,893	53.1	54.5	123.31	30	0	43,671	320	101,687,890
Jul-02	118,077,792	4.7	129.0	123.68	31	0	43,765	352	117,859,533
Aug-02	111,029,049	11.0	72.3	124.04	31	0	43,859	336	107,138,096
Sep-02	105,434,631	50.2	47.0	124.41	30	1	43,954	320	98,911,868
Oct-02	104,527,084	349.3	1.0	124.78	31	1	44,048	352	103,177,958
Nov-02	107,260,871	486.4	-	125.14	30	1	44,143	336	104,231,057
Dec-02	113,273,476	675.6	-	125.51	31	0	44,237	320	112,961,075
Jan-03	121,514,909	868.4	-	125.66	31	0	43,367	352	118,692,400
Feb-03	109,473,438	755.9	-	125.81	28	0	43,629	320	108,174,333
Mar-03	111,457,612	638.7	-	125.95	31	1	43,892	336	110,239,190
Apr-03	101,097,074	397.4	0.7	126.10	30	1	44,155	336	102,023,985
May-03	95,418,975	217.0	-	126.24	31	1	44,417	336	99,288,159
Jun-03	99,801,649	65.3	25.5	126.39	30	0	44,680	336	100,153,023
Jul-03	109,026,232	12.5	50.1	126.54	31	0	44,793	352	106,229,455
Aug-03	103,421,920	18.9	72.4	126.68	31	0	44,948	320	108,918,088
Sep-03	98,043,968	104.1	6.0	126.83	30	1	45,072	336	96,475,303
Oct-03	103,519,466	331.9	-	126.98	31	1	45,204	352	105,024,288
Nov-03	105,018,205	434.4	-	127.12	30	1	45,375	320	104,427,734
Dec-03	112,180,376	610.0	-	127.27	31	0	45,463	336	114,607,979
Jan-04	122,649,421	879.2	-	127.53	31	0	45,553	336	122,462,419
Feb-04	110,237,601	699.2	-	127.80	29	0	45,665	320	112,682,161
Mar-04	113,692,507	540.9	-	128.06	31	1	45,790	368	113,167,334
Apr-04	100,105,050	354.1	-	128.32	30	1	45,875	336	104,232,545
May-04	99,240,430	196.2	6.7	128.59	31	1	45,923	320	102,159,954
Jun-04	100,800,868	92.5	16.3	128.85	30	0	46,112	352	103,247,017
Jul-04	106,254,964	21.3	49.3	129.12	31	0	46,202	336	108,494,641
Aug-04	104,989,522	55.0	30.6	129.38	31	0	46,332	336	106,359,625
Sep-04	105,243,131	71.3	13.7	129.65	30	1	46,496	336	100,061,143
Oct-04	104,008,029	287.5	-	129.92	31	1	46,661	320	105,136,488
Nov-04	108,891,801	432.9	-	130.19	30	1	46,825	352	109,458,803
Dec-04	118,197,088	700.1	-	130.45	31	0	46,881	336	120,344,229
Jan-05	124,799,625	814.7	-	130.74	31	0	46,961	320	122,857,824
Feb-05	109,377,224	683.5	-	131.03	28	0	47,060	320	113,367,937
Mar-05	116,762,158	680.5	-	131.33	31	1	47,156	352	119,289,485
Apr-05	101,984,233	354.6	-	131.62	30	1	47,057	336	107,011,186
May-05	100,328,217	244.9	-	131.91	31	1	47,180	336	106,177,827
Jun-05	120,116,153	27.3	104.8	132.20	30	0	47,430	352	120,409,886
Jul-05	120,982,338	6.8	105.4	132.50	31	0	47,565	320	120,392,580
Aug-05	118,023,792	11.9	67.9	132.79	31	0	47,605	352	115,722,988
Sep-05	106,742,175	63.4	13.7	133.09	30	1	47,806	336	102,861,712
Oct-05	107,401,539	259.9	2.6	133.38	31	1	47,911	320	107,743,549
Nov-05	111,578,091	433.1	-	133.68	30	1	48,010	352	112,270,181
Dec-05	120,461,267	721.6	-	133.98	31	0	48,041	320	122,780,939

Appendix A Monthly Inputs and Outputs in Regression Model

Month	Net Purchased	Heating Degree Days	Cooling Degree Days	Ontario Real GDP Monthly %	Number of Days in Month	Spring Fall Flag	Number of Customers	Number of Peak Hours	Predicted Purchases
Jan-06	120,031,274	590.6	-	134.25	31	0	48,141	336	120,234,323
Feb-06	110,603,205	651.2	-	134.53	28	0	48,205	320	115,183,350
Mar-06	118,111,013	562.4	-	134.81	31	1	48,263	368	119,535,436
Apr-06	101,305,369	322.5	-	135.08	30	1	48,272	304	107,098,391
May-06	109,175,317	177.8	17.7	135.36	31	1	48,222	352	110,901,804
Jun-06	113,972,994	44.1	32.2	135.64	30	0	48,352	352	110,082,248
Jul-06	126,190,594	6.5	117.2	135.92	31	0	48,357	320	124,585,770
Aug-06	119,196,414	27.5	45.5	136.20	31	0	48,485	352	114,348,142
Sep-06	106,202,903	130.3	2.3	136.48	30	1	48,589	320	103,799,759
Oct-06	113,108,178	335.1	-	136.76	31	1	48,653	336	112,316,863
Nov-06	115,095,613	415.9	-	137.04	30	1	48,727	352	113,703,335
Dec-06	119,540,244	545.2	-	137.33	31	0	48,779	304	118,835,368
Jan-07	127,304,937	698.3	-	137.59	31	0	48,826	352	126,044,267
Feb-07	120,808,165	785.1	-	137.85	28	0	48,864	320	120,790,564
Mar-07	122,670,698	582.0	-	138.11	31	1	48,982	352	121,067,388
Apr-07	110,394,915	403.0	-	138.37	30	1	48,695	320	111,658,102
May-07	110,504,003	166.4	11.2	138.63	31	1	48,892	352	111,222,135
Jun-07	119,418,387	35.5	51.2	138.90	30	0	48,942	336	114,030,754
Jul-07	118,261,123	28.0	53.8	139.16	31	0	49,055	336	116,544,483
Aug-07	122,630,064	19.7	65.1	139.42	31	0	49,140	352	119,449,824
Sep-07	112,791,765	74.7	28.0	139.69	30	1	49,319	304	107,873,641
Oct-07	115,139,459	184.7	10.9	139.95	31	1	49,435	352	112,922,765
Nov-07	118,589,797	511.8	-	140.22	30	1	49,527	352	118,465,705
Dec-07	125,055,727	686.6	-	140.48	31	0	49,558	304	124,847,699
Jan-08	129,382,740	676.8	-	140.43	31	0	49,631	352	127,428,437
Feb-08	121,389,403	651.2	-	140.37	29	0	49,649	320	120,891,596
Mar-08	122,865,588	686.1	-	140.31	31	1	49,699	304	122,988,300
Apr-08	110,209,043	297.9	-	140.25	30	1	49,603	352	112,535,001
May-08	107,615,734	243.1	0.7	140.19	31	1	49,718	336	112,388,812
Jun-08	114,986,972	40.6	53.0	140.13	30	0	49,781	336	116,252,157
Jul-08	125,312,276	7.6	75.8	140.07	31	0	49,843	352	122,454,610
Aug-08	116,483,362	36.2	29.5	140.02	31	0	49,932	320	113,220,308
Sep-08	113,629,916	93.2	12.0	139.96	30	1	50,197	336	109,015,909
Oct-08	114,738,698	325.7	-	139.90	31	1	50,286	352	116,517,234
Nov-08	117,399,771	499.7	-	139.84	30	1	50,341	304	116,795,919
Dec-08	127,416,180	694.0	-	139.78	31	0	50,478	336	128,442,811
Jan-09	133,448,051	891.8	-	139.38	31	0	50,522	336	134,066,387
Feb-09	116,228,531	649.6	-	138.98	28	0	50,567	304	119,370,647
Mar-09	122,336,070	562.6	-	138.58	31	1	50,570	352	123,528,065
Apr-09	109,295,046	341.5	3.2	138.18	30	1	50,379	320	113,573,610
May-09	106,535,371	192.8	2.3	137.78	31	1	50,556	320	111,443,745
Jun-09	111,863,489	75.7	26.2	137.38	30	0	50,618	352	114,372,705
Jul-09	113,574,356	37.6	14.5	136.99	31	0	50,688	352	113,234,579
Aug-09	121,796,156	18.2	57.3	136.59	31	0	50,788	320	118,695,094
Sep-09	113,158,051	88.8	5.5	136.20	30	1	50,947	336	108,425,012
Oct-09	117,287,295	329.1	-	135.81	31	1	51,006	336	116,289,812
Nov-09	117,111,126	396.5	-	135.42	30	1	51,052	320	115,301,277
Dec-09	129,131,138	669.5	-	135.03	31	0	51,089	352	128,938,768

Appendix A Monthly Inputs and Outputs in Regression Model

Month	Net Purchased	Heating Degree Days	Cooling Degree Days	Ontario Real GDP Monthly %	Number of Days in Month	Spring Fall Flag	Number of Customers	Number of Peak Hours	Predicted Purchases
Jan-10		753.1	-	135.33	31	0	51,157	320	129,655,504
Feb-10		656.1	-	135.63	28	0	51,179	304	120,081,109
Mar-10		591.9	-	135.93	31	1	51,224	368	126,008,091
Apr-10		354.9	0.8	136.23	30	1	51,260	320	114,784,280
May-10		193.3	7.7	136.54	31	1	51,296	320	113,570,758
Jun-10		49.5	49.3	136.84	30	0	51,332	352	119,025,419
Jul-10		15.5	72.2	137.14	31	0	51,368	336	123,395,825
Aug-10		23.4	55.2	137.45	31	0	51,404	336	120,657,827
Sep-10		92.7	17.4	137.75	30	1	51,440	336	111,862,188
Oct-10		292.7	1.2	138.06	31	1	51,476	320	115,815,823
Nov-10		451.2	-	138.37	30	1	51,512	336	119,145,951
Dec-10		651.1	-	138.67	31	0	51,549	368	130,832,643
Jan-11		753.1	-	139.04	31	0	51,587	320	131,110,628
Feb-11		656.1	-	139.40	28	0	51,625	304	121,577,245
Mar-11		591.9	-	139.77	31	1	51,663	368	127,502,966
Apr-11		354.9	0.8	140.14	30	1	51,701	320	116,294,508
May-11		193.3	7.7	140.51	31	1	51,739	320	115,096,392
Jun-11		49.5	49.3	140.88	30	0	51,777	352	120,566,513
Jul-11		15.5	72.2	141.25	31	0	51,815	336	124,952,430
Aug-11		23.4	55.2	141.62	31	0	51,853	336	122,229,997
Sep-11		92.7	17.4	141.99	30	1	51,891	336	113,449,976
Oct-11		292.7	1.2	142.36	31	1	51,929	320	117,419,284
Nov-11		451.2	-	142.74	30	1	51,967	336	120,765,137
Dec-11		651.1	-	143.11	31	0	52,009	368	132,473,129

Appendix B

OPA Results

2006 – 2009 Preliminary

OPA Conservation & Demand Management Programs

Annual Results at the End-User Level

For: **Waterloo North Hydro Inc.**

Net Summer Peak Demand Savings (MW)

#	Program Year	Results Status	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1	2006 Programs	Final	3.4684	0.3314	0.3314	0.3314	0.3314	0.2133	0.1655	0.1655	0.1295	0.1295
2	2007 Programs	Final	0.0000	4.5035	0.5761	0.5201	0.5201	0.5192	0.3531	0.3531	0.3531	0.3155
3	2008 Programs	Final	0.0000	0.0000	6.8536	1.6148	1.6146	1.6146	1.5731	0.5685	0.5555	0.5512
4	2009 Programs (Preliminary)	Preliminary	0.0000	0.0000	0.0000	6.0943	4.0230	3.8787	3.8455	3.8436	1.0305	1.0273
Total			3.4684	4.8349	7.7611	8.5607	6.4892	6.2258	5.9373	4.9308	2.0687	2.0234

Net Energy Savings (MWh)

#	Program Year	Results Status	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1	2006 Programs	Final	3,673	3,673	3,673	3,673	638	638	584	584	548	548
2	2007 Programs	Final	0	1,995	1,979	1,979	1,979	1,979	1,925	1,925	1,925	774
3	2008 Programs	Final	0	0	2,176	2,170	2,169	2,169	1,991	1,990	1,805	1,666
4	2009 Programs (Preliminary)	Preliminary	0	0	0	4,374	4,374	3,309	3,309	3,308	3,307	3,210
Total			3,673	5,668	7,828	12,196	9,160	8,095	7,808	7,807	7,584	6,198

Gross Summer Peak Demand Savings (MW)

#	Program Year	Results Status	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1	2006 Programs	Final	3.5012	0.3642	0.3642	0.3642	0.3642	0.2461	0.1970	0.1970	0.1569	0.1569
2	2007 Programs	Final	0.0000	7.3570	1.5647	1.0988	1.0988	1.0965	0.8706	0.8706	0.8706	0.8162
3	2008 Programs	Final	0.0000	0.0000	7.1849	1.9290	1.9288	1.9288	1.8776	0.8729	0.8447	0.8330
4	2009 Programs (Preliminary)	Preliminary	0.0000	0.0000	0.0000	6.4369	4.3656	4.2104	4.1772	4.1729	1.3598	1.3550
Total			3.5012	7.7212	9.1139	9.8289	7.7574	7.4819	7.1224	6.1134	3.2320	3.1611

Gross Energy Savings (MWh)

#	Program Year	Results Status	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1	2006 Programs	Final	4,102	4,102	4,102	4,102	730	730	669	669	630	630
2	2007 Programs	Final	0	2,858	2,825	2,824	2,824	2,824	2,659	2,659	2,659	1,159
3	2008 Programs	Final	0	0	5,136	4,810	4,809	4,809	4,346	4,345	3,930	3,560
4	2009 Programs (Preliminary)	Preliminary	0	0	0	5,395	5,395	4,250	4,250	4,247	4,244	4,108
Total			4,102	6,960	12,063	17,131	13,758	12,612	11,924	11,921	11,463	9,457

OPA Conservation & Demand Management Programs

Annual Results at the End-User Level

For: **Waterloo North Hydro Inc.**

Net Summer Peak Demand Savings (MW)

#	Program Year	Results Status	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
1	2006 Programs	Final	0.1295	0.1295	0.1295	0.1295	0.0792	0.0541	0.0541	0.0541	0.0015	0.0015	0.0000
2	2007 Programs	Final	0.3045	0.2802	0.2802	0.2802	0.2802	0.2287	0.1209	0.1207	0.1207	0.0959	0.0762
3	2008 Programs	Final	0.5295	0.5022	0.4989	0.4989	0.4886	0.3338	0.3295	0.2964	0.2078	0.2078	0.0879
4	2009 Programs (Preliminary)	Preliminary	1.0237	1.0145	0.9876	0.9803	0.9796	0.9721	0.5980	0.3663	0.1640	0.1085	0.1085
Total			1.9873	1.9263	1.8962	1.8889	1.8276	1.5887	1.1026	0.8374	0.4940	0.4138	0.2726

Net Energy Savings (MWh)

#	Program Year	Results Status	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
1	2006 Programs	Final	518	518	518	518	469	408	408	408	220	220	129
2	2007 Programs	Final	673	474	474	474	474	474	284	278	278	251	184
3	2008 Programs	Final	1,311	1,092	1,017	1,017	999	996	992	920	231	231	44
4	2009 Programs (Preliminary)	Preliminary	3,176	2,991	2,793	2,763	2,758	2,751	2,743	1,042	642	209	209
Total			5,678	5,076	4,802	4,772	4,700	4,628	4,427	2,648	1,371	910	566

Gross Summer Peak Demand Savings (MW)

#	Program Year	Results Status	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
1	2006 Programs	Final	0.1569	0.1569	0.1569	0.1569	0.1011	0.0619	0.0619	0.0619	0.0017	0.0017	0.0000
2	2007 Programs	Final	0.7885	0.7557	0.7557	0.7557	0.7557	0.3270	0.1396	0.1391	0.1391	0.0959	0.0762
3	2008 Programs	Final	0.7930	0.7407	0.7333	0.7333	0.7097	0.5376	0.5315	0.4755	0.3104	0.3104	0.1021
4	2009 Programs (Preliminary)	Preliminary	1.3511	1.3358	1.2796	1.2619	1.2612	1.2440	0.8284	0.5792	0.2349	0.1745	0.1745
Total			3.0896	2.9892	2.9256	2.9078	2.8277	2.1704	1.5614	1.2556	0.6860	0.5825	0.3528

Gross Energy Savings (MWh)

#	Program Year	Results Status	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
1	2006 Programs	Final	596	596	596	596	542	454	454	454	245	245	143
2	2007 Programs	Final	902	640	640	640	640	640	308	297	297	251	184
3	2008 Programs	Final	2,807	2,407	2,204	2,204	2,163	2,151	2,143	2,011	427	427	103
4	2009 Programs (Preliminary)	Preliminary	4,072	3,804	3,393	3,320	3,315	3,298	3,289	1,460	817	331	331
Total			8,379	7,447	6,833	6,760	6,660	6,543	6,195	4,222	1,786	1,253	760

OPA Conservation & Demand Management Programs

Annual Results at the End-User Level

For: Waterloo North Hydro Inc.

Net Summer Peak Demand Savings (MW)

[illegible]

Net Energy Savings (MWh)

[illegible]

Gross Summer Peak Demand Savings (MW)

[illegible]

Gross Energy Savings (MWh)

[illegible]

Annual Results at the End-User Level

For: Waterloo North Hydro Inc.

Net Summer Peak Demand Savings (MW)

[illegible]

Net Energy Savings (MWh)

[illegible]

Gross Summer Peak Demand Savings (MW)

[illegible]

Gross Energy Savings (MWh)

[illegible]

Appendix C

OEB Proposed Electricity Conservation and Demand Management Targets EB-2010-0216

Appendix D: The OPA's CDM Target Advice

Energy Savings Target

The projected residential sector contribution to LDC provincial aggregate energy savings target is 1,150 GWh. The projected non-residential sector contribution to LDC provincial aggregate energy savings target is 4,850 GWh. The 2011-2014 LDC provincial aggregate energy savings target is 6,000 GWh.

#	Local Distribution Company	Energy Target Allocation Factors (Per 2008 OEB Distributors Yearbook + HONI Adjustment)		2011-2014 Energy Savings Target (GWh)	Overall Portion of Provincial Total (%)
		Portion of Total 2008 Residential Energy Consumption by all LDCs that have CDM Targets (%)	Portion of Total 2008 Non-Residential Energy Consumption by all LDCs that have CDM Targets (%)		
1	Algoma Power Inc.	0.22%	0.11%	8	0.13%
2	Atikokan Hydro Inc.	0.03%	0.02%	1	0.02%
3	Attawapiskat Power Corporation	0.01%	0.00%	0.1	0.00%
4	Bluewater Power Distribution Corporation	0.64%	1.00%	56	0.93%
5	Brant County Power Inc.	0.20%	0.24%	14	0.23%
6	Brantford Power Inc.	0.72%	0.88%	51	0.85%
7	Burlington Hydro Inc.	1.37%	1.41%	84	1.40%
8	COLLUS Power Corporation	0.28%	0.25%	15	0.25%
9	Cambridge and North Dumfries Hydro Inc.	0.95%	1.37%	77	1.28%
10	Canadian Niagara Power Inc.	0.50%	0.41%	25	0.42%
11	Centre Wellington Hydro Ltd.	0.11%	0.14%	8	0.13%
12	Chapleau Public Utilities Corporation	0.04%	0.02%	1	0.02%
13	Chatham-Kent Hydro Inc.	0.57%	0.70%	41	0.68%
14	Clinton Power Corporation	0.03%	0.02%	1	0.02%
15	Cooperative Hydro Embrun Inc.	0.05%	0.01%	1	0.02%
16	E.L.K. Energy Inc.	0.23%	0.19%	12	0.20%
17	ENWIN Utilities Ltd.	1.57%	2.19%	124	2.07%
18	Energysource Hydro Mississauga Inc.	3.91%	7.87%	427	7.12%
19	Erie Thames Powerlines Corporation	0.28%	0.34%	20	0.33%
20	Espanola Regional Hydro Distribution Corporation	0.08%	0.04%	3	0.05%
21	Essex Powerlines Corporation	0.64%	0.34%	24	0.40%
22	Festival Hydro Inc.	0.35%	0.55%	30	0.50%
23	Fort Albany Power Corporation	0.01%	0.00%	0.1	0.00%
24	Fort Frances Power Corporation	0.10%	0.05%	4	0.07%
25	Greater Sudbury Hydro Inc.	1.01%	0.67%	44	0.73%
26	Grimsby Power Inc.	0.22%	0.11%	8	0.13%

#	Local Distribution Company	Energy Target Allocation Factors (Per 2008 OEB Distributors Yearbook + HONI Adjustment)		2011-2014 Energy Savings Target (GWh)	Overall Portion of Provincial Total (%)
		Portion of Total 2008 Residential Energy Consumption by all LDCs that have CDM Targets (%)	Portion of Total 2008 Non-Residential Energy Consumption by all LDCs that have CDM Targets (%)		
27	Guelph Hydro Electric Systems Inc.	0.90%	1.49%	83	1.38%
28	Haldimand County Hydro Inc.	0.42%	0.22%	15	0.25%
29	Halton Hills Hydro Inc.	0.54%	0.34%	23	0.38%
30	Hearst Power Distribution Company Limited	0.07%	0.07%	4	0.07%
31	Horizon Utilities Corporation	4.04%	5.25%	301	5.02%
32	Hydro 2000 Inc.	0.04%	0.01%	1	0.02%
33	Hydro Hawkesbury Inc.	0.14%	0.17%	10	0.17%
34	Hydro One Brampton Networks Inc.	2.80%	3.35%	194	3.24%
35	Hydro One Networks Inc.	30.54%	13.66%	1,014	16.91%
36	Hydro Ottawa Limited	5.48%	6.42%	374	6.24%
37	Innisfil Hydro Distribution Systems Limited	0.39%	0.10%	9	0.15%
38	Kashechewan Power Corporation	0.01%	0.00%	0.1	0.00%
39	Kenora Hydro Electric Corporation Ltd.	0.10%	0.08%	5	0.08%
40	Kingston Hydro Corporation	0.49%	0.65%	37	0.62%
41	Kitchener-Wilmot Hydro Inc.	1.62%	1.53%	93	1.55%
42	Lakefront Utilities Inc.	0.19%	0.25%	14	0.23%
43	Lakeland Power Distribution Ltd.	0.20%	0.17%	10	0.17%
44	London Hydro Inc.	2.76%	2.66%	161	2.69%
45	Middlesex Power Distribution Corporation	0.15%	0.17%	10	0.17%
46	Midland Power Utility Corporation	0.12%	0.20%	11	0.18%
47	Milton Hydro Distribution Inc.	0.56%	0.58%	34	0.57%
48	Newmarket - Tay Power Distribution Ltd.	0.66%	0.55%	34	0.57%
49	Niagara Peninsula Energy Inc.	0.99%	0.99%	59	0.98%
50	Niagara-on-the-Lake Hydro Inc.	0.16%	0.13%	8	0.13%
51	Norfolk Power Distribution Inc.	0.35%	0.28%	18	0.30%
52	North Bay Hydro Distribution Limited	0.53%	0.43%	27	0.45%
53	Northern Ontario Wires Inc.	0.10%	0.10%	6	0.10%
54	Oakville Hydro Electricity Distribution Inc.	1.45%	1.21%	75	1.25%
55	Orangeville Hydro Limited	0.21%	0.20%	12	0.20%
56	Orillia Power Distribution Corporation	0.27%	0.25%	15	0.25%
57	Oshawa PUC Networks Inc.	1.21%	0.81%	53	0.88%
58	Ottawa River Power Corporation	0.19%	0.14%	9	0.15%

#	Local Distribution Company	Energy Target Allocation Factors (Per 2008 OEB Distributors Yearbook + HONI Adjustment)		2011-2014 Energy Savings Target (GWh)	Overall Portion of Provincial Total (%)
		Portion of Total 2008 Residential Energy Consumption by all LDCs that have CDM Targets (%)	Portion of Total 2008 Non-Residential Energy Consumption by all LDCs that have CDM Targets (%)		
59	PUC Distribution Inc.	0.85%	0.43%	31	0.52%
60	Parry Sound Power Corporation	0.08%	0.06%	4	0.07%
61	Peterborough Distribution Incorporated	0.71%	0.64%	39	0.65%
62	PowerStream Inc.	6.46%	6.92%	410	6.84%
63	Renfrew Hydro Inc.	0.08%	0.08%	5	0.08%
64	Rideau St. Lawrence Distribution Inc.	0.11%	0.08%	5	0.08%
65	Sioux Lookout Hydro Inc.	0.08%	0.05%	3	0.05%
66	St. Thomas Energy Inc.	0.30%	0.27%	16	0.27%
67	Thunder Bay Hydro Electricity Distribution Inc.	0.87%	0.78%	48	0.80%
68	Tillsonburg Hydro Inc.	0.13%	0.20%	11	0.18%
69	Toronto Hydro-Electric System Limited	12.84%	24.11%	1,317	21.97%
70	Veridian Connections Inc.	2.32%	1.87%	117	1.95%
71	Wasaga Distribution Inc.	0.19%	0.05%	4	0.07%
72	Waterloo North Hydro Inc.	1.00%	1.16%	68	1.13%
73	Welland Hydro-Electric System Corp.	0.39%	0.37%	22	0.37%
74	Wellington North Power Inc.	0.06%	0.08%	5	0.08%
75	West Coast Huron Energy Inc.	0.07%	0.15%	8	0.13%
76	West Perth Power Inc.	0.04%	0.06%	3	0.05%
77	Westario Power Inc.	0.52%	0.31%	21	0.35%
78	Whitby Hydro Electric Corporation	0.85%	0.61%	39	0.65%
79	Woodstock Hydro Services Inc.	0.27%	0.36%	21	0.35%
Total		100%	100%	6,000	100%

1
2

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EXHIBIT 4 - MANAGER'S SUMMARY-OPERATING COSTS:

Waterloo North Hydro's mission is to provide safe and reliable electricity distribution services at competitive rates. However, WNH's operating costs have been steadily increasing each year, particularly Distribution Operating and Maintenance, due to a number of reasons including steady growth, ongoing maintenance associated with an aging infrastructure and additional costs associated with regulatory and legislated requirements.

LDCs have been operating in an ever-changing atmosphere since market opening in 2002. This has put additional cost pressures on all distribution utilities in the province, particularly in the area of regulation and compliance. WNH has incurred considerable increase in expenses over the past number of years to comply with regulatory and legislative changes arising from rate applications, RRR reporting, embedded generation, Smart Meters, ESA Regulations and increasing regulatory fees.

Effective January 1, 2010 WNH ceased providing services to the City of Waterloo for Water and Sewer Billings. The cessation of services was initiated by the City of Waterloo and their desire to perform these services in-house. WNH complied with the provisions of the Affiliate Relationship Code (ARC) Section 2.3.3.6. Section 2.3.3.6 states where a reasonably competitive market exists for a service, product, resource or use of asset, a utility shall charge no less than the greater of (i) the market price of the service, product, resource or use of asset and (ii) the utility's fully-allocated cost to provide service, product, resource or use of asset, when selling that service, product, resource or use of asset to an affiliate. WNH charged the market price which was in excess of the fully-allocated cost as a market exists to provide these services. WNH regularly performed surveys to ensure they were charging a rate comparable to other distributors.

WNH recorded the revenue in USoA 4375 Non-Distribution Revenue and the related costs in USoA 4380 Non-Distribution Expenses. WNH removed the costs from Meter Reading, Billing and Collecting and transferred these to USOA 4380. As such, in 2010 and 2011, WNH will no longer have the revenue from providing this service and will have some reduction in costs, however, this reduction does not equate to the loss in revenue.

1 WNH will have reduced payroll costs, as it will not fill a mid-2010 year retirement and meter reading
2 costs will reduce. Items such as postage will remain the same, since the cost can no longer be split
3 among two parties (electricity and water & sewer). WNH submits that full recovery of the Meter
4 Reading, Billing and Collection Costs should be allowed and submits that with its adherence to the
5 ARC in charging Fair Market Value, customers have enjoyed a benefit in reduced rates over an
6 extended period of time since WNH commenced providing water and sewer billing services to the
7 City of Waterloo.

8
9 As detailed below, WNH has maintained its employee complement; however, as demonstrated in
10 the sections below, the effect of an aging workforce, long trainee or apprenticeship periods and the
11 increased regulatory environment has culminated with increases in staff in 2010. Apprenticeships
12 for Powerline Workers occur over a five year period, Apprenticeships for System Control Operators
13 occur over a four to five year period, training periods for Stations Protection and Control
14 Technicians occur over a six period and training periods for Engineering Technologist/Technician
15 occur over a five year period.

16
17 WNH is experiencing what others in the industry are experiencing, an aging workforce and a high
18 volume of retirements in the foreseeable future. WNH has also experienced in 2009 and 2010,
19 employees opting to exercise early retirement options at age 55 rather than the normal retirement
20 age of 65, necessitating the need to increase the number of Powerline Worker apprentices. In
21 addition, increasing regulatory requirements [Meter Data Management Repository (MDM/R) part of
22 the Smart Meter OM&A Deferral Account 1556] for programming and reporting needs increased
23 WNH's staffing compliment.

24
25 A summary of WNH's operating costs for the 2006 Board Approved, 2006 Actual, 2007 Actual,
26 2008 Actual, 2009 Actual, 2010 Bridge Year and the 2011 Test Year, including the determination of
27 the variance amount for analysis, in accordance with the Filing Requirements, is provided in Table
28 4-1 below.

29
30 Note that the Cost of Power is not included in Distribution Expenses in Table 4-1 but rather is used
31 for the Working Capital calculation.

1 Table 4-1 does not include Accounts 6005 and 6035 Interest Expense and Capital Tax amounts
2 that are included in Table 6-5 of Exhibit 6 – Calculation of Revenue Deficiency.

3 In recording its costs, WNH follows the OEB's Accounting Procedures Handbook (the "APH") in
4 distinguishing work performed between Operations and Maintenance. Detailed information with
5 respect to the OM&A costs and variances, arranged by USoA account, is provided in Table 4-5.
6

7 The variance used to determine the OM&A accounts requiring analysis has been prescribed by the
8 Filing Requirements as 0.5% of total distribution expenses including PILs, which is calculated at
9 \$144,903 (see Table 4-2). WNH has adopted a variance analysis threshold of \$75,000 for
10 Operating Costs, which is approximately one-half of the materiality threshold required.
11

12 WNH has not adjusted its 2010 OM&A Bridge Year Costs for the impacts of the Harmonized Sales
13 Tax (HST) which is effective July 1, 2010. As a result of the March 25, 2010 Board Decision EB-
14 2009-0210 on WNH's May 1, 2010 distribution rate application, WNH is required to record the
15 incremental input tax credit (ITC) it receives on distribution revenue requirement items that were
16 previously subject to PST and become subject to HST into the deferral account 1592 (PILs and Tax
17 Variances, Sub-account HST/OVAT Input Tax Credits (ITCs). WNH expects that 50% of the
18 confirmed balances in this account will be returned to the ratepayers in the future.
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1 WNH has reviewed each line item in its 2011 OM&A Test Year Costs and adjusted for impacts of
2 the HST. The impact resulted in a reduction of OM&A by \$72,970. These impacts include removal
3 of any Provincial Sales Tax (PST) that had been included in the budgeted cost where the PST
4 portion of the HST is recoverable by WNH as an input tax credit. WNH notes that as a company
5 with sales in excess of \$10,000,000 it is subject to input tax credit (ITC) restrictions. These
6 restrictions include non-recovery of the PST portion of the HST on energy costs (not IESO energy
7 costs), on telecommunication costs (excluding 1-800 numbers and internet charges), on certain
8 costs for road vehicles weighing less than 3,000 kilograms, and on costs for meals and
9 entertainment.

10
11 WNH notes that where expenses previously included PST that is now fully recoverable through
12 HST, costs will be reduced.

13
14 However, with the ITC restrictions above, some costs that previously were not subject to PST are
15 now subject to HST, and the PST portion of the HST is not recoverable. The net effect of this
16 restriction is that it adds costs to our business. This is not a material amount in this filing.

17
18 In addition, some costs previously did not attract PST (i.e. audit fees), thus, the charging of HST is
19 simply a pass-through, and there is no impact to the OM&A costs as it is no different than when the
20 Goods & Services Tax (GST) only was charged.

21
22 This application has been filed in accordance with Canadian Generally Accepted Accounting
23 Principles (CGAAP) as allowed for in the Board's July 28, 2009 EB-2008-0408 *Report of the Board:*
24 *Transition to International Financial Reporting Standards*. The Filing Requirements for Rate
25 Applications Section states "The Board will require electricity distributors filing for 2011 rates to
26 provide the required years, the 2010 bridge year and the 2011 forecasts in CGAAP based format.
27 An electricity distributor may choose to present modified IFRS based forecasts for 2010 and 2011, if
28 the distributor prefers to have rates set on the basis of modified IFRS."

1 WNH has chosen to provide the required years, the 2010 bridge year and the 2011 forecast in
2 CGAAP based format. The CGAAP based format extends itself to all costs in this application,
3 including Rate Base, Depreciation and OM&A Costs and is prepared under the same CGAAP basis
4 that its audited financial statements are prepared under. WNH submits that the application of the
5 format is not severable, an example of which is that capitalization of direct and indirect costs
6 (overheads) cannot be on a CGAAP basis, while depreciation rates are subject to the new IFRS
7 componentization rules. WNH notes that the Board's letter of April 30, 2010 "*Depreciation Study for*
8 *Electricity Distributors (EB-2010-0178) – Transition to International Financial Reporting Standards*
9 *("IFRS")* clearly defines the depreciation study, and any changes as a result of the application of the
10 study, under the realm of IFRS.

11
12 WNH is not submitting an updated depreciation study and thus, has adhered to the depreciation
13 rates contained in the 2006 EDR Handbook, Appendix B.

14
15 WNH has one annual donation which is paid to Waterloo Regional Energy Assistance, an
16 organization that assists customers pay their energy bills. This expense is reflected in USoA 5410
17 and the donation forecasted in 2011 is \$10,000. As this cost is allowable as a distribution expense
18 under Board guidelines, WNH has included it in USoA 5410 Community Relations –Sundry, it is not
19 included in USoA 6205 Donations.
20

Table 4-1 - Summary of Operating Costs (OEB Appendix 2-E)

OM&A Expenses	2006 Board Approved	2006 Actual	Variance Board Approved to Actual	2007 Actual	Variance 2006 Actual to 2007 Actual	2008 Actual	Variance 2007 Actual to 2008 Actual	2009 Actual	Variance 2008 Actual to 2009 Actual	2010 Bridge	Variance 2009 Actual to 2010 Bridge	2011 Test	Variance 2010 Bridge to 2011 Test
Operation	3,479,237	3,079,565	(399,672)	3,380,262	300,697	3,638,282	258,020	3,473,986	(164,297)	3,480,071	6,085	3,877,534	397,463
Maintenance	1,565,312	1,719,190	153,878	1,523,299	(195,891)	1,730,289	206,990	1,384,651	(345,637)	1,564,256	179,605	1,559,180	(5,076)
Billing and Collections	1,643,292	1,362,238	(281,054)	1,472,667	110,429	1,595,556	122,890	1,599,224	3,668	2,179,495	580,271	2,188,939	9,444
Community Relations	192,345	582,943	390,598	310,784	(272,158)	119,696	(191,088)	121,619	1,923	221,160	99,541	246,777	25,617
Administrative and General Expenses	1,848,383	1,780,756	(67,627)	2,006,595	225,840	1,857,875	(148,720)	2,223,826	365,951	2,363,101	139,275	2,311,407	(51,694)
Total OM&A Expenses	8,728,569	8,524,692	(203,877)	8,693,608	168,917	8,941,699	248,091	8,803,306	(138,393)	9,808,083	1,004,777	10,183,838	375,755
Variance from Previous Year			(203,877)		168,917		248,091		(138,393)		1,004,777		375,755
Percent Change (Year over Year)			-2.34%		1.98%		2.85%		-1.55%		11.41%		3.83%
Percent Change Test Year vs Most Current Actuals (2011 vs. 2009)												15.68%	
Percent Change Test Year vs Last Board Approved Rebasing Year (2011 vs. 2006 Approved)												16.67%	
Simple Average of Variance % for All Actual Years Check Calculation		3.38%											
Compound Annual Growth Rate for Actual Years		1.08%											
Inflation Rate		2.1%		1.9%		2.1%		2.3%		1.3%		2.0%	

Table 4-2
Base Revenue Requirement & Variance Calculation

Service Revenue Requirement (from Revenue Deficiency Calculation)	30,036,603
Less Revenue Offsets	(1,055,963)
Base Revenue Requirement	28,980,640
Allocated to:	
Low Voltage Wheeling Costs	165,000
Directly Assigned CDM	-
Other	28,815,640
Total	28,980,640

Variance Calculation .5% of Distribution Revenue Requirement

\$ 144,903

WNH has selected a materiality factor of \$75,000 in its variance analysis of OM&A, which is approximately one-half of the variance calculation above.

OM&A COSTS:

OM&A costs in this Exhibit represent WNH's asset maintenance activity and customer service activity to meet public and employee safety objectives, to comply with the Distribution System Code, environmental requirements and regulatory direction, and to maintain distribution business service quality and reliability at targeted performance levels. OM&A costs also include costs to provide services to customers connected to WNH's distribution system, and meeting the requirements of the OEB's Standard Supply Service Code and Retail Settlement Code.

The proposed OM&A cost expenditures for the 2011 Test Year are the result of a business planning and work priority setting process that ensures that the most appropriate, cost effective solutions are put in place.

WNH is proposing recovery of 2011 Test Year OM&A costs, including Amortization, but excluding PILs and Interest, totaling \$18,000,168.

OM&A Budgeting Process Used by WNH

The operating budget is prepared annually by Management and is reviewed and approved by the WNH's Board of Directors. The budget is prepared and approved before the start of each fiscal year.

Operating Work Plans

WNH believes in an all inclusive budgeting process. Each department Supervisor and Manager provides input for the preparation of the departmental budget. The following directives are provided to each supervisor and manager:

Expenses for all department budgets are built from the bottom up using previous year actual, current year forecast and current year budget as reference points;

- Review the staffing requirements and outline any changes;

- Available productive hours by employee and the projected benefit costs are provided by the Finance Department;
- Significant variances in spending from prior years must be explained and documented;

All departments budget employees between individual capital projects and operating expenses. Managers determine if a labour shortfall is projected to meet the budgeted workload and if the shortfall can be covered by third party contractors. Regular time, overtime and account distribution are projected considering previous year's actual and the current year's expected workload.

Cost Drivers

WNH has identified the incremental OM&A cost drivers in the preparation of this application, which are detailed in Table 4-3. While there are many cost drivers, certain items are significant enough to warrant special comment. It should be noted that WNH's cost drivers have exceeded the actual OM&A cost increases year over year and it is not possible for Table 4-3 to balance completely for each years OM&A without detailing every expense or credit. The variance has been identified in Table 4-3. Successful efforts at cost containment have allowed WNH to keep its OM&A costs under control. Costs increased in 2010 due to the cessation of water and sewer billings, increased activity in depreciated pole inspection and replacement, and increased activity in load break switch maintenance programs.

OM&A Costs Table

Table 4-5 provides details of WNH's OM&A costs for the 2005 Actual, 2006 Actual, 2007 Actual, 2008 Actual, 2009 Actual, 2010 Bridge and the 2011 Test Year including the determination of the variance amount for analysis, in accordance with the Filing Requirements. Note that Table 4-5 below does not include account 6110 - Income Tax Expenses (PILS), nor does it include account 5705 - Amortization Expense.

Table 4-3
OM&A Incremental Cost Driver Table

OM&A	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Bridge	2011 Test
Opening Balance	7,731,984	8,555,626	8,693,608	8,941,699	8,803,306	9,867,005
OMERS	197,500	132,450	11,622	(17,980)	101,009	34,152
CDM Activities	337,273	(181,403)	(180,232)	5,145	19,152	-
Inflationary Payroll Increases	138,895	168,285	162,405	153,840	160,579	157,850
Other Payroll Changes	74,529	16,765	310,667	31,989	148,103	148,262
Inflation (Labour Removed)	85,626	72,253	76,367	97,936	61,142	91,097
Increase (Decrease) in Bad Debts	(56,939)	77,911	165,683	(105,051)	(89,953)	-
Adjustment of Pension Expense to 1508	(258,054)					
Administrative Transfer Credit	96,538	158,050	(113,603)	86,804	(8,202)	(114,921)
Increase (Decrease) in Station Building & Fixture Expense	140,822					
Increase (Decrease) in TS Equipment Expense		(132,637)		(106,304)		
(Decrease) in Outside Services Purchased		(83,837)				
(Decrease) in Maintenance Supervision and Engineering		(189,322)				
Increase (Decrease) in Tree Trimming Activities		101,730		(105,159)		
(Decrease) Increase in Meter Expense			(88,311)	(85,932)		192,081
Decrease in Poles, Towers & Fixtures Maintenance				(79,722)		
Cessation of Water & Sewer Billing					665,223	(28,778)
Benefit Increases					65,990	
HST Impact of Reduction of Costs						(72,970)
Rebasing Regulatory Expense						40,000
Other Changes	67,451	(2,262)	(96,508)	(13,958)	(59,344)	(109,709)
Closing Balance	8,555,626	8,693,608	8,941,699	8,803,306	9,867,005	10,204,069

Incremental Cost Drivers

OMERS

OMERS costs for 2005 were NIL due to the reclassification to USoA account 1508. Beginning May 1, 2006, OMERS costs were once again included in WNH's distribution rates and the OM&A portion of OMERS was \$187,531.

OMERS costs have continued to rise each year since 2006, however, the portion that is allocated to OM&A versus Capital fluctuates on a year to year basis depending on the allocation of labour required, and thus, the incremental OM&A impact may vary from year to year. In 2009, the allocation of expenses to OM&A decreased to 56.7% from the 63.9% OM&A portion of costs in 2008, thus, contributing to the decrease of (\$64,845) in 2009.

For the years 2010 and 2011, WNH initially estimated rates of 6.4% for earnings below the YMPE (yearly maximum pensionable earnings) and 9.7% for earnings above the YMPE, however, with the recent rate increase announced by OMERS, WNH increased the budgeted amount by \$85,000, of which the OM&A portion is \$51,500 and \$54,300 for 2010 and 2011 respectively. The increase in staff and the increased OMERS rates also contributed to the incremental OM&A expense of \$105,374 in 2010.

CDM Activities

In 2006 WNH incurred its third-tranche CDM costs in the amount of \$387,338 which was \$337,273 higher than the previous year's spending of \$50,065. In 2007 WNH incurred \$205,935 in third-tranche CDM costs which was a (\$181,403) decrease from 2006. In 2008 WNH incurred \$25,703 for all CDM activities undertaken by WNH which was a (\$180,232) decrease in spending from 2007.

WNH continues to run Conservation programs on behalf of the Ontario Power Authority.

Inflationary Payroll Increases

WNH's employees are represented by a Union and a collective agreement is in place setting the economic increase each unionized employee is to receive.

The economic increases, effective April 1 of each year, were 3.0%, 3.5%, 3.3% and 3.3% for 2006, 2007, 2008 and 2009 respectively. It has been calculated that approximately 64% of all labour costs run through OM&A in 2006 (and this percentage was applied in 2007 and 2008) and 57% of all labour costs run through OM&A in 2009. Based on the labour costs of the previous year, WNH estimates that the incremental cost of each year's increase was as follows:

- 2006 - \$138,895
- 2007 - \$168,285
- 2008 - \$162,405
- 2009 - \$153,840

The previous collective agreement with WNH's union expired March 31, 2010. WNH reached a new agreement with its Union in July 2010. WNH has used the agreement's 3% increase in its incremental payroll in 2010 and 2011. WNH has estimated the split between capital and OM&A will be 61% OM&A in 2010 and 64% OM&A in 2011. This split has been factored into estimated inflationary labour cost increases for 2010 and 2011 as follows:

- 2010 - \$160,579
- 2011 - \$157,850

Other Payroll Increases

WNH has maintained its employee complement; however, as demonstrated in the sections below, the effect of an aging workforce, long trainee or apprenticeship periods and the increased regulatory environment has culminated with increases in staff in 2010. Apprenticeships for Powerline Workers occur over a five year period, Apprenticeships for System Control Operators occur over a four to five year period, training periods for Stations Protection and Control occur over a six year period and training periods for Engineering Technologist/Technician occur over a five year period.

WNH is experiencing what others in the industry are experiencing, an aging workforce and a high volume of retirements in the foreseeable future. WNH has been rebuilding the complement of its System Control Operators. Labour costs will increase through 2010 to 2012 as apprentices progress through increasing levels of experience and wage rates to become Journeyman System Control Operators. WNH has also experienced in 2009 and 2010, a number of retirements of its powerline workers, necessitating the need to increase the number of apprenticeship powerline worker apprentices.

The increase in Other Payroll Increases is primarily attributable to termination allowances incurred in the year.

Inflation

After removal of inflationary costs due to labour increases, WNH has estimated inflationary increases for its OM&A below. The 2006 to 2010 are the inflationary percentages used in previous rate applications approved by the Board. The 2011's percentage is 2.0% estimated by WNH. For the purposes of this cost driver, total OM&A from Table 4-3 has been reduced by total labour costs for the year and the remaining amount multiplied by the inflation factor.

2006 – 2.1%	(EB-2005-0448)
2007 – 1.9%	(EB-2007-0585)
2008 – 2.1%	(EB-2007-0829)
2009 – 2.3%	(EB-2008-0216)
2010 – 1.3%	(EB-2009-0210)
2011 – 2.0%	

Bad Debts Expense

As demonstrated in Table 4-3, Bad Debts can vary from year to year; they are strongly dependent on the economic environment.

In 2007 Bad Debts expense was \$129,321, an increase of \$77,911 over 2006, following the write-off of a Miscellaneous Accounts Receivable of \$30,000.

In 2008, the downturn in the economy resulted in Bad Debts expense of \$295,004, an increase of \$165,683 over 2007. Bankruptcies in 2009 from 4 General Service Customers totaled approximately \$175,000.

In 2009 the Bad Debts expense of \$189,953 was a decrease of (\$105,051) over 2008, due to improved economic conditions.

WNH expects that its Bad Debts expense will drop to its pre-recession levels in 2010 and 2011 and has, thus, decreased its Bad debt expense to \$100,000 per annum, which is a decrease of (\$89,953) in 2010 over 2009.

Pension Expense

WNH transferred \$258,054 of its Pension Costs to USoA 1508 Other Regulator Assets – Sub-account Pension Contributions. As per Board instructions, pension costs for January 1, 2005 to April 30, 2006 may be tracked in a variance account to reflect the fact that rates at that time did not include pension expense, as OMERS had a premium holiday at the times the rates were set.

Administrative Credit Transfer

WNH recovers some administration costs on its recoverable activities (subdivision developments, damage claims and recoverable work), thus, the level of recovery varies with the level of recoverable activities. The level of variability is reflected below:

Administrative Expense Transferred - Credit							
	2006 EDR	2006	2007	2008	2009	2010	2011
Administrative Expense Transferred - Credit	(604,370)	(507,832)	(349,782)	(463,385)	(376,581)	(384,783)	(499,704)
Increase (decrease) over Previous Year		96,538	158,050	(113,603)	86,804	(8,202)	(114,921)

Station Building & Fixture Expense

The increase in costs in 2006 of \$140,822 primarily reflects increased activity in the inspection of Municipal Substations of \$62,000, an increase in TS and MS insurance of \$48,000 and an increase in building costs re-allocated to this department of \$14,000.

TS Equipment Expenses

The nature of the operation and maintenance of transformer station equipment is in itself “lumpy”. As reference in Table 4 *Condition Based Maintenance Activities and Intervals* in the Asset Management Strategy, the inspection requirements vary in time frames. In addition with these large assets, TS maintenance requirements can vary from year to year. 2007 was a year that less maintenance was required to the TS’ than what was required in 2006, resulting in a (\$132,637) decrease. Similarly, in 2009, a period in which major capital rebuilding of one of the TS’ occurred, less maintenance was required than in 2008, resulting in a (\$106,304) decrease.

Outside Services Purchased

In 2006, WNH had Outside Services Purchased costs of \$177,884, primarily due to legal expenses and a Management Job Evaluation Project. In 2007 the Outside Services Purchased costs was \$94,047, thus, resulting in a decrease of (\$83,837) in 2007 over 2006.

Maintenance Supervision and Engineering

In 2007, WNH commenced allocating Operating and Maintenance Supervision and Administration costs directly to the specific work activities it related to, rather than captured solely in one account. WNH submits that this more accurately reflects the allocation of costs.

Tree Trimming Activities

Forestry maintenance work rotates on a cycle, which differs between every three years for the urban area and every five years for the rural areas.

The increase in 2007 of \$101,730 is a result of contracted services covering a larger area and scope than 2006, as well as a reduction in demand for tree trimming services from our customers.

The decrease in 2009 of (\$105,159) is a result of contracted services covering a smaller area and scope than 2008.

Meter Expense

In 2008, WNH became authorized by regulation (O. Reg. 427/06) to conduct Smart Meter activities. At this time, meter activities were focused on the installation of new Smart Meters, resulting in a decrease in meter maintenance expense of (\$88,311) and (\$85,932) in 2008 and 2009 respectively over the previous year's expenses.

WNH targets the complete installation of its Smart Meters by the end of 2010 and will focus its maintenance attention in 2011 on its non-smart meters, resulting in a increase of \$192,081 over 2010.

Poles, Towers & Fixtures Maintenance

During the variance analysis investigation it was discovered that charges in 2006 through 2008 charged to this maintenance account in fact should have been charged to capital. The issue was discovered and corrected in 2009. This has resulted in a decrease of (\$79,722) in Poles, Towers & Fixtures Maintenance material costs in 2009 over 2008.

Cessation of Water & Sewer Billings

In 2010 WNH ceased providing water and sewer billing services to the City of Waterloo. WNH had recorded the revenue in USoA 4375 Non-Distribution Revenue and the related costs in USoA 4380 Non-Distribution Expenses. WNH removed the costs from Meter Reading, Billing and Collecting and transferred these to USoA 4380. As such, in 2010 and 2011, WNH will no longer have the revenue and will have a reduction in costs, however, this reduction does not equate to the loss in revenue. WNH will have reduced payroll costs, as it will not fill a mid-2010 year retirement and reduced meter reading costs. Items such as postage will remain the same; however, as the cost can no longer be split among two parties (electricity and water & sewer). A decrease of \$665,223 in 2010 has thus resulted. In 2011, the full savings of (\$28,778) for the 2010 mid-year retirement will be realized.

HST Impact of Reduction of Costs

WNH reviewed all line items of its 2011 projected distribution expenses and removed (\$72,970) in HST related savings.

Rebasing Regulatory Expense

WNH's expects to incur \$160,000 in additional expenses due to preparing this 2011 rate application. This cost has been amortized over four years, commencing in 2011 at \$40,000.

OM&A Cost per Customer and FTEE

WNH strives to maintain reliable service and succession planning to replace an aging workforce while keeping its controllable expenses in check.

Controllable expenses per customer and per full time equivalent employee (FTEE) are detailed in Table 4-4.

Table 4-4
OM&A Cost per Customer and FTEE

OM&A	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Bridge	2011 Test
Number of Customers ¹	48,787	49,552	50,472	51,084	51,544	52,004
Total OM&A	\$ 8,524,692	\$ 8,693,608	\$ 8,941,699	\$ 8,803,306	\$ 9,808,083	\$ 10,183,838
OM&A Cost per Customer	\$ 175	\$ 175	\$ 177	\$ 172	\$ 190	\$ 196
Number of FTEs ²	110.2	107.0	108.0	110.4	116.9	120.5
FTEs/Customer	0.0023	0.0022	0.0021	0.0022	0.0023	0.0023
OM&A Cost per FTEE	\$ 77,357	\$ 81,249	\$ 82,794	\$ 79,776	\$ 83,901	\$ 84,513

FTEs/Customer % Increase from Previous Year

OM&A Cost per FTEE % Increase from Previous Year

OM&A Cost per Customer % Increase from Previous Year

-4.40%	-0.91%	0.95%	4.99%	2.17%
5.03%	1.90%	-3.64%	5.17%	0.73%
0.41%	0.98%	-2.73%	10.42%	2.91%

¹ WNH has used # customers, not the # of connections for Street Lighting and USL; Customer Numbers are at year-end or projected in Exhibit 3 for 2010 and 2011

² 2007 differs from the 2007 2.1.5 Filing, an incorrect headcount was input at that time and has been corrected above

OM&A Expense Table

Table 4-5 provides detail of WNH's OM&A expenses for the 2005 Actual, 2006 Actual, 2007 Actual, 2008 Actual, 2009 Actual, the 2010 Bridge Year and the 2011 Test Year including the determination of the variance amount for analysis, in accordance with the Filing Requirements.

Table 4-5
Detailed, Account by Account, OM&A Expense Table

Distribution Expenses - Operation	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Bridge	2011 Test
5005 - Operation Supervision and Engineering	4,300	-	-	-	-	-	-
5010 - Load Dispatching	710,643	843,791	962,687	1,047,310	987,610	1,133,603	1,252,456
5012 - Station Buildings and Fixtures Expense	306,997	408,157	430,232	457,953	419,551	424,108	434,630
5014 - Transformer Station Equipment - Operation Labour	145,779	149,544	113,269	149,488	93,249	76,279	122,155
5015 - Transformer Station Equipment - Operation Supplies and Expenses	55,912	56,832	39,595	60,647	37,041	70,668	78,613
5016 - Distribution Station Equipment - Operation Labour	118,319	84,090	113,409	176,698	177,503	112,153	123,042
5017 - Distribution Station Equipment - Operation Supplies and Expenses	64,885	32,347	66,150	67,202	92,946	80,591	81,766
5020 - Overhead Distribution Lines and Feeders - Operation Labour	601,825	542,982	533,172	676,820	844,746	562,569	574,591
5025 - Overhead Distribution Lines and Feeders - Operation Supplies and Expenses	274,274	208,059	278,914	248,020	273,540	396,692	392,386
5030 - Overhead Subtransmission Feeders - Operation	-	-	-	-	-	-	-
5035 - Overhead Distribution Transformers - Operation	-	-	-	-	3,269	5,159	5,014
5040 - Underground Distribution Lines and Feeders - Operation Labour	203,006	67,455	134,662	99,684	26,768	63,775	65,092
5045 - Underground Distribution Lines and Feeders - Operation Supplies and Expenses	45,343	41,917	66,362	77,344	8,877	25,820	25,005
5050 - Underground Subtransmission Feeders - Operation	-	-	-	-	-	-	-
5055 - Underground Distribution Transformers - Operation	141	66	-	-	10,515	11,028	10,796
5060 - Street Lighting and Signal System Expense	-	-	-	-	-	-	-
5065 - Meter Expense	436,602	349,700	410,333	322,022	236,090	213,174	405,255
5070 - Customer Premises - Operation Labour	-	-	-	-	-	-	-
5075 - Customer Premises - Materials and Expenses	3,902	-	-	-	-	-	-
5085 - Miscellaneous Distribution Expense	310,178	294,626	231,479	255,094	262,281	304,452	306,733
5090 - Underground Distribution Lines and Feeders - Rental Paid	-	-	-	-	-	-	-
5095 - Overhead Distribution Lines and Feeders - Rental Paid	-	-	-	-	-	-	-
5096 - Other Rent	-	-	-	-	-	-	-
Sub-Total - Distribution Expenses - Operation	3,282,106	3,079,565	3,380,262	3,638,282	3,473,986	3,480,071	3,877,534
Distribution Expenses - Maintenance	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Bridge	2011 Test
5105 - Maintenance Supervision and Engineering	(4,300)	189,322	-	-	-	-	-
5110 - Maintenance of Structures	66,472	29,763	45,236	62,755	48,022	65,692	55,468
5112 - Maintenance of Transformer Station Equipment	58,082	114,169	35,045	110,352	83,893	78,988	36,473
5114 - Maintenance of Distribution Station Equipment	133,744	76,510	127,355	114,238	166,363	88,340	77,262
5120 - Maintenance of Poles, Towers and Fixtures	347,797	449,429	406,736	366,819	133,113	198,155	225,985
5125 - Maintenance of Overhead Conductors and Devices	193,671	134,879	158,509	159,150	248,807	312,160	322,983
5130 - Maintenance of Overhead Services	71,414	43,921	13,688	8,765	30,590	35,031	35,204
5135 - Overhead Distribution Lines and Feeders - Right of Way	520,484	448,802	550,532	535,739	430,580	440,562	445,716
5145 - Maintenance of Underground Conduit	2,376	8,037	308	-	-	-	-
5150 - Maintenance of Underground Conductors and Devices	31,496	21,615	9,953	14,970	6,645	13,964	14,012
5155 - Maintenance of Underground Services	135,614	129,060	69,693	156,402	140,929	174,484	174,972
5160 - Maintenance of Line Transformers	70,364	69,840	87,650	174,224	86,876	146,324	160,395
5165 - Maintenance of Street Lighting and Signal Systems	-	-	-	-	-	-	-
5170 - Sentinel Lights - Labour	-	-	-	-	-	-	-
5172 - Sentinel Lights - Materials and Expenses	-	-	-	-	-	-	-
5175 - Maintenance of Meters	4,466	3,843	18,596	26,874	8,833	10,556	10,711
5178 - Customer Installations Expenses - Leased Property	-	-	-	-	-	-	-
5195 - Maintenance of Other Installations on Customer Premises	-	-	-	-	-	-	-
Sub-Total - Distribution Expenses - Maintenance	1,631,681	1,719,190	1,523,299	1,730,289	1,384,651	1,564,256	1,559,180

Table 4-5 Detailed, Account by Account, OM&A Expense Table

Billing and Collecting	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Bridge	2011 Test
5305 - Supervision	69,642	91,687	116,569	106,573	113,434	111,069	117,462
5310 - Meter Reading Expense	256,546	285,926	246,673	241,803	259,260	289,676	260,318
5315 - Customer Billing	652,878	696,308	727,243	668,799	726,373	1,155,109	1,207,472
5320 - Collecting	293,561	329,214	339,961	347,902	384,899	601,141	581,187
5325 - Collecting - Cash Over and Short	98	13	81	2,393	253	-	-
5330 - Collection Charges	(56,496)	(92,320)	(87,180)	(66,917)	(74,948)	(77,500)	(77,500)
5335 - Bad Debt Expense	107,989	51,410	129,321	295,004	189,953	100,000	100,000
5340 - Miscellaneous Customer Accounts Expenses	-	-	-	-	-	-	-
Sub-Total - Billing and Collecting	1,324,218	1,362,238	1,472,667	1,595,556	1,599,224	2,179,495	2,188,939
Community Relations	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Bridge	2011 Test
5405 - Supervision	58,551	38,688	-	-	-	-	-
5410 - Community Relations - Sundry	123,491	129,582	80,898	65,692	66,458	138,071	163,663
5415 - Energy Conservation	50,065	387,338	205,935	25,703	30,847	50,000	50,000
5420 - Community Safety Program	21,696	27,335	23,951	28,302	24,314	33,089	33,114
5425 - Miscellaneous Customer Service and Informational Expenses	-	-	-	-	-	-	-
- Sales Expenses	-	-	-	-	-	-	-
5505 - Supervision	-	-	-	-	-	-	-
5510 - Demonstrating and Selling Expense	-	-	-	-	-	-	-
5515 - Advertising Expense	-	-	-	-	-	-	-
5520 - Miscellaneous Sales Expense	-	-	-	-	-	-	-
Sub-Total - Billing and Collecting	253,802	582,943	310,784	119,696	121,619	221,160	246,777
Administrative and General Expenses	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Bridge	2011 Test
5605 - Executive Salaries and Expenses	519,160	515,160	490,417	486,500	474,131	460,707	464,036
5610 - Management Salaries and Expenses	-	-	-	-	-	-	-
5615 - General Administrative Salaries and Expenses	1,174,617	1,149,125	1,011,759	1,005,375	1,274,834	1,431,285	1,453,695
5620 - Office Supplies and Expenses	-	-	-	-	-	-	-
5625 - Administrative Expense Transferred-Credit	(734,909)	(507,832)	(349,783)	(463,386)	(376,582)	(384,784)	(499,705)
5630 - Outside Services Employed	106,223	177,884	94,047	83,113	121,337	90,300	90,300
5635 - Property Insurance	-	-	-	-	-	-	-
5640 - Injuries and Damages	258,434	116,780	142,929	135,898	109,923	113,850	115,300
5645 - Employee Pensions and Benefits	(409,153)	(203,942)	-	-	-	-	-
5650 - Franchise Requirements	-	-	-	-	-	-	-
5655 - Regulatory Expenses	73,442	312,703	398,144	377,610	393,922	431,430	471,686
5660 - General Advertising Expenses	-	-	-	-	-	-	-
5665 - Miscellaneous Expenses	252,362	220,879	219,082	232,766	226,261	220,313	216,095
5670 - Rent	-	-	-	-	-	-	-
5675 - Maintenance of General Plant	-	-	-	-	-	-	-
5680 - Electrical Safety Authority Fees	-	-	-	-	-	-	-
5685 - Independent Market Operator Fees and Penalties	-	-	-	-	-	-	-
5695 - OM&A Contra Account	-	-	-	-	-	-	-
Sub-Total - Administrative and General Expenses	1,240,177	1,780,756	2,006,595	1,857,875	2,223,826	2,363,101	2,311,407
Total - OM&A Expenses	7,731,984	8,524,692	8,693,608	8,941,699	8,803,306	9,808,083	10,183,838

VARIANCE ANALYSIS ON OM&A COSTS:

As mentioned above, the dollar amount chosen by WNH that triggers variance analysis is \$75,000.

In accordance with the Board's Minimum Filing Guidelines, WNH has detailed in Table 4-6A the variances between the 2011 Test Year and the 2006 Actual Year and in Table 4-6B the variance between the 2011 Test Year and the 2009 Actual Year. WNH has reviewed the variance of each OEB USoA account by these years to determine where explanations are necessary. An identification reference has been assigned for each variance exceeding the threshold and an explanation of each variance is presented in the following section.

Table 4-6A
Variance Analysis 2011 Test Year vs. 2006 Actual Year

Distribution Expenses - Operation		2006 Actual	2011 Test	Variance (\$)	Variance (%)
5005	- Operation Supervision and Engineering	-	-	-	-
5010	- Load Dispatching	843,791	1,252,456	408,664	48%
5012	- Station Buildings and Fixtures Expense	408,157	434,630	26,474	6%
5014	- Transformer Station Equipment - Operation Labour	149,544	122,155	(27,389)	-18%
5015	- Transformer Station Equipment - Operation Supplies and Expenses	56,832	78,613	21,781	38%
5016	- Distribution Station Equipment - Operation Labour	84,090	123,042	38,952	46%
5017	- Distribution Station Equipment - Operation Supplies and Expenses	32,347	81,766	49,419	153%
5020	- Overhead Distribution Lines and Feeders - Operation Labour	542,982	574,591	31,610	6%
5025	- Overhead Distribution Lines and Feeders - Operation Supplies and Expenses	208,059	392,386	184,327	89%
5030	- Overhead Subtransmission Feeders - Operation	-	-	-	0%
5035	- Overhead Distribution Transformers - Operation	-	5,014	5,014	0%
5040	- Underground Distribution Lines and Feeders - Operation Labour	67,455	65,092	(2,363)	-4%
5045	- Underground Distribution Lines and Feeders - Operation Supplies and Expenses	41,917	25,005	(16,912)	-40%
5050	- Underground Subtransmission Feeders - Operation	-	-	-	0%
5055	- Underground Distribution Transformers - Operation	66	10,796	10,730	16305%
5060	- Street Lighting and Signal System Expense	-	-	-	0%
5065	- Meter Expense	349,700	405,255	55,555	16%
5070	- Customer Premises - Operation Labour	-	-	-	0%
5075	- Customer Premises - Materials and Expenses	-	-	-	0%
5085	- Miscellaneous Distribution Expense	294,626	306,733	12,107	4%
5090	- Underground Distribution Lines and Feeders - Rental Paid	-	-	-	0%
5095	- Overhead Distribution Lines and Feeders - Rental Paid	-	-	-	0%
5096	- Other Rent	-	-	-	0%
Sub-Total - Distribution Expenses - Operation		3,079,565	3,877,534	797,969	25.9%
Variance >WNH's materiality of \$75,000 for OM&A					

Table 4-6A
Variance Analysis 2011 Test Year vs. 2006 Actual Year

Distribution Expenses - Maintenance		2006 Actual	2011 Test	Variance (\$)	Variance (%)
5105	- Maintenance Supervision and Engineering	189,322	-	(189,322)	-100%
5110	- Maintenance of Structures	29,763	55,468	25,705	86%
5112	- Maintenance of Transformer Station Equipment	114,169	36,473	(77,696)	-68%
5114	- Maintenance of Distribution Station Equipment	76,510	77,262	752	1%
5120	- Maintenance of Poles, Towers and Fixtures	449,429	225,985	(223,444)	-50%
5125	- Maintenance of Overhead Conductors and Devices	134,879	322,983	188,104	139%
5130	- Maintenance of Overhead Services	43,921	35,204	(8,717)	-20%
5135	- Overhead Distribution Lines and Feeders - Right of Way	448,802	445,716	(3,086)	-1%
5145	- Maintenance of Underground Conduit	8,037	-	(8,037)	-100%
5150	- Maintenance of Underground Conductors and Devices	21,615	14,012	(7,603)	-35%
5155	- Maintenance of Underground Services	129,060	174,972	45,912	36%
5160	- Maintenance of Line Transformers	69,840	160,395	90,555	130%
5165	- Maintenance of Street Lighting and Signal Systems	-	-	-	0%
5170	- Sentinel Lights - Labour	-	-	-	0%
5172	- Sentinel Lights - Materials and Expenses	-	-	-	0%
5175	- Maintenance of Meters	3,843	10,711	6,868	179%
5178	- Customer Installations Expenses - Leased Property	-	-	-	0%
5195	- Maintenance of Other Installations on Customer Premises	-	-	-	0%
Sub-Total - Distribution Expenses - Maintenance		1,719,190	1,559,180	(160,010)	-9.3%
Billing and Collecting		2006 Actual	2011 Test	Variance (\$)	Variance (%)
5305	- Supervision	91,687	117,462	25,775	28%
5310	- Meter Reading Expense	285,926	260,318	(25,608)	-9%
5315	- Customer Billing	696,308	1,207,472	511,164	73%
5320	- Collecting	329,214	581,187	251,973	77%
5325	- Collecting - Cash Over and Short	13	-	(13)	-100%
5330	- Collection Charges	(92,320)	(77,500)	14,820	-16%
5335	- Bad Debt Expense	51,410	100,000	48,590	95%
5340	- Miscellaneous Customer Accounts Expenses	-	-	-	0%
Sub-Total - Billing and Collecting		1,362,238	2,188,939	826,701	60.7%
Variance >WNH's materiality of \$75,000 for OM&A					

Table 4-6A
Variance Analysis 2011 Test Year vs. 2006 Actual Year

Community Relations		2006 Actual	2011 Test	Variance (\$)	Variance (%)
5405	- Supervision	38,688	-	(38,688)	-100%
5410	- Community Relations - Sundry	129,582	163,663	34,081	26%
5415	- Energy Conservation	387,338	50,000	(337,338)	-87%
5420	- Community Safety Program	27,335	33,114	5,779	21%
5425	- Miscellaneous Customer Service and Informational Expenses	-	-	-	0%
	- Sales Expenses	-	-	-	-
5505	- Supervision	-	-	-	0%
5510	- Demonstrating and Selling Expense	-	-	-	0%
5515	- Advertising Expense	-	-	-	0%
5520	- Miscellaneous Sales Expense	-	-	-	0%
Sub-Total - Billing and Collecting		582,943	246,777	(336,165)	-57.7%
Administrative and General Expenses		2006 Actual	2011 Test	Variance (\$)	Variance (%)
5605	- Executive Salaries and Expenses	515,160	464,036	(51,124)	-10%
5610	- Management Salaries and Expenses	-	-	-	0%
5615	- General Administrative Salaries and Expenses	1,149,125	1,453,695	304,571	27%
5620	- Office Supplies and Expenses	-	-	-	0%
5625	- Administrative Expense Transferred-Credit	(507,832)	(499,705)	8,127	-2%
5630	- Outside Services Employed	177,884	90,300	(87,584)	-49%
5635	- Property Insurance	-	-	-	0%
5640	- Injuries and Damages	116,780	115,300	(1,480)	-1%
5645	- Employee Pensions and Benefits	(203,942)	-	203,942	-100%
5650	- Franchise Requirements	-	-	-	0%
5655	- Regulatory Expenses	312,703	471,686	158,983	51%
5660	- General Advertising Expenses	-	-	-	0%
5665	- Miscellaneous Expenses	220,879	216,095	(4,784)	-2%
5670	- Rent	-	-	-	0%
5675	- Maintenance of General Plant	-	-	-	0%
5680	- Electrical Safety Authority Fees	-	-	-	0%
5685	- Independent Market Operator Fees and Penalties	-	-	-	0%
5695	- OM&A Contra Account	-	-	-	0%
Sub-Total - Administrative and General Expenses		1,780,756	2,311,407	530,651	29.8%
Total - OM&A Expenses		8,524,692	10,183,838	1,659,146	19.5%

Variance >WNH's materiality of \$75,000 for OM&A

Table 4-6B
Variance Analysis 2011 Test Year vs. 2009 Actual Year

Distribution Expenses - Operation		2009 Actual	2011 Test	Variance (\$)	Variance (%)
5005	- Operation Supervision and Engineering	-	-	-	-
5010	- Load Dispatching	987,610	1,252,456	264,846	27%
5012	- Station Buildings and Fixtures Expense	419,551	434,630	15,079	4%
5014	- Transformer Station Equipment - Operation Labour	93,249	122,155	28,906	31%
5015	- Transformer Station Equipment - Operation Supplies and Expenses	37,041	78,613	41,572	112%
5016	- Distribution Station Equipment - Operation Labour	177,503	123,042	(54,461)	-31%
5017	- Distribution Station Equipment - Operation Supplies and Expenses	92,946	81,766	(11,180)	-12%
5020	- Overhead Distribution Lines and Feeders - Operation Labour	844,746	574,591	(270,155)	-32%
5025	- Overhead Distribution Lines and Feeders - Operation Supplies and Expenses	273,540	392,386	118,846	43%
5030	- Overhead Subtransmission Feeders - Operation	-	-	-	0%
5035	- Overhead Distribution Transformers - Operation	3,269	5,014	1,745	53%
5040	- Underground Distribution Lines and Feeders - Operation Labour	26,768	65,092	38,324	143%
5045	- Underground Distribution Lines and Feeders - Operation Supplies and Expenses	8,877	25,005	16,128	182%
5050	- Underground Subtransmission Feeders - Operation	-	-	-	0%
5055	- Underground Distribution Transformers - Operation	10,515	10,796	281	3%
5060	- Street Lighting and Signal System Expense	-	-	-	0%
5065	- Meter Expense	236,090	405,255	169,165	72%
5070	- Customer Premises - Operation Labour	-	-	-	0%
5075	- Customer Premises - Materials and Expenses	-	-	-	0%
5085	- Miscellaneous Distribution Expense	262,281	306,733	44,452	17%
5090	- Underground Distribution Lines and Feeders - Rental Paid	-	-	-	0%
5095	- Overhead Distribution Lines and Feeders - Rental Paid	-	-	-	0%
5096	- Other Rent	-	-	-	0%
Sub-Total - Distribution Expenses - Operation		3,473,986	3,877,534	403,549	11.6%
Variance >WNH's materiality of \$75,000 for OM&A					

Table 4-6B
Variance Analysis 2011 Test Year vs. 2009 Actual Year

Distribution Expenses - Maintenance		2009 Actual	2011 Test	Variance (\$)	Variance (%)
5105	- Maintenance Supervision and Engineering	-	-	-	0%
5110	- Maintenance of Structures	48,022	55,468	7,446	16%
5112	- Maintenance of Transformer Station Equipment	83,893	36,473	(47,420)	-57%
5114	- Maintenance of Distribution Station Equipment	166,363	77,262	(89,101)	-54%
5120	- Maintenance of Poles, Towers and Fixtures	133,113	225,985	92,872	70%
5125	- Maintenance of Overhead Conductors and Devices	248,807	322,983	74,176	30%
5130	- Maintenance of Overhead Services	30,590	35,204	4,614	15%
5135	- Overhead Distribution Lines and Feeders - Right of Way	430,580	445,716	15,136	4%
5145	- Maintenance of Underground Conduit	-	-	-	0%
5150	- Maintenance of Underground Conductors and Devices	6,645	14,012	7,367	111%
5155	- Maintenance of Underground Services	140,929	174,972	34,043	24%
5160	- Maintenance of Line Transformers	86,876	160,395	73,519	85%
5165	- Maintenance of Street Lighting and Signal Systems	-	-	-	0%
5170	- Sentinel Lights - Labour	-	-	-	0%
5172	- Sentinel Lights - Materials and Expenses	-	-	-	0%
5175	- Maintenance of Meters	8,833	10,711	1,878	21%
5178	- Customer Installations Expenses - Leased Property	-	-	-	0%
5195	- Maintenance of Other Installations on Customer Premises	-	-	-	0%
Sub-Total - Distribution Expenses - Maintenance		1,384,651	1,559,180	174,529	12.6%
Billing and Collecting		2009 Actual	2011 Test	Variance (\$)	Variance (%)
5305	- Supervision	113,434	117,462	4,028	4%
5310	- Meter Reading Expense	259,260	260,318	1,058	0%
5315	- Customer Billing	726,373	1,207,472	481,100	66%
5320	- Collecting	384,899	581,187	196,288	51%
5325	- Collecting - Cash Over and Short	253	-	(253)	-100%
5330	- Collection Charges	(74,948)	(77,500)	(2,552)	3%
5335	- Bad Debt Expense	189,953	100,000	(89,953)	-47%
5340	- Miscellaneous Customer Accounts Expenses	-	-	-	0%
Sub-Total - Billing and Collecting		1,599,224	2,188,939	589,715	36.9%
Variance >WNH's materiality of \$75,000 for OM&A					

Table 4-6B
Variance Analysis 2011 Test Year vs. 2009 Actual Year

Community Relations		2009 Actual	2011 Test	Variance (\$)	Variance (%)
5405	- Supervision	-	-	-	0%
5410	- Community Relations - Sundry	66,458	163,663	97,205	146%
5415	- Energy Conservation	30,847	50,000	19,153	62%
5420	- Community Safety Program	24,314	33,114	8,800	36%
5425	- Miscellaneous Customer Service and Informational Expenses	-	-	-	0%
	- Sales Expenses	-	-	-	0%
5505	- Supervision	-	-	-	0%
5510	- Demonstrating and Selling Expense	-	-	-	0%
5515	- Advertising Expense	-	-	-	0%
5520	- Miscellaneous Sales Expense	-	-	-	0%
Sub-Total - Billing and Collecting		121,619	246,777	125,158	102.9%
Administrative and General Expenses		2009 Actual	2011 Test	Variance (\$)	Variance (%)
5605	- Executive Salaries and Expenses	474,131	464,036	(10,095)	-2%
5610	- Management Salaries and Expenses	-	-	-	0%
5615	- General Administrative Salaries and Expenses	1,274,834	1,453,695	178,861	14%
5620	- Office Supplies and Expenses	-	-	-	0%
5625	- Administrative Expense Transferred-Credit	(376,582)	(499,705)	(123,123)	33%
5630	- Outside Services Employed	121,337	90,300	(31,037)	-26%
5635	- Property Insurance	-	-	-	0%
5640	- Injuries and Damages	109,923	115,300	5,377	5%
5645	- Employee Pensions and Benefits	-	-	-	0%
5650	- Franchise Requirements	-	-	-	0%
5655	- Regulatory Expenses	393,922	471,686	77,764	20%
5660	- General Advertising Expenses	-	-	-	0%
5665	- Miscellaneous Expenses	226,261	216,095	(10,166)	-4%
5670	- Rent	-	-	-	0%
5675	- Maintenance of General Plant	-	-	-	0%
5680	- Electrical Safety Authority Fees	-	-	-	0%
5685	- Independent Market Operator Fees and Penalties	-	-	-	0%
5695	- OM&A Contra Account	-	-	-	0%
Sub-Total - Administrative and General Expenses		2,223,826	2,311,407	87,581	3.9%
Total - OM&A Expenses		8,803,306	10,183,838	1,380,532	15.7%

Variance >WNH's materiality of \$75,000 for OM&A

2011 TEST YEAR VERSUS 2006 ACTUAL YEAR

Ref A: 5010 - Load Dispatching

OEB Account	2006 Actual	2011 Test	Variance
5010	843,791	1,252,456	408,664

WNH has varying costs in 5010 Load Dispatching. The costs are dependent on the number of apprentices it has in its control room. An apprenticeship is a four to five year process and for a minimum of the first two years of training, an apprentice may not work alone. WNH, thus, incurs additional costs during that period for both the apprentice and the person directly supervising them. In 2006 WNH had two experienced system operators leave the organization and two apprentices were hired later in 2006, thus, not reflecting a full year's salary for either position.

WNH has hired, or will hire, three Apprentice System Operators since 2006 (2008, 2010 and 2011). The 2011 costs reflect a full year of the Apprentice System Operator hired in 2010 and an additional Apprentice System Operator to be hired in May 2011. Apprentice System Operators are hired to be trained in time to cover operators that are scheduled to retire within four years. The variance also includes wage increases as the Apprentices progress in experience to fully qualified operators.

**Ref B: 5025 - Overhead Distribution Lines and Feeders -
Operation Supplies and Expenses**

OEB Account	2006 Actual	2011 Test	Variance
5025	208,059	392,386	184,327

The primary significant costs that comprise the variance are a result of an increase in contracted services for overhead plant inspection and plant repairs of \$103,000; training of \$28,000 which is now being charged to this account and in 2006 was charged to an overhead account; Personal Protective Equipment of \$19,000 which is now being charged to this account and in 2006 was charged to an overhead account; increased rubber and fibre testing of \$43,000 as WNH has increased the consistency of our rubber testing and maintenance program; increased trucking costs \$45,000 due to increased inspection activity, offset by a decrease in material costs (\$77,000) as it had been determined that material costs were being incorrectly charged here. This issue was identified and corrected from 2009 on.

Ref C: 5105 - Maintenance Supervision and Engineering

OEB Account	2006 Actual	2011 Test	Variance
5105	189,322	-	(189,322)

In 2007, WNH commenced allocating Operating and Maintenance Supervision and Administration costs directly to the specific work activities it related to. It is no longer captured solely in one account. WNH submits that this more accurately reflects the allocation of costs.

**Ref D: 5112 - Maintenance of Transformer Station
Equipment**

OEB Account	2006 Actual	2011 Test	Variance
5112	114,169	36,473	(77,696)

The nature of the operation and maintenance of transformer station equipment is in itself “lumpy”. As reference in Table 4 *Condition Based Maintenance Activities and Intervals* in the Asset Management Strategy, the inspection requirements vary in time frames. In addition with these large assets, TS maintenance requirements can vary from year to year. 2011 is a year that less maintenance was required to the transformer stations than was required in 2006. Also two transformer stations have undergone rebuilds since 2006 which reduces maintenance in the short term.

Ref E: 5120 - Maintenance of Poles, Towers and Fixtures

OEB Account	2006 Actual	2011 Test	Variance
5120	449,429	225,985	(223,444)

During the variance analysis investigation it was discovered that labour, material and trucking charges in 2006 through 2008 charged to this maintenance account in fact should have been charged to capital. This issue was discovered in 2009 and proper treatment is reflected in 2009 through 2011.

**Ref F: 5125 - Maintenance of Overhead Conductors
and Devices**

OEB Account	2006 Actual	2011 Test	Variance
5125	134,879	322,983	188,104

In 2009 Load break maintenance activities commenced, the requirement as discussed in the Asset Management Strategy page 19. Prior to 2009, only annual preventative maintenance was completed. WNH has implemented a program to annually replace a defined number of the worst performing load break switches as this is more cost-effective and provides the greatest reliability for operation.

Ref G: 5160 - Maintenance of Line Transformers

OEB Account	2006 Actual	2011 Test	Variance
5160	69,840	160,395	90,555

During the investigation of variances it was discovered that underground transformers that were installed in 2006 and charged to maintenance of line transformers should have been charged to capital. This issue was discovered in 2009 and proper treatment is reflected in 2009 through 2011.

Ref H: 5315 - Customer Billing

OEB Account	2006 Actual	2011 Test	Variance
5315	696,308	1,207,472	511,164

Effective January 1, 2010 WNH ceased providing services to the City of Waterloo for Water and Sewer Billings. The cessation of services was initiated by the City of Waterloo and their desire to perform these services in-house

In 2006 WNH removed the costs associated with providing the service from Meter Reading, Billing and Collecting and transferred these costs to USoA 4380 (Non-Distribution Expenses). As such, in 2010 and 2011, WNH will no longer have the revenue to offset the expense. In 2006, \$322,463 in costs were transferred from USoA 5315 to USoA 4380. Most of this expense will transfer back to USoA 5315 as WNH has very few billing costs that will decrease due to the cessation of providing these services. Postage for instance will not be reduced and can no longer be shared, nor, is it anticipated that any staff savings will occur.

WNH submits that full recovery of the Meter Reading, Billing and Collection Costs should be allowed and submits that with its adherence to the ARC in charging Fair Market Value, customers have enjoyed a benefit in reduced rates over an extended period of time since WNH commenced providing water and sewer billing services to the City of Waterloo.

Additionally, increased customer service representative costs have been budgeted to handle the anticipated increase in call volume due to the introduction of Time-of-Use (TOU) billing in 2011.

Ref I: 5320 - Collections

OEB Account	2006 Actual	2011 Test	Variance
5320	329,214	581,187	251,973

Effective January 1, 2010 WNH ceased providing services to the City of Waterloo for Water and Sewer Billings. The cessation of services was initiated by the City of Waterloo and their desire to perform these services in-house

In 2006 WNH removed the costs associated with providing the service from Meter Reading, Billing and Collecting and transferred these costs to USoA 4380 (Non-Distribution Expenses). As such, in 2010 and 2011, WNH will no longer have the revenue to offset the expense. In 2006, \$168,724 in costs were transferred to USoA 4380. WNH has very few collection costs that will decrease due to the cessation of providing these services

WNH submits that full recovery of the Meter Reading, Billing and Collection Costs should be allowed and submits that with its adherence to the ARC in charging Fair Market Value, customers have enjoyed a benefit in reduced rates over an extended period of time since WNH commenced providing water and sewer billing services to the City of Waterloo.

Ref J: 5415 - Conservation

OEB Account	2006 Actual	2011 Test	Variance
5415	387,338	50,000	(337,338)

Third-Tranche CDM expenses commenced in 2005, had the peak spending in 2006 and concluded in September 2007. WNH operated its CDM Activities in conjunction with the OPA after this period.

Ref K: 5615 - General Administrative Salaries and Expenses

OEB Account	2006 Actual	2011 Test	Variance
5615	1,149,125	1,453,695	304,571

The following significant costs are primarily attributable to the variance in this account: Addition of an IT programmer and IT regular increases and progressions of \$89,000; Increase in Management and Supervisory Training of \$37,000; increase in HR Consulting of \$15,000; increase in software maintenance of \$113,000 which reflects additional maintenance on various software that were implemented including Business Intelligence/KPIs, Docova, QREP Report Writer, Lotus Notes Client with Collaboration, Fieldworker, Bsafe, Oracle Support, Websense Email Security, Linux, Websense Internet Security and many other software maintenance fees.

Ref L: 5630 - Outside Services Employed

OEB Account	2006 Actual	2011 Test	Variance
5630	177,884	90,300	(87,584)

The significant costs that primarily contribute to the variance in this account include a Management Job Evaluation Project in the amount of \$50,000 and increased legal fees in the amount of \$23,500.

Ref M: 5645 - Employee Pensions and Benefits

OEB Account	2006 Actual	2011 Test	Variance
5645	(203,942)	-	203,942

In 2006 the amount reflects the transfer of pension costs to OEB USoA 1508 Sub-Pensions as per Board instructions.

Ref N: 5655 - Regulatory Expenses

OEB Account	2006 Actual	2011 Test	Variance
5655	312,703	471,686	158,983

In July 2006 a VP of Regulatory Affairs commenced working in the Regulatory Department as WNH developed the department in response to the increased regulatory pressures. The department has grown in its requirements for internal and external resources as the requirement to respond to regulatory activity at the OEB continues to increase. Also, in 2006, the expenses were reduced by \$68,029 in an allocation of OEB Assessment Fees to the USoA 1508 Other Regulatory Assets, Sub-account OEB Cost Assessment, for costs up to April 30, 2006, as per Board instructions.

2011 TEST YEAR VERSUS 2009 ACTUAL YEAR

Ref A: 5010 - Load Dispatching

OEB Account	2009 Actual	2011 Test	Variance
5010	987,610	1,252,456	264,846

WNH has varying costs in 5010 Load Dispatching. The costs are dependent on the number of apprentices it has in its control room. An apprenticeship is a four to five year process and for a minimum of the first two years of training, an apprentice may not work alone. WNH thus, incurs additional costs during that period for both the apprentice and the person directly supervising them. In 2006 WNH had two experienced system operators leave the organization and two apprentices were hired later in 2006, thus, not reflecting a full year's salary for either position.

WNH has hired, or will hire, three Apprentice System Operators since 2006 (2008, 2010 and 2011). The 2011 costs reflect a full year of the Apprentice System Operator hired in 2010 and an additional Apprentice System Operator to be hired in May 2011. Apprentice System Operators are hired to be trained in time to cover operators that are scheduled to retire within four years. The variance also includes wage increases as the Apprentices progress in experience to fully qualified operators.

Ref B: 5020 - Overhead Distribution Lines and Feeders - Operation Labour

OEB Account	2009 Actual	2011 Test	Variance
5020	844,746	574,591	(270,155)

The primary contributor to the variance is a result of charging costs in 2009 to this account for employees who had previously either split their time between forestry and field services or capital work.

**Ref C: 5025 - Overhead Distribution Lines and Feeders -
Operation Supplies and Expenses**

OEB Account	2009 Actual	2011 Test	Variance
5025	273,540	392,386	118,846

The primary significant costs that comprise the variance are a result of an increase in contracted services for overhead plant inspections of \$39,000; increased rubber and fibre testing of \$22,000 as WNH has increased the consistency of our rubber testing and maintenance program and increased trucking costs \$39,000 as a result of additional planned overhead plant inspection work.

Ref D: 5065 - Meter Expense

OEB Account	2009 Actual	2011 Test	Variance
5065	236,090	405,255	169,165

WNH will complete installation of its Smart Meters by the end of 2010. The costs of the Smart Meter initiative has been reclassified to deferral accounts 1555 and 1556 during this time. Due to the focus on Smart Meter installs, WNH will focus its attention on its non-smart meters and expects to incur an additional \$169,000 in 2011.

Ref E: 5114 - Maintenance of Distribution Station Equipment

OEB Account	2009 Actual	2011 Test	Variance
5114	166,363	77,262	(89,101)

The decrease in projected costs in 2011 reflects the fact that in 2009 costs were high for repairs to a tap changer in a Municipal Station (MS) in Wellesley of \$62,000 and \$16,000 in security and maintenance costs. The MS in Wellesley was a major repair with the MS out of service for a number of months and in addition security patrols were added in 2009 to combat the theft of copper at WNH's MSs.

Ref F: 5120 - Maintenance of Poles, Towers and Fixtures

OEB Account	2009 Actual	2011 Test	Variance
5120	133,113	225,985	92,872

The increase in 2011 costs reflects the increase in pole testing in 2011. A pole testing program, as described on page 21 of the Asset Management Strategy, details the program whereby WNH tests 2,400 of its poles each year.

Ref G: 5315 - Customer Billing

OEB Account	2009 Actual	2011 Test	Variance
5315	726,373	1,207,472	481,100

Effective January 1, 2010 WNH ceased providing services to the City of Waterloo for Water and Sewer Billings. The cessation of services was initiated by the City of Waterloo and their desire to perform these services in-house

In 2009 WNH removed the costs from Meter Reading, Billing and Collecting and transferred these to USOA 4380 (Non-Distribution Expenses). As such, in 2010 and 2011, WNH will no longer have the revenue to offset the expense. In 2009 \$390,933 in costs were transferred to USoA 4380. WNH has very few billing costs that will decrease due to the cessation of providing these services. Postage for instance will not be reduced, nor, is it anticipated that any staff savings will occur.

WNH submits that full recovery of the Meter Reading, Billing and Collection Costs should be allowed and submits that with its adherence to the ARC in charging Fair Market Value, customers have enjoyed a benefit in reduced rates over an extended period of time since WNH commenced providing water and sewer billing services to the City of Waterloo.

Additionally, increased customer service representative costs have been budgeted to handle the anticipated increase in call volume due to the introduction of TOU billing in 2011.

Ref H: 5320 - Collections

OEB Account	2009 Actual	2011 Test	Variance
5320	384,899	581,187	196,288

Effective January 1, 2010 WNH ceased providing services to the City of Waterloo for Water and Sewer Billings. The cessation of services was initiated by the City of Waterloo and their desire to perform these services in-house

In 2009 WNH removed the costs from Meter Reading, Billing and Collecting and transferred these to USOA 4380 (Non-Distribution Expenses). As such, in 2010 and 2011, WNH will no longer have the revenue to offset the expense. In 2009 \$193,883 in costs were transferred to USOA 4380. WNH has very few collection costs that will decrease due to the cessation of providing these services

WNH submits that full recovery of the Meter Reading, Billing and Collection Costs should be allowed and submits that with its adherence to the ARC in charging Fair Market Value, customers have enjoyed a benefit in reduced rates over an extended period of time since WNH commenced providing water and sewer billing services to the City of Waterloo.

Ref I: 5335 - Bad Debt Expense

OEB Account	2009 Actual	2011 Test	Variance
5335	189,953	100,000	(89,953)

WNH expects that its Bad debts expense will drop to its pre-recession levels in 2011 and has, thus, decreased its Bad debt expense to \$100,000 per annum, which is a decrease of (\$89,953) in 2011 over 2009.

Ref J: 5410 - Community Relations - Sundry

OEB Account	2009 Actual	2011 Test	Variance
5410	66,458	163,663	97,205

The increase in 2011 budgeted costs over 2009 costs reflects additional radio and newspaper advertising of \$13,000, an additional \$7,500 in customer newsletters, an additional \$20,000 in initiation of the overhaul of WNH's website and customer breakfast meetings in the amount of \$5,000. These costs are necessary to inform customers of all the new changes in the industry and at our utility, including Smart Meters and TOU pricing. WNH submits that updating, educating and providing information to our customers is not only efficient in reducing customer care inquiries, it keeps our customers informed in an industry that is continually changing. The Smart Meter and TOU pricing activity will require additional time devoted by the Customer Service Supervisor/Public Relations person in the amount of \$35,000. A contribution to the Waterloo Regional Energy Assistance is budgeted in the amount of \$10,000 to assist with low-income consumers that have difficulty paying their energy bills.

Ref K: 5615 - General Administrative Salaries and Expenses

OEB Account	2009 Actual	2011 Test	Variance
5615	1,274,834	1,453,695	178,861

The significant costs that primarily contributed to the variance in this account include: Training expenses in general have reduced by \$14,000 in 2011 as less training is occurring than in 2009. An increase in the Finance department of \$26,000 reflects progression salary increases. The addition of an IT programmer and IT regular increases and progressions of \$103,000 and an increase in software maintenance of \$63,000 which reflects additional maintenance on various software that were implemented including Business Intelligence/KPIs, Docova, QREP Report Writer, Lotus Notes Client with Collaboration, Fieldworker, Bsafe, Oracle Support, Websense Email Security, Linux, Websense Internet Security and many other software maintenance fees.

Ref L: 5625 - Administrative Expense Transferred-Credit

OEB Account	2009 Actual	2011 Test	Variance
5625	(376,582)	(499,705)	(123,123)

WNH recovers some administration costs on its recoverable activities (subdivision developments, damage claims and recoverable jobs), thus, the level of recovery varies with the level of recoverable activities.

Ref M: 5655 - Regulatory Expenses

OEB Account	2009 Actual	2011 Test	Variance
5655	393,922	471,686	77,764

Regulatory Expenses have increased in 2011 primarily due to \$40,000 (\$160,000 recovered over 4 years) of regulatory costs to prepare this 2011 Cost of Service Application and a return to needed resource levels as in 2009 costs were lower due a vacancy for part of the year in the department.

SHARED SERVICES/CORPORATE COST ALLOCATION

In 2009 WNH commenced allocating a portion of its corporate administration, finance, audit, consulting, directors' fees, directors insurance, meetings and administration expenses as detailed in Table 4-7 below, to its parent company, Waterloo North Hydro Holding Corporation (WNHHC).

Table 4-7
Shared Services/Corporate Cost Allocation – Appendix 2-L

Date	Name of Company		Service Offered	Pricing Methodology	Price for the Service (\$)	Cost for the Service (\$)	% Allocation
	From	To					
2009	WNH	WNHHC	Corporate Administration	Cost Based	45,893	305,948	15%
			Finance, Audit & Consulting	Cost Based	31,203	295,731	11%
			Directors Fees, Insurance, Meeting & Admin Expenses	Cost Based	21,328	105,708	20%
					98,424	707,387	14%
2010	WNH	WNHHC	Corporate Administration	Cost Based	47,080	313,865	15%
			Finance, Audit & Consulting	Cost Based	33,422	320,458	10%
			Directors Fees, Insurance, Meeting & Admin Expenses	Cost Based	19,820	89,100	22%
					100,321	723,423	14%
2011	WNH	WNHHC	Corporate Administration	Cost Based	48,363	322,422	15%
			Finance, Audit & Consulting	Cost Based	34,791	337,497	10%
			Directors Fees, Insurance, Meeting & Admin Expenses	Cost Based	17,802	89,407	20%
					100,957	749,327	13%

The pricing methodology used was cost based, as is demonstrated above that a percentage of the total cost of those specific services that was allocated to the parent company. The Cost Based basis was selected as it is representative of the time devoted to providing these services.

Variances between 2011 and 2009 are immaterial, the percentage of the total cost allocated was reduced slightly and the total costs to be allocated slightly increased.

As WNH commenced allocating the costs in 2009, the allocated amount in 2006 was \$NIL and have not been presented.

SERVICES PROVIDED TO AFFILIATES

WNH provides street lighting maintenance and construction services to its three shareholders as detailed below in Table 4-7A. The level of services can vary each year, primarily due to the level of construction activity occurring that require these services.

Table 4-7A
Charges to Affiliates for Services Provided

Description	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Bridge	2011 Test
Revenue - Street Light Capital & Maintenance						
City of Waterloo	232,594	316,469	240,194	273,848	274,240	287,839
Township of Wellesley	23,892	25,779	10,259	19,662	18,392	19,305
Township of Woolwich	42,426	67,489	31,523	75,807	57,726	60,589
Operating Revenue from Street Lighting	298,912	409,737	281,976	369,317	350,359	367,733
Profit on Street Lighting (9.85%¹⁴ Rate of Return)					34,510	36,222
PILs					7,212	7,570
Total Street Lighting Revenue	298,912	409,737	281,976	369,317	392,082	411,524

¹⁴ Rate of Return was applicable for 2010 applications, to be adjusted at the time of Board determination of rates for 2011 Applications

REGULATORY COSTS:

Introduction

WNNH's regulatory costs have been steadily increasing, and are considered to be an on-going cost.

Regulatory Costs increased in 2006 with the appointment of a VP of Regulatory Affairs in 2006. WNNH recognized that Regulatory Affairs would be assuming an ever increasing role and that in order to fully participate, be fully informed and provide necessary input to the industry, that it needed to increase its resources devoted to Regulatory Affairs. In addition, \$68,029 in costs were transferred to USOA 1508 Regulatory Assets – Sub-account OEB Assessments, as per Board directives.

2007 increase reflects a full year's salary of the VP of Regulatory Affairs and related costs and accounts primarily for its increase.

2008 and 2009 reflect the fact that due to an illness of the VP of Regulatory Affairs, the Regulatory Department was not fully staffed. Consultant Costs varied with assistance needed during this time.

2010 shows a return to needed resource levels, however, the VP of Regulatory Affairs position no longer exists and the work in this department is being performed by Consultants and a Regulatory/Financial Analyst.

2011 reflects an increase of \$40,000 of One-Time Costs (\$160,000 of estimated 2011 rate application costs, including consulting and legal assistance and Board and intervenor costs, to be recovered over a four year period). Regulatory costs as recorded in the following Table 4-8.

Table 4-8
Regulatory Cost Schedule

Regulatory Cost Category	USoA Account	USoA Account Balance	Ongoing or One-time Cost	2006 Actual	2009 Actual	2010 Bridge	% Change in 2009 Actual Year vs 2010 Bridge Year	2011 Test	% Change in 2010 Bridge Year vs 2011 Test Year
1 OEB Annual Assessment	5655	All costs are included in USoA 5655 as detailed in these schedules	Ongoing	109,790	173,915	180,000	3.5%	180,000	0.0%
2 OEB Hearing Assessments (applicant initiated)	5655 (2)		One-time	-	-	-		40,000	100.0%
3 OEB Section 30 Costs (OEB initiated)	5655		Ongoing	-	11,311	10,000	-11.6%	10,000	0.0%
4 Expert Witness Cost for Regulatory Matters	5655								
5 Legal Costs for Regulatory Matters	5655		Ongoing	-	-	5,000	100.0%	5,000	0.0%
6 Consultants Costs for Regulatory Matters	5655		Ongoing	121,538	119,821	143,000	19.3%	143,000	0.0%
7 Operating Expenses Associated with Staff Resources Allocated to Regulatory Matters	5655		Ongoing	61,374	81,676	83,430	2.1%	83,686	0.3%
8 Operating Expenses Associated with Other Resources Allocated to Regulatory Matters	5655 (1)		One-time	19,729	-	-	-	-	
9 Other Regulatory Agency Fees or Assessments	5655								
10 Any Other Costs for Regulatory Matters	5655								
11 Intervenor Costs	5655		Ongoing	272	7,199	10,000	38.9%	10,000	0.0%
12 Sub-total - Ongoing Costs				292,974	393,922	431,430	9.5%	431,686	0.1%
13 Sub-total - One-time Costs				19,729	-	-	0.0%	40,000	100%
14 Total				312,703	393,922	431,430	9.5%	471,686	9.3%

INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS):

Introduction

Canada will move to IFRS, the same accounting standards as are used by publically accountable enterprises in many other countries around the world. IFRS is anticipated to provide shareholder and regulators with financial information that has enhanced comparability and transparency. The transition to IFRS; however, will not be easy and will require significant effort by WNH and its staff to comply with the standard. The original implementation date was January 1, 2011 and required WNH to have the 2010 year-end financial statement in IFRS format. The Canadian Accounting Standards Board (AcSB) has issued an Exposure Draft proposing to extend the implementation date for rate regulated entities by two years to January 1, 2013.

WNH has proposed in Exhibit 9, Deferral and Variances to defer requesting disposition of the Deferral Account 1508 - Other Regulatory Assets – IFRS, given the uncertainties of the implementation date and, thus, the timing and amount of costs. WNH has not included any IFRS costs in its distribution expenses in this application. WNH will continue to record any costs in the Deferral Account and seek disposition in a future filing.

WNH is receiving assistance from its auditor, KPMG, for its IFRS implementation project and software modifications from the software vendor and/or contractors.

EMPLOYEE COMPENSATION, INCENTIVE PLAN EXPENSES, PENSION EXPENSE AND POST RETIREMENT BENEFITS:

Overview

WNH is facing the same challenges as other LDCs throughout the electricity distribution sector. In the next five years, 22% of WNH's employees will be eligible for retirement, and 50% will be eligible within 10 years. WNH's total employee average age is 44.7 years.

The challenge WNH faces is effectively bridging the gap in maintaining sufficient talent to meet the current needs of the utility while planning for the 'new' future. Tables 4-9 to 4-11 below illustrate WNH's current employee demographics by employee type.

Effective workforce planning will be a significant initiative going forward. WNH recognizes the need to develop a strategy to replace its aging workforce going forward. As a result of the minimum four year training program for trades and technical staff, apprentice positions must be introduced on a timely basis. To meet this need, WNH hired:

- Apprentice Lineperson in 2006 (2), 2009 (2), 2010 (6) and two will be hired in 2011 (details below)
- P&C technician apprentice in 2009 and one will be hired in 2011
- System Operator Apprentice in 2006 (2), 2008 (1), 2010 (1) and one will be hired in 2011
- Engineering Technologist Trainee (2) in 2010

Table 4-9
Unionized Workforce

Department	Avg. Age	Avg. Length of Service
Accounting	48.7	16.4
Arborists	31.7	6.9
Customer Service	48.9	12.9
Engineering	44.1	12.3
Field Service	54.0	32.0
Metering	49.5	23.4
General Maintenance	57.0	16.8
Operation Services	43.5	13.7
Powerline Maintainer	42.4	14.3
Protection & Control	48.0	17.1
Stores	42.5	9.8
Station Maintenance	50.0	24.7
System Operator	42.4	8.0
Vehicle Maintenance	51.0	11.8
Average	44.7	14.0

Table 4-10
Non-Unionized Workforce

Department	Avg. Age	of Service
Executive	52.4	7.6
Mgrs/Supv/Supt/Foreman	47.7	14.0
General & Admin	44.3	17.9
Average	46.9	14.8

Table 4-11
2009 Skilled Trades/Engineering (Union & Management)

Department	Avg. Age	Avg. Length of Service	Notes
Engineering PEng/Technicians*	44.8	12.9	Incl. all Supervisors
Powerline Maintainers	43.7	16.6	Incl. Superintendent & Forepersons
Arborists	31.7	6.9	
Meter Technicians	46.0	23.7	Incl. Foreperson
P&C Technicians	49.5	20.3	Incl. Foreperson
Station Operators/PEng	45.0	16.0	Incl. Foreperson & Supervisor
Average	44.0	15.8	
* Does not include 2 PEng in other areas			

Staffing

As of the end of 2009, WNH had 110 employees. As of the end of 2010, WNH expects to have 117 employees and 120 employees at the end of 2011. The number of employees by major department as of 2009 is presented in Table 4-12.

There is one union representing the employees of WNH. The unionized staff is represented by the International Brotherhood of Electrical Workers Union (IBEW) Local 636. The previous collective agreement expired March 31, 2010 and a new agreement was ratified in July, 2010. Previous settlements included annual wage increases of 3.0%, 3.5%, 3.3% and 3.3% for 2006, 2007, 2008 and 2009 respectively and changes to the benefit package.

WNH recently settled a three-year agreement with its unionized staff, which included a 3% economic increase in each year of the contract. The City of Waterloo has been a high-growth area for a number of years and the cost of living in the area has risen along with the high demand for housing and services. WNH's economic wage adjustments are driven by the local cost of living, settlements at comparable neighbouring utilities, and are developed through the negotiation process.

Table 4-12
2009 Number of Employees by Department

Department	FTE
Executive	5.4
Finance (General Administration, Accounting & Regulatory)	7.0
Customer Service (Customer Service Administration, Billing, Collection and Meter Reading)	19.5
Engineering	15.0
Operations & Maintenance	54.5
Purchasing/Stores	3.0
Health, Safety and Environment	1.0
Information Technology	5.0
Total Employees by Major Department	110.4

CHANGE IN WORKFORCE YEAR OVER YEAR:

WNH has provided detailed annual analysis of the change in workforce from 2004 (2006 EDR numbers) through 2011.

2006 Board Approved (2004) vs. 2006 Actual

2005

In 2005 WNH hired the following persons to the organization: Billing & Settlement Supervisor (February 2005), Customer Service Supervisor (March 2005), GIS Technician (October 2005), Stations Engineer (November 2005), Powerline Maintainer (November 2005) and System (Control Room) Operator (September 2005). In 2005 the following persons left the organization: Stations P&C Technician, Powerline Maintainer (retirement), System (Control Room) Operator, the Control Room Supervisor and the Energy Services Supervisor.

The hires of the Powerline Maintainer, System (Control Room) Operator and Stations Engineer were filling positions that had been vacated in the year.

The Billing & Settlement Supervisor position was assuming duties that had previously been performed by the VP of Information Technology and WNH determined that with the complex settlement rules and ongoing changes in this area, it would serve the organization best to create this position.

The Customer Service Supervisor was a newly created position to supervise the Customer Service Department.

The GIS Technician was hired as WNH commenced implementing its first ever GIS System in 2005.

The Control Room Supervisor's duties were assumed by a contractor until 2010.

2006 Actual

In 2006 WNH hired the following persons to the organization: Distribution Engineering Manager (September 2006), 2 Apprentice Powerline Maintainers (July 2006), Operations Clerk (July 2006), 2 Apprentice System (Control Room) Operators (June and August 2006), Stores Person (September 2006), Customer Service Supervisor (October 2006) and VP Regulatory Affairs (July 2006). In 2006 the following persons left the organization: Customer Service Supervisor, Collections Supervisor, Distribution Engineering Supervisor, 2 Powerline Maintainers (retired), 2 System (Control Room) Operators, Fleet Supervisor (retired) and the VP Customer Service duties were assumed by the VP Finance & CFO.

The hires of the Manager of Distribution Engineering, Collections Supervisor, Customer Service Supervisor, System (Control Room) Operators and Powerline Maintainers were filling positions that had been vacated in the year. In addition, the Stores position was filling the position that had previously been performed by third party contract personnel.

The Customer Service Supervisor duties were assumed by the Public Relations/Conservation position who also maintained their existing duties and the position was renamed Customer Care Supervisor. WNH, thus, eliminated one position.

The Operations Clerk position previously was filled on a seasonal basis (April to October). The Operations Clerk position continues to perform these duties and also provides 50% of their time to provide clerical support to the Manager of Health, Safety and Environment.

In November 2006 the Fleet Supervisor retired and WNH was able to transfer this position's duties to the Line Superintendent and the Operations Executive Assistant. WNH, thus, eliminated one position.

1 In July 2006, WNH implemented a corporate re-organization in which the VP Operations
2 transferred to become the VP of Regulatory Affairs, the VP of Customer Service became the VP of
3 Operations and the VP Finance & CFO assumed the duties of the VP of Customer Service. This
4 re-organization recognized the ever increasing regulatory responsibilities and WNH's belief that
5 distributors need to be involved in the regulatory process to stay informed, participate and
6 contribute to the evolution of the regulation of the electricity industry.

2007 Actual vs. 2006 Actual

In 2007 the following persons left the organization: Switchboard Operator, Billing & Settlement Supervisor, Finance Coordinator, and Engineering Technologist.

The Finance Co-coordinator left the organization in 2007 and was replaced in 2008 with a Manager of Finance.

The person performing the Switchboard Operator's duties left the organization and this position was incorporated with the Front Desk Representative position, thus, the position was eliminated.

The Billing & Settlement Supervisor left the organization in late December 2007 and this position was filled in 2008.

2008 Actual vs. 2007 Actual

In 2008 WNH hired the following persons: VP Information Technology (August 2008), Manager of Finance (September 2008), Billing & Settlement Supervisor (May 2008), Front Office Representative (January 2008), GIS Technician (September 2008), VP Operations (September 2008), 2 Utility Arborists (November & December 2008), Apprentice System (Control Room) Operator (September 2008), Engineering Technologist (May 2008) and Purchasing & Stores Supervisor (December 2008). The following left the organization in 2008 or transferred to other departments: Arborist, Purchasing & Stores Supervisor (retired), VP Operations, Manager of Health, Safety and Environment, VP Information Technology (retired), Buyer, and Metering Supervisor (retired).

The positions of Manager of Finance, Billing & Settlement Supervisor, VP Operations, VP Information Technology and Purchasing & Stores Supervisor were hired to fill vacated positions.

The Front Office Representative position was previously filled by a series of contract or third party personnel.

WNH determined that it required an additional arborist to effectively provide full-time tree trimming services. A crew of three can guarantee availability when needed (vs. third party contractors that are subject to availability, especially in peak tree trimming seasons) and maintain coverage during vacation and training periods. In-house personnel also allows WNH to be more responsive to customer requests for tree trimming services, as well as our operations and line staff for tree trimming required during a line construction project.

An Apprentice System (Control Room) Operator was hired as part of its succession plan in light of upcoming retirements. It takes an apprentice four to five years to complete their certification and the apprentice must be supervised directly for the first 2 years, thus, WNH incurs additional costs during this period.

1 An additional GIS Technician was required due to an increase in workload in supporting the GIS
2 development. This position was required to input the historical asset data and new capital program
3 information into the GIS.

4
5 In 2008 the Buyer transferred to the Engineering Department to fill an Engineering Technologist
6 position and the Buyer position was eliminated as it was determined that the Purchasing and
7 Stores Supervisor would assume these duties. WNH had implemented a new ERP system and the
8 efficiencies and time savings achieved through the introduction of this system allowed this position
9 to be eliminated.

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2009 Actual vs. 2008 Actual

In 2009 WNH hired the following persons: Executive Assistant to President (March 2009), Manager of Health, Safety and Environment (January 2009), Systems Administrator (April 2009), P&C Technologist (June 2009), Engineering Technologist (July 2009), 2 Apprentice Powerline Maintainers (February 2009), Utility Arborist (March 2009), Billing & Settlement Clerk (November 2009) and Engineering Clerk (November 2009). In 2009 the following persons left the organization or transferred to other positions within the organization: Executive Assistant to President, VP Regulatory Affairs (deceased), Billing & Settlement Clerk, Systems Administrator, 3 Powerline Maintainers, Utility Arborist, Engineering Clerk and Customer Service Call Centre Representative.

The positions of Executive Assistance to President, Manager of Loss Prevention, Systems Administrator, Powerline Maintainers, Engineering Technologist, Utility Arborist, Billing & Settlement Clerk and Engineering Clerk were hired to filled vacated positions.

The P&C Technologist was hired in preparation for an upcoming retirement in the P&C area in 2010.

2010 Bridge vs. 2009 Actual

In 2010 WNH hired, or anticipates hiring, the following persons: Front Office Representative (April 2010), Stations Project Designer (February 2010), 2 Engineering Technologists (May & July 2010), 6 Apprentice Powerline Maintainers (2 in January 2010 and 4 in June 2010), Metering Supervisor (January 2010), Programmer Analyst (May 2010), Apprentice System (Control Room) Operator (June 2010), Regulatory/Financial Analyst (July 2010), Operations Superintendent (May 2010), System (Control Room) Supervisor (May 2010), and MDM/R Administrator (July 2010). In 2010 the following persons left, or are anticipated to leave, the organization: Engineering Technologist (retired) 4 Powerline Maintainers (retired), Meter Reading Edit Clerk (retired), Operations Superintendent (retired), General Maintenance Person (retired), P&C Foreperson (retired).

The positions of Front Office Representative, Engineering Technologist, Operations Superintendent, System (Control Room) Supervisor, Regulatory/Financial Analyst, Apprentice Powerline Maintainers (replacing 2 vacancies from 2009 and 4 vacancies from 2010) and Metering Supervisor were hired to fill vacated positions. The Front Office Representative position had been filled by temporary personnel. The System (Control Room) Supervisory position had been filled by a third party contractor since the previous Supervisor left in 2005.

The Programmer Analyst was hired to assist with the development of in-house programming. WNH recognizes the benefits of efficiency and additional information in running its business and decision making and as such, has made the commitment to invest in new technologies and software

The Stations Project Designer is required to cover additional workload in the Transformer Stations and Stations Design area, as well as assist with systems integration of the new SCADA System, ODS and Outage Management systems. The person assuming this position previously was a Contract System Administrator at WNH.

Two Engineering Technologists were hired as replacements for an upcoming retirement in 2011 and the loss of a 3rd party consultant's services. WNH notes that the training period for an Engineering Technologist to be fully trained is five years.

1 In addition, an Apprentice System (Control Room) Operator was hired as part of its succession
2 plan in light of upcoming retirements (2013). It takes an apprentice four to five years to complete
3 their certification and must be supervised directly for the first two years, thus, WNH incurs
4 additional costs during this period.

5
6 WNH had determined that an increased workload is associated with the integration of Smart
7 Meters with the MDM/R and it does not have the internal resources to fill this need. WNH has
8 budgeted for one-half year of this position in 2010 (costs for this position are in the Smart Meter
9 OM&A Deferral Account 1556).

10
11 WNH has projected that its Meter Reading Edit Clerk will retire in mid-2010 and will not be filling
12 this position, thus, one position has been eliminated. The loss of providing water and sewer billing
13 services to the City of Waterloo, has contributed to the decision to eliminate this position.

2011 Test vs. 2010 Bridge

In 2011 WNH has budgeted for the hiring of the following persons in its plans: Apprentice System (Control Room) Operator (May 2011) and 2 Apprentice Power Maintainers (May 2011).

An Apprentice System (Control Room) Operator will be hired as part of its succession plan in light of upcoming retirements. It takes an apprentice four to five years to complete their certification and must be supervised directly for the first two years, thus, WNH incurs additional costs during this period.

Two Apprentice Powerline Maintainers will be hired as part of its succession plan in light of upcoming retirements. As noted previously, the apprenticeship program takes five years to complete.

WNH performs a thorough needs analysis prior to the creation of a new position or the decision as to whether to fill a vacant position. As discussed above, WNH made the decision to incorporate the duties of the VP Customer Service, Fleet Supervisor, Meter Reading Clerk, Switchboard, Public Relations/Conservation and Buyer into existing positions. The creation of new positions was taken after careful considerations of the needs of our customers and the electricity industry, replacing contracted tree trimming services with in-house arborists and hiring apprentices to fill the looming retirements in the organization.

Net Increase in FTE Employees

Table 4-13 outlines the increase in employees since the 2006 Board Approved EDR (2004). It should be noted that some increases are succession planning for employees retiring in the 2 to 3 year time frame.

Table 4-13
Net Increase in FTE Employees

Department	Change
FTE 2006 Board Approved (2004 Actual)	113.0
Correction of Position included in 2004 Count in error	(1.0)
Increase due to Positions not full year in 2004	3.0
Reduction of Energy Services Supervisory Position (2005)	(1.0)
Reduction of 1 Foreman Position (2006)	(1.0)
GIS Technicians (2005 & 2008)	2.0
Billing & Customer Service Supervisors (2005)	2.0
Stations & Project Designer (2010)	1.0
Operations Clerk (2006)	0.5
Regulatory Affairs (2010)	1.0
Programmer Analyst (2010)	1.0
Stores Person (2006)	1.0
Public Relations/Conservation Person promoted to C/S Supervisor, maintained PR/Conservation Duties, Position not filled (2006)	(1.0)
Fleet Supervisor (2006) Position Eliminated	(1.0)
VP Customer Services duties assumed by VP, Finance & CFO (2006)	(1.0)
Utility Arborist (2008)	1.0
Buyer Position not replaced (2008)	(1.0)
CSR & Switchboard Positions not filled (2007 & 2011)	(2.0)
General Maintenance Position filled by contract services (2010)	(1.0)
Engineering Technologists (2010)	2.0
Retirement Meter Reading Clerk (2010)	(1.0)
MDM/R Administration (2010)	1.0
Control Room Apprentices (2008, 2010 & 2011)	2.7
Net Powerline/Apprentice Maintainers	0.3
FTE 2011 Test Year	120.5

WNH'S COMPENSATION/PERFORMANCE SYSTEM

Unionized Staff

WNH's unionized staff is represented by the International Brotherhood of Electrical Workers Union (IBEW) Local 636. A formal set of contract negotiations were completed July 8, 2010 and ratified by the Union on July 12, 2010, retroactive to April 1, 2010. The negotiated general wage increase is 3% each year effective April 1, 2010 through March 31, 2013. The previous collective agreement expired March 31, 2010. Previous settlements included annual wage increases of 3.3% per year for 2008 and 2009, 3.5% for 2007 and changes to the benefits package. All salary estimates used the 9/12 assumption, using the rates in effect for the first 3 months (Jan-March) and then the increased rates for April to Dec. for each year. WNH's pay rates are competitive with other LDCs in Waterloo Region.

Executive/Management

WNH collects pay market data from Ontario's LDCs and National/Regional Salary Surveys in order to pay competitive salaries to its management staff and to assist it in hiring and maintaining talented staff. Each management staff is paid on an hourly/salary basis. WNH uses a pay grid that includes 28 pay grades within the management group with each grade paying more as the level of responsibility increases. Each grade allows for five possible progression steps. Management employees and supervisors, except trades forepersons, are not paid overtime.

Individual job performance is aligned with the WNH's vision, mission, and goals. Annually, when qualifying employees are scheduled for progression, a formal evaluation is conducted by the supervisor/manager and is shared with the employee. Pay progression may be withheld if job performance is below acceptable levels. Job performance review is also conducted as needed for internal promotions and job vacancies.

Employee Compensation and Benefits

WNH's employee complement, compensation and benefits are set out in Table 4-14, which is in the Board's Appendix 2-K format as shown in the Board's Minimum Filing Requirements. Table 4-14 reports the actual wages and salaries paid, rather than the general ledger balances and does not include members of the Board (Directors), temporary or contract employees or students.

For the purposes of RRR reporting, WNH has previously reported the actual wages and salaries paid of all employees and did not include year-end accruals to the general ledger. WNH notes that in order to be consistent with the RRR 2.1.5 criteria effective May 1, 2010, all years have been reported on the same basis, thus, temporary and contract staff, Board of Directors and students have not been included. Previously reported 2.1.5 labour figures in 2006 and 2009 included these amounts.

The "Salaries and Wages" amounts include all Salaries and Wages paid, inclusive of vacations, statutory holidays, floater holidays, sick leave, bereavement leave and other miscellaneous paid leave (i.e. jury duty), which may be considered as benefits; however, they are not considered benefits for the purpose of this analysis.

The "Benefits" amounts include the employer's cost to provided Extended Health Care, Dental, Long-Term Disability and Life Insurance to its employees.

Details of WNH's incentive compensation plan are as follows:

Waterloo North Hydro's incentive program has been established to provide financial incentives for those key executives who, by virtue of their position, have a significant impact on the performance of the utility. It has been created with the belief that those executives who are directly responsible for managing key strategic functions and who materially contribute to achieving corporate objectives should be rewarded based upon overall company as well as their own individual performance.

Prior to the beginning of each year, The Board reviews and approves performance targets as part of the annual budgeting exercise. These targets are aligned with WNH's Corporate Strategic Plan. They focus on the following key areas of LDC performance:

- Health and Safety
- System Reliability
- Employee Engagement
- Customer Service and Service Quality Indicators
- Competitive Rates
- Controllable Costs per Customer
- Plant Inspections and Maintenance
- System Expansion and Plant Replacement

Goals and performance targets for the CEO are established and reviewed quarterly by the Board. The CEO reviews the performance of the other members of the executive group.

After the utility has completed its year-end, the HR committee of the Board reviews year-end accomplishments and results and make appropriate award recommendations to the Board for the CEO and senior management group.

**Table 4-14
Employee Costs**

Description	Last Rebasing Year 2006	Historical Year (Bridge Year - 1) 2009	Bridge Year 2010	Test Year 2011
Number of Employees (FTEs including Part-Time)				
Executive	6.0	5.4	5.0	5.0
Management	19.2	15.0	16.7	17.0
Non-Union	11.0	11.1	12.4	13.0
Union	74.0	78.8	82.8	85.5
Total	110.2	110.4	116.9	120.5
Number of Part-Time Employees				
Executive				
Management				
Non-Union				
Union	-	2	1	1
Total	-	2	1	1
Total Salary and Wages				
Executive	\$ 657,150	\$ 711,125	\$ 664,433	\$ 684,366
Management	\$ 1,294,591	\$ 1,159,651	\$ 1,412,939	\$ 1,478,681
Non-Union	\$ 729,440	\$ 823,491	\$ 885,494	\$ 915,457
Union	\$ 4,039,482	\$ 4,802,738	\$ 5,123,375	\$ 5,297,212
Total	\$ 6,720,663	\$ 7,497,004	\$ 8,086,241	\$ 8,375,717
Current Benefits				
Executive	\$ 43,546	\$ 38,290	\$ 39,707	\$ 40,071
Management	\$ 110,508	\$ 84,700	\$ 115,881	\$ 117,081
Non-Union	\$ 68,467	\$ 66,981	\$ 74,087	\$ 74,598
Union	\$ 413,179	\$ 431,928	\$ 501,097	\$ 507,776
Total	\$ 635,700	\$ 621,899	\$ 730,773	\$ 739,525
Accrued Pension and Post-Retirement Benefits				
Executive	\$ 75,507	\$ 125,033	\$ 93,580	\$ 95,411
Management	\$ 136,018	\$ 193,347	\$ 189,272	\$ 196,498
Non-Union	\$ 74,711	\$ 135,042	\$ 111,740	\$ 114,341
Union	\$ 408,993	\$ 796,279	\$ 645,945	\$ 664,287
Total	\$ 695,229	\$ 1,249,701	\$ 1,040,536	\$ 1,070,536
Total Benefits (Current + Accrued)				
Executive	\$ 119,053	\$ 163,323	\$ 133,287	\$ 135,482
Management	\$ 246,526	\$ 278,047	\$ 305,153	\$ 313,579
Non-Union	\$ 143,178	\$ 202,023	\$ 185,827	\$ 188,938
Union	\$ 822,172	\$ 1,228,206	\$ 1,147,042	\$ 1,172,063
Total	\$ 1,330,929	\$ 1,871,599	\$ 1,771,309	\$ 1,810,061
Total Compensation (Salary, Wages, & Benefits)				
Executive	\$ 776,203	\$ 874,448	\$ 797,720	\$ 819,848
Management	\$ 1,541,117	\$ 1,437,698	\$ 1,718,092	\$ 1,792,260
Non-Union	\$ 872,618	\$ 1,025,514	\$ 1,071,321	\$ 1,104,396
Union	\$ 4,861,654	\$ 6,030,944	\$ 6,270,418	\$ 6,469,275
Total	\$ 8,051,592	\$ 9,368,604	\$ 9,857,550	\$ 10,185,778
Compensation - Average Yearly Base Wages				
Executive	\$ 109,525	\$ 131,690	\$ 132,887	\$ 136,873
Management	\$ 67,427	\$ 77,310	\$ 84,607	\$ 86,981
Non-Union	\$ 66,313	\$ 74,055	\$ 71,411	\$ 70,420
Union	\$ 54,588	\$ 60,925	\$ 61,877	\$ 61,956
Total	\$ 60,986	\$ 67,938	\$ 69,172	\$ 69,508
Compensation - Average Yearly Overtime				
Executive	\$ -	\$ -	\$ -	\$ -
Management	\$ 2,692	\$ 6,184	\$ 783	\$ 787
Non-Union	\$ 2,143	\$ 1,088	\$ 640	\$ 725
Union	\$ 5,717	\$ 8,326	\$ 3,165	\$ 3,605
Total	\$ 4,522	\$ 6,898	\$ 2,422	\$ 2,747
Compensation - Average Yearly Incentive Pay				
Executive	\$ 2,817	\$ 6,000	\$ 6,480	\$ 7,480
Management	\$ -	\$ -	\$ -	\$ -
Non-Union	\$ -	\$ -	\$ -	\$ -
Union	\$ -	\$ -	\$ -	\$ -
Total	\$ 153	\$ 294	\$ 269	\$ 304
Compensation - Average Yearly Benefits				
Executive	\$ 19,842	\$ 30,245	\$ 26,657	\$ 27,096
Management	\$ 12,840	\$ 18,536	\$ 18,273	\$ 18,446
Non-Union	\$ 13,016	\$ 18,168	\$ 14,986	\$ 14,534
Union	\$ 11,110	\$ 15,580	\$ 13,853	\$ 13,708
Total	\$ 12,077	\$ 16,961	\$ 15,152	\$ 15,021
Total Compensation	\$ 16,103,183	\$ 18,737,207	\$ 19,715,101	\$ 20,371,556
Total Compensation Charged to OM&A	\$ 10,283,493	\$ 10,622,123	\$ 11,949,323	\$ 13,013,350
Total Compensation Capitalized	\$ 5,819,690	\$ 8,115,085	\$ 7,765,778	\$ 7,358,206

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EMPLOYEE BENEFITS:

A comprehensive and competitive benefits package is provided to employees which includes medical, dental, life and travel insurance, and long term disability. The plans are designed to address the health and welfare needs of the employee population with similar plans for both union and management employees. WNH notes that an updated handbook to reflect the recent settlement is not yet available, thus, WNH has not provided a benefits handbook.

For consistency with the Wages and Salaries reported, the amounts for Employee Benefits are based on the amounts paid.

For the purposes of RRR reporting 2.1.5, WNH's amounts reported differ substantially for "Fringe Benefits" from what is reported in this analysis. WNH's 2.1.5 reported amounts are \$3,930,435 for 2006, \$3,959,332 for 2007, \$3,829,595 for 2008 and \$2,667,406 for 2009. This is due to the fact that the amounts reported through 2.1.5 are inclusive of all benefits and indirect costs related to payroll, including the benefits included in the wages and salaries reported.

A summary of the benefits is presented in Table 4-15. WNH has had an average of a 2.5% increase for the period 2005 through 2011. WNH works diligently to contain the benefit costs, and regularly go to the market to obtain the best price for the value provided. WNH also provides Wellness Workshops to assist its employees in maintaining a healthy lifestyle and this in turn will reduce health costs.

The increase in 2006 benefit costs was primarily driven by an increase in Extended Health Premiums these costs are driven largely by increases in drug and vision care.

Health, Dental and LTD premium costs are expected to modestly increase in 2010. No increases have been budgeted for 2011.

OMERS Pension Expense and Post Retiree Benefits:

OMERS Pension Expense

WNL's employees are members of the Ontario Municipal Employees Retirement System ("OMERS"). Accordingly, WNL has provided the OMERS pension premium information for 2006 Actual, 2007 Actual, 2008 Actual, 2009 Actual, 2010 Bridge Year, and the 2011 Test Year in Table 4-16 below. OMERS pension premiums from January 1, 2006 to April 30, 2006 were transferred to USOA account 1508 for recovery at a later date have been recorded as an adjustment.

The amounts paid by WNL to OMERS continues to increase each year; however these costs are primarily driven by mandated OMERS's premium rates and are thus uncontrollable by WNL. WNL estimates its OMERS expense by estimating the number of employees within each category (management, union, etc) and their salaries and wages, upon which OMERS contributions are based. The OMERS contributions are then calculated by applying the estimated tiered rates of 6.4% (up to the YMPE) and 9.7% (over the YMPE) for the year 2011. Actual rates of 6.4% and 9.7% were used for the year 2010. WNL subsequently increased the overall estimated OMERS contributions in 2010 and 2011 by \$85,000 in order to recognize the OMERS premium increase recently announced.

Post-Retirement Benefits - Liability

Actuarial valuation of post-retirement non-pension benefits sponsored by WNL is conducted every three years in accordance with CICA guidelines. The purpose of these valuations is to determine WNL's liabilities and benefit expense in respect of post-retirement non-pension benefits.

WNL has provided post-retirement benefits accounting information as required and has included the change in post-retirement expense for 2006 Actual, 2007 Actual, 2008 Actual, 2009 Actual, 2010 Bridge Year, and 2011 Test Year, in Table 4-17 below.

In 2009, the actuarial evaluation determined a material increase in its Post Retirement Benefit Liability. The most recent actuarial evaluation is shown in Appendix D.

Post-Retirement Benefits - Premiums

WNH pays certain health, dental, and life insurance benefits on behalf of its retired employees who take early retirement, up to the age of 65.

Employee Benefits

Premiums paid for 2006 Actual, 2007 Actual, 2008 Actual, 2009 Actual, 2010 Bridge Year, and 2011 Test Year, are shown in Table 4-15. Please note that these figures may slightly differ from Table 4-14, as not all employees are included in that table.

Table 4-15
Summary of Employee Benefits

	2005 Actual	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Bridge	2011 Test
Annual Benefit Cost	654,696	738,701	724,097	682,264	742,319	756,548	753,657
\$ Increase per Year		84,005	(14,604)	(41,833)	60,055	14,229	(2,891)
% Increase per Year		12.8%	-2.0%	-5.8%	8.8%	1.9%	-0.4%
% Average Increase 2005-2011							2.5%

Table 4-16
Pension Premium Information

	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Bridge	2011 Test
Premiums Paid	513,199	516,654	534,853	570,792	700,536	718,190
Regulatory Asset Adjustment	(203,942)					
Pension Expense	309,257	516,654	534,853	570,792	700,536	718,190
\$ Increase per Year		207,397	18,199	35,939	129,744	17,654
% Increase per Year		0.7%	3.5%	6.7%	22.7%	2.5%

Table 4-17
Post-Retirement Pension Information

	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Bridge	2011 Test
Premiums Paid	110,474	141,327	119,129	151,927		
Change in Liability Account	73,668	15,187	11,977	550,290		
Post-Retirement Benefit Expense	184,142	156,514	131,106	702,217	340,000	370,000

DEPRECIATION, AMORTIZATION AND DEPLETION:

WNH's amortization policy is calculated as follows:

WNH uses the pooling of assets for all fixed assets, with the exception of the following:

1915	Furniture & Equipment
1920	Computer Equipment
1925	Computer Software
1930	Transportation Equipment
1935	Stores Equipment
1940	Tools, Shop and Garage Equipment
1945	Measurement and Testing Equipment
1955	Communication Equipment
1960	Miscellaneous Equipment
1980	Supervisory System Equipment

Amortization for all pooled assets is calculated on a straight line basis over the estimated useful life of the assets as of the end of the previous year, plus:

- Normally a full year's amortization is taken on capital additions in the year of acquisition and no amortization is taken in the year of disposition
- For this rate application, WNH has used the half-year rule for calculating depreciation expense in the 2011 Test Year, however, depreciation for all other years is calculated using a full year's amortization in the year of acquisition
- Depreciation rates are in line with the rates set out in the APH. As discussed in the OM&A Manager's Summary above, this application has been filed in accordance with CGAAP, thus, WNH has filed this application under the same depreciation rates as WNH files its Audited CGAAP Financial Statements. WNH has not applied any of the provisions of the Board's Depreciation Study (EB-2010-0178), as this study specifically relates to the transition to IFRS, as evidenced by the subject line of the Board's April 30, 2010 letter "Depreciation Study for Electricity Distributors (EB-2010-0178) – Transition to International Financial Reporting Standards ("IFRS"). A summary of the depreciation rates are as follows in Table 4-18:

**Table 4-18
Depreciation Rates**

USoA	Description	Rate
1808	Buildings	2.0%
1815	Transformer Station Equipment > 50 kV	2.5%
1820	Distribution Station Equipment < 50kV	3.3%
1830	Poles, Towers & Fixtures	4.0%
1835	Overhead Conductors & Devices	4.0%
1840	Underground Conduit	4.0%
1845	Underground Conductors & Devices	4.0%
1850	Line Transformers	4.0%
1855	Services	4.0%
1860	Metering	4.0%
1915	Furniture & Equipment	10.0%
1920	Computer Hardware	20.0%
1925	Computer Software	20.0%
1930	Transporation Equipment - large vehicle, trailers	12.5%
1930	Transporation Equipment - small vehicles	20.0%
1935	Stores Equipment	10.0%
1940	Tools, Shop and Garage Equipment	10.0%
1945	Measurement and Testing Equipment	10.0%
1955	Communication Equipment	10.0%
1960	Miscellaneous Equipment	20.0%
1980	System Supervisory Equipment	4.0%
1995	Contributed Capital	4.0%

All of WNH's amortization expense runs through account 5705 – Amortization Expense – Property, Plant and Equipment with the exception of vehicle, stores, and Engineering hardware and software amortization. The vehicle amortization is captured in the Trucking Overhead/Burden and is allocated out through an hourly truck rate which is directly charged to the Work Order that it is being used for, thus, costs are directly allocated to OM&A or Capital as they are used.

Details of WNH's amortization by account number are provided in the Fixed Asset Continuity Schedules in Exhibit 2, Tables 2-14 to 2-19 and in Table 2-23.

Table 4-19
Amortization Expense

USoA	Description	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Bridge	2011 Test
5705	Depreciation Expense - Property, Plant & Equipment	5,858,566	5,998,961	6,358,132	6,876,944	7,464,713	7,816,331
	Allocated between Capital and OM&A (Transportation/ Tools/Stores/Engineering Hardware & Software)	670,345	612,757	652,673	711,280	753,847	682,400
Total		6,528,911	6,611,718	7,010,804	7,588,224	8,218,561	8,498,731

WNH has provided in Board Appendix 2-M Format the Depreciation and Amortization Expense Schedules for 2006 Actual, 2007 Actual, 2008 Actual, 2009 Actual, 2010 Bridge and 2011 Test Years. WNH notes that timing and allocation issues necessitated adjustments in each year. In addition, four USoA accounts have had their depreciation lives changed in the past, thus, the schedule applies today's depreciation rate to the original cost, when a different rate was applied previously. The four USoA Accounts are 1808 Buildings and Fixtures, 1815 Transformer Equipment > 50 kV, 1820 Distribution Station Equipment < 50 kV and 1980 Supervisory System Equipment. This has resulted in these four accounts comprising an adjustment of (\$81,695) in 2011 as demonstrated in Table 4-25, thus, is the primary driver of this adjustment.

Table 4-20
2006 Depreciation and Amortization Expense

Account	Description	Opening Balance	Less Fully Depreciated	Net for Depreciation	Additions	Total for Depreciation	Years	Depreciation Rate	Depreciation Expense	Adjustments	Total depreciation
		(a)	(b) ¹	(c) = (a) - (b)	(d)	(e)=(c) + 1.0 x (d)	(f)	(g) = 1 / (f)	(h) = (e) / (f)	(i)	(j) = (h) + (i)
1805	Land	1,563,004	-	1,563,004	17,783	1,580,787					-
1806	Land Rights	227,432	-	227,432	6,455	233,887					-
1808	Buildings and Fixtures	7,388,747	97,199	7,291,548	919,621	8,211,169	50	0.02	164,223	(74,453)	89,770
1815	Transformer Station Equipment >50 kV	18,717,060	590,115	18,126,945	1,952,965	20,079,910	40	0.03	501,998	48,465	550,463
1820	Substation Equipment	4,497,181	1,299,537	3,197,644	502,762	3,700,406	30	0.03	123,347	(37,464)	85,883
1830	Poles, Towers & Fixtures	27,963,164	889,154	27,074,009	1,280,967	28,354,976	25	0.04	1,134,199	80,189	1,214,388
1835	Overhead Conductors & Devices	11,018,627	337,259	10,681,368	711,676	11,393,043	25	0.04	455,722	0	455,722
1840	Underground Conduit	10,407,244	-	10,407,244	581,120	10,988,364	25	0.04	439,535	(23,608)	415,926
1845	Underground Conductors & Devices	23,540,403	2,031,631	21,508,773	1,359,811	22,868,584	25	0.04	914,743	21,887	936,631
1850	Line Transformers	27,722,803	874,771	26,848,032	1,819,017	28,667,049	25	0.04	1,146,682	18,332	1,165,014
1855	Services	15,008,445	271,448	14,736,997	808,838	15,545,835	25	0.04	621,833	(26,989)	594,845
1860	Meters	7,766,509	1,284,555	6,481,954	(158,297)	6,323,657	25	0.04	252,946	33,411	286,357
1915	Office Furniture & Equipment	604,297	164,623	439,673	113,142	552,815	10	0.10	55,282	(8)	55,273
1920	Computer - Hardware	2,383,700	1,317,926	1,065,774	144,767	1,210,541	5	0.20	242,108	-	242,108
1925	Computer Software	2,162,054	947,401	1,214,654	405,910	1,620,564	5	0.20	324,113	(49)	324,064
1930	Transportation Equipment - other	121,145	-	121,145	85,580	206,725	8	0.13	25,841	262	
1930	Transportation Equipment - small trucks/mini vans	1,364,994	933,468	431,527	170,253	601,780	5	0.20	120,356	43,411	528,165
1930	Transportation Equipment - work platforms	4,125,520	1,203,128	2,922,392	4,599	2,926,991	8	0.13	365,874	(27,579)	
1935	Stores Equipment	156,150	58,579	97,571	-	97,571	10	0.10	9,757	-	9,757
1940	Tools, Shop & Garage Equipment	545,673	7,616	538,057	-	538,057	10	0.10	53,806	-	53,806
1945	Measurement & Testing Equipment	568,369	290,976	277,393	29,230	306,623	10	0.10	30,662	-	30,662
1955	Communications Equipment	173,638	28,868	144,770	17,942	162,712	10	0.10	16,271	-	16,271
1960	Miscellaneous Equipment	488,793	180,936	307,857	1,166	309,024	10	0.10	30,902	-	30,902
1980	System Supervisory Equipment	2,091,267	-	2,091,267	81,576	2,172,843	15	0.07	144,856	(21,369)	123,487
1995	Contributions & Grants	(14,857,883)	-	(14,857,883)	(2,156,723)	(17,014,606)	25	0.04	(680,584)	-	(680,584)
										-	
	Total	155,748,335	12,809,190	142,939,145	8,700,161	151,639,307			6,494,472	34,439	6,528,911

¹ Disposal of \$145,556.20 USoA 1930 included

Table 4-21
2007 Depreciation and Amortization Expense

Account	Description	Opening Balance	Less Fully Depreciated ⁽¹⁾	Net for Depreciation	Additions	Total for Depreciation	Years	Depreciation Rate	Depreciation Expense	Adjustments	Depreciation
		(a)	(b)	(c) = (a) - (b)	(d)	(e)=(c) + 1.0 x (d)	(f)	(g) = 1 / (f)	(h) = (e) / (f)	(i)	(j) = (h) + (i)
1805	Land	1,580,787	-	1,580,787		1,580,787					
1806	Land Rights	233,887	-	233,887	90,888	324,775					
1808	Buildings and Fixtures	8,308,368	122,907	8,185,461	664,764	8,850,225	50	0.02	177,005	(88,747)	88,257
1815	Transformer Station Equipment >50 kV	20,670,025	615,938	20,054,087	12,165	20,041,922	40	0.03	501,048	53,445	554,493
1820	Substation Equipment	4,999,943	1,299,537	3,700,406	11,114	3,711,520	30	0.03	123,717	(37,833)	85,885
1830	Poles, Towers & Fixtures	29,244,131	3,395,726	25,848,404	4,607,640	30,456,044	25	0.04	1,218,242	(19,866)	1,198,375
1835	Overhead Conductors & Devices	11,730,302	500,726	11,229,576	2,480,132	13,709,708	25	0.04	548,388	(10,631)	537,757
1840	Underground Conduit	10,988,364	513,579	10,474,784	812,166	11,286,950	25	0.04	451,478	(16,502)	434,976
1845	Underground Conductors & Devices	24,900,214	2,031,631	22,868,584	1,198,911	24,067,495	25	0.04	962,700	(21,570)	941,130
1850	Line Transformers	29,541,820	731,241	28,810,579	2,173,216	30,983,795	25	0.04	1,239,352	11,660	1,251,012
1855	Services	15,817,283	491,838	15,325,445	854,591	16,180,036	25	0.04	647,201	(29,480)	617,721
1860	Meters	7,608,212	1,284,555	6,323,657	448,132	6,771,789	25	0.04	270,872	30,202	301,074
1915	Office Furniture & Equipment	717,439	196,169	521,269	54,174	575,443	10	0.10	57,544	(4)	57,540
1920	Computer - Hardware	2,528,467	1,412,642	1,115,825	160,484	1,276,309	5	0.20	255,262	(1,709)	253,553
1925	Computer Software	2,567,965	1,170,162	1,397,803	333,496	1,731,299	5	0.20	346,260	(47)	346,213
1930	Transportation Equipment - other	206,725	-	206,725	23,363	230,087	8	0.13	28,761	43,239	72,000
1930	Transportation Equipment - small trucks/mini vans	1,535,248	1,062,204	473,043	172,544	645,588	5	0.20	129,118	19,300	148,418
1930	Transportation Equipment - work platforms	3,984,563	2,101,852	1,882,710	520,266	2,402,976	8	0.13	300,372	(94,252)	206,121
1935	Stores Equipment	156,150	61,145	95,005		95,005	10	0.10	9,501	-	9,501
1940	Tools, Shop & Garage Equipment	545,673	8,940	536,733	17,337	554,070	10	0.10	55,407	-	55,407
1945	Measurement & Testing Equipment	597,599	308,769	288,830	13,367	302,197	10	0.10	30,220	-	30,220
1955	Communications Equipment	191,580	45,773	145,807	47,681	193,487	10	0.10	19,349	-	19,349
1960	Miscellaneous Equipment	489,959	232,508	257,451	66,374	323,825	10	0.10	32,383	-	32,383
1980	System Supervisory Equipment	2,172,843	107,620	2,065,224	31,721	2,096,944	15	0.07	139,796	(21,589)	118,207
1995	Contributions & Grants	(17,014,606)	-	(17,014,606)	(1,682,172)	(18,696,778)	25	0.04	(747,871)	-	(747,871)
										-	-
	Total	164,302,940	17,695,462	146,607,478	13,088,023	159,695,501			6,796,103	(184,384)	6,611,718

¹ Disposal of \$203,969.62 USoA 1930 included

Table 4-22
2008 Depreciation and Amortization Expense

Account	Description	Opening Balance (a)	Less Fully Depreciated (b)	Net for Depreciation (c) = (a) - (b)	disposal (c1)	Additions (d)	Closing Balance 2008	Total for Depreciation (e)=(c-c1) + 1.0 x (d)	Years (f)	Depreciation Rate (g) = 1 / (f)	Depreciation Expense (h) = (e) / (f)	Adjustments (i)	Depreciation (j) = (h) + (i)
1805	Land	1,580,787	-	1,580,787		248,400	1,829,186	1,829,186					-
1806	Land Rights	324,775	-	324,775		35,659	360,434	360,434					-
1808	Buildings and Fixtures	8,973,132	97,199	8,875,933		5,752	8,978,884	8,881,685	50	0.02	177,634	(71,644)	105,989
1815	Transformer Station Equipment >50 kV	20,657,860	590,115	20,067,745		778,737	21,436,597	20,846,482	40	0.03	521,162	(25,387)	495,775
1820	Substation Equipment	5,011,057	1,299,537	3,711,520		35,856	5,046,913	3,747,376	30	0.03	124,913	(34,868)	90,044
1830	Poles, Towers & Fixtures	33,851,771	1,970,799	31,880,972		3,373,891	37,225,662	35,254,863	25	0.04	1,410,195	(2,967)	1,407,228
1835	Overhead Conductors & Devices	14,210,434	689,219	13,521,215		1,875,354	16,085,788	15,396,569	25	0.04	615,863	(6,053)	609,809
1840	Underground Conduit	11,800,530	-	11,800,530		210,221	12,010,751	12,010,751	25	0.04	480,430	(28,277)	452,153
1845	Underground Conductors & Devices	26,099,125	2,031,631	24,067,495		1,568,180	27,667,305	25,635,675	25	0.04	1,025,427	(13,887)	1,011,540
1850	Line Transformers	31,715,036	898,268	30,816,768		2,382,530	34,097,566	33,199,298	25	0.04	1,327,972	13,397	1,341,369
1855	Services	16,671,874	593,741	16,078,133		1,260,156	17,932,030	17,338,289	25	0.04	693,532	(29,481)	664,051
1860	Meters	8,056,344	1,284,555	6,771,789		367,063	8,423,407	7,138,852	25	0.04	285,554	30,595	316,149
1915	Office Furniture & Equipment	771,612	239,552	532,061		7,049	778,662	539,110	10	0.10	53,911	(2)	53,909
1920	Computer - Hardware	2,688,951	1,690,132	998,819		91,002	2,779,953	1,089,822	5	0.20	217,964	0	217,964
1925	Computer Software	2,901,460	1,210,979	1,690,481		231,044	3,132,504	1,921,525	5	0.20	384,305	(1,188)	383,117
1930	Transportation Equipment - other	230,087	38,174	191,913		10,929	241,017	202,843	8	0.13	25,355	(22,809)	
1930	Transportation Equipment - small trucks/mini vans	1,707,792	871,279	836,512	113,047	93,820	1,688,566	817,286	5	0.20	163,457	29,866	430,369
1930	Transportation Equipment - work platforms	4,300,859	1,937,021	2,363,838	132,478	211,307	4,379,689	2,442,668	8	0.13	305,333	(70,834)	
1935	Stores Equipment	156,150	63,904	92,246	80,449	99,191	174,892	110,987	10	0.10	11,099	-	11,099
1940	Tools, Shop & Garage Equipment	563,010	8,940	554,070		114,754	677,764	668,824	10	0.10	66,882	(2,257)	64,626
1945	Measurement & Testing Equipment	610,966	351,799	259,167		14,066	625,032	273,233	10	0.10	27,323	2,257	29,580
1955	Communications Equipment	239,260	47,851	191,409		216,739	455,999	408,148	10	0.10	40,815	(21,674)	19,141
1960	Miscellaneous Equipment	556,334	340,264	216,070		25,550	581,884	241,620	10	0.10	24,162	(197)	23,965
1980	System Supervisory Equipment	2,204,564	221,765	1,982,800		-	2,204,564	1,982,800	15	0.07	132,187	(21,664)	110,523
1995	Contributions & Grants	(18,696,778)	-	(18,696,778)		(1,993,134)	(20,689,911)	(20,689,911)	25	0.04	(827,596)	-	(827,596)
	Total	177,186,993	16,476,722	160,710,272	325,973	11,264,117	188,125,137	171,648,415			7,287,878	(277,073)	7,010,805

Table 4-23
2009 Depreciation and Amortization Expense

Account	Description	Opening Balance	Less Fully Depreciated	Net for Depreciation	Disposal	Transfers	Additions	Closing balance 2009	Total for Depreciation (e)=(c-c1+c2) + 1.0 x (d)	Years	Depreciation Rate	Depreciation Expense	Adjustment	Depreciation
		(a)	(b)	(c) = (a) - (b)	(c1)	(c2)	(d)			(f)	(g) = 1 / (f)	(h) = (e) / (f)	(i)	(j) = (h) + (i)
1805	Land	1,829,186	-	1,829,186				1,829,186	1,829,186					
1806	Land Rights	360,434	-	360,434			15,448	375,882	375,882					-
1808	Buildings and Fixtures	8,978,884	97,199	8,881,685			42,847	9,021,731	8,924,532	50	0.02	178,491	(23,039)	155,452
1815	Transformer Station Equipment >50 kV	21,436,597	590,115	20,846,482			647,205	22,083,802	21,493,687	40	0.03	537,342	(2,622)	534,721
1820	Substation Equipment	5,046,913	1,428,322	3,618,591			31,527	5,078,440	3,650,118	30	0.03	121,671	(38,693)	82,978
1830	Poles, Towers & Fixtures	37,225,662	2,513,969	34,711,693			4,153,368	41,379,030	38,865,061	25	0.04	1,554,602	(8,652)	1,545,951
1835	Overhead Conductors & Devices	16,085,788	877,285	15,208,503			2,279,721	18,365,509	17,488,224	25	0.04	699,529	(4,509)	695,020
1840	Underground Conduit	12,010,751	-	12,010,751			485,801	12,496,552	12,496,552	25	0.04	499,862	(40,694)	459,168
1845	Underground Conductors & Devices	27,667,305	2,031,631	25,635,675			1,124,839	28,792,144	26,760,514	25	0.04	1,070,421	1,057	1,071,477
1850	Line Transformers	34,097,566	977,083	33,120,483			3,570,690	37,668,256	36,691,173	25	0.04	1,467,647	12,255	1,479,902
1855	Services	17,932,030	794,917	17,137,113			1,281,287	19,213,317	18,418,400	25	0.04	736,736	(29,667)	707,069
1860	Meters	8,423,407	1,284,555	7,138,852	60,894		240,145	8,602,659	7,318,103	25	0.04	292,724	29,463	322,187
1915	Office Furniture & Equipment	778,662	326,960	451,702			18,821	797,483	470,523	10	0.10	47,052	0	47,052
1920	Computer - Hardware	2,779,953	1,883,647	896,306		(27,907)	152,428	2,904,474	1,020,827	5	0.20	204,165	5,653	209,819
1925	Computer Software	3,132,504	1,645,386	1,487,118		27,907	579,849	3,740,261	2,094,874	5	0.20	418,975	(5,582)	413,393
1930	Transportation Equipment - other	241,017	38,174	202,843			29,419	270,435	232,262	8	0.13	29,033	(36,688)	-
1930	Transportation Equipment - small trucks/mini vans	1,688,566	861,993	826,572	73,341		87,919	1,703,143	841,150	5	0.20	168,230	29,934	473,656
1930	Transportation Equipment - work platforms	4,379,689	2,359,282	2,020,406	105,433		681,747	4,956,003	2,596,720	8	0.13	324,590	(41,442)	-
1935	Stores Equipment	174,892	66,161	108,731			2,811	177,703	111,542	10	0.10	11,154	-	11,154
1940	Tools, Shop & Garage Equipment	677,764	88,687	589,077			25,417	703,181	614,493	10	0.10	61,449	0	61,450
1945	Measurement & Testing Equipment	625,032	396,815	228,217		1,188	33,434	659,654	262,839	10	0.10	26,284	356	26,640
1955	Communications Equipment	455,999	46,553	409,447	89,196	(1,188)	74,139	439,754	393,202	10	0.10	39,320	(475)	38,845
1960	Miscellaneous Equipment	581,884	403,673	178,211			11,983	593,867	190,194	10	0.10	19,019	-	19,019
1980	System Supervisory Equipment	2,204,564	333,865	1,870,700			434,697	2,639,261	2,305,396	15	0.07	153,693	(21,664)	132,029
1995	Contributions & Grants	(20,689,911)	-	(20,689,911)			(1,779,036)	(22,468,948)	(22,468,948)	25	0.04	(898,758)	-	(898,758)
	Total	188,125,137	19,046,272	169,078,865	328,864	-	14,226,505	202,022,778	182,976,505			7,763,232	(175,007)	7,588,224

Table 4-24
2010 Depreciation and Amortization Expense Forecast

Account	Description	Opening Balance (a)	Less Fully Depreciated (b)	Net for Depreciation (c) = (a) - (b)	Disposal (c1)	Transfers (c2)	Additions (d)	Closing Balance 2009	Total for Depreciation (e)=(c-c1+c2) + 1.0 x (d)	Years (f)	Depreciation Rate (g) = 1 / (f)	Depreciation Expense (h) = (e) / (f)	Adjustment (i)	Depreciation (j) = (h) + (i)
1805	Land	1,829,186	-	1,829,186	11,000			1,818,186	1,818,186					
1806	Land Rights	375,882	-	375,882			15,805	391,687	391,687					-
1808	Buildings	9,021,731	97,199	8,924,532	30,433		1,289,002	10,280,300	10,183,100	50	0.02	203,662	(23,398)	180,264
1815	Transformer Station Equipment >50 kV	22,083,802	590,115	21,493,687			5,636,134	27,719,935	27,129,821	40	0.03	678,246	(9,163)	669,083
1820	Substation Equipment	5,078,440	1,598,630	3,479,810	79,263		59,882	5,059,059	3,460,429	30	0.03	115,348	(31,215)	84,133
1830	Poles, Towers & Fixtures	41,379,030	3,115,576	38,263,453			4,292,721	45,671,751	42,556,175	25	0.04	1,702,247	(8,653)	1,693,594
1835	OH Conductors & Devices	18,365,509	1,087,254	17,278,255			2,538,264	20,903,774	19,816,519	25	0.04	792,661	(4,509)	788,152
1840	UG Conduit	12,496,552	-	12,496,552			628,603	13,125,155	13,125,155	25	0.04	525,006	(47,514)	477,492
1845	UG Conductors & Devices	28,792,144	2,031,631	26,760,514			2,930,459	31,722,604	29,690,973	25	0.04	1,187,639	(22,228)	1,165,411
1850	Line Transformers	37,668,256	1,342,047	36,326,209			2,866,093	40,534,349	39,192,302	25	0.04	1,567,692	31,284	1,598,976
1855	Services (OH & UG)	19,213,317	1,029,736	18,183,580			1,814,690	21,028,006	19,998,270	25	0.04	799,931	(29,666)	770,264
1860	Meters	8,602,659	1,284,555	7,318,103			386,860	8,989,519	7,704,963	25	0.04	308,199	35,474	343,673
1915	Office Furniture & Equipment 10yr	797,483	404,830	392,653				797,483	392,653	10	0.10	39,265	649	39,914
1920	Computer - Hardware	2,904,474	2,384,060	520,414			137,339	3,041,813	657,753	5	0.20	131,551	5,653	137,204
1925	Computer Software	3,740,261	2,162,054	1,578,206			629,483	4,369,744	2,207,689	5	0.20	441,538	(5,582)	435,956
1930	Transportation Equipment - other	270,435	114,730	155,705				270,435	155,705	8	0.13	19,463	43,021	499,875
1930	Transportation Equipment - small trucks/mini vans	1,703,143	959,361	743,782				1,703,143	743,782	5	0.20	148,756	29,934	
1930	Transportation Equipment - work platforms	4,956,003	2,846,892	2,109,111	339,706		631,743	5,248,040	2,401,147	8	0.13	300,143	(41,442)	
1935	Stores Equipment	177,703	67,961	109,741				177,703	109,741	10	0.10	10,974	-	10,974
1940	Tools, Shop & Garage Equipment	703,181	223,530	479,651			187,888	891,069	667,539	10	0.10	66,754	0	66,754
1945	Measurement & Testing Equipment	659,654	464,396	195,259			16,600	676,254	211,859	10	0.10	21,186	(119)	21,067
1955	Communications Equipment	439,754	51,387	388,367				439,754	388,367	10	0.10	38,837	(0)	38,837
1960	Miscellaneous Equipment	593,867	413,034	180,833				593,867	180,833	10	0.10	18,083	-	18,083
1980	System Supervisor Equipment	2,639,261	514,097	2,125,164			147,459	2,786,720	2,272,623	15	0.07	151,508	0	151,508
1995	Contributions & Grants	22,468,948	-	(22,468,948)			(1,818,299)	(24,287,247)	(24,287,247)	25	0.04	(971,490)	(1,164)	(972,654)
	Total	202,022,778	22,783,077	179,239,701	460,402	-	22,390,727	223,953,103	201,170,026			8,297,198	(78,638)	8,218,561

6
7

Accounts that depreciation rates have changed	(81,695)
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ALLOCATED (OVERHEAD) FUNCTIONS:

WNNH's general ledger accounting system is work order driven. For all work that is to be completed, work orders are issued through WNNH's Sungard Enterprise Resource Planning (ERP) system. Most work orders are issued for the specific purpose or job when needed. Some work orders are "standing", which means that they continue from year to year. All work orders are attached to a department or, in the case of capital work orders, a project, and are categorized according to the work that is being performed.

Further, WNNH has a number of departments that are considered to be "overhead" departments (balances are cleared or allocated to other business units). The costs from each of these "overhead" departments are allocated to capital, operating, maintenance, administrative and recoverable units based on a management-approved methodology. Most often, but not always, the costs related to these departments are allocated based on charges to work orders.

In addition to the allocated functions below, payroll burden costs or expenses are also allocated. Payroll burden expenses are outlined in the Employee Compensation section of this Exhibit. An outline of the procedure used by WNNH to allocate overhead costs is attached as Appendix A.

Effectively, based on the allocations calculated each year, the resulting split has historically averaged 60% Operating and 40% Capital for allocated costs, although it may vary from year to year.

Costs for each of the allocated departments are as follows:

Truck Operation and Maintenance

Truck Operation and Maintenance is responsible for the maintenance of WNH's fleet of trucks and power operated equipment. WNH performs many of its own onsite repairs and maintenance, having one full-time mechanic in its vehicle garage.

Activity	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Bridge	2011 Test
Truck Operation & Maintenance	1,701,990	1,469,134	1,603,729	1,555,925	1,456,014	1,404,336

The vehicle count is as follows:

	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Bridge	2011 Test
# of Vehicles	58	58	57	59	55	55
# of Trailers	15	16	17	18	18	18

All expenses to own and operate the fleet (including amortization, fuel, repairs, insurance) are captured within this department. WNH attempts to control its fleet operating costs by replacing or overhauling vehicles as they reach the end of their useful lives. On a yearly basis, replacement priorities are set at budget time based on a number of conditions including age of the vehicle, hours in use, condition, maintenance records, increasing maintenance expenses or increasing down time. As shown above, WNH does not anticipate the addition of any vehicles or equipment to its fleet by 2011; however, there will be eight vehicles that will be replaced in the years 2010 and 2011.

The decrease in 2007 costs reflects the retirement of the Fleet Supervisor in November 2006 and this position was not replaced. The increase in 2008 was primarily due to an increase in fuel costs and contracted services. A decrease in contracted services and truck tools and supplies is expected in 2010.

Allocation - All vehicle costs are charged to individual vehicle work orders in our ERP system, by vehicle. Total accumulated vehicle overhead is charged out through hourly trucking rates (rate depends on the size of the vehicle) directly to the work order, thus, the actual use of the vehicle is reflected in each work order. The allocation via the work order is to operating, capital or recoverable depending on the actual work activity.

Service Centre Building Maintenance

Activity	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Bridge	2011 Test
Service Centre Building Maintenance	542,380	606,950	581,022	590,047	631,917	944,555

WNH's existing administration office and service centre is approximately 48,000 square feet and includes the garage for the storage of fleet vehicles, stores warehouse, and workshops for the trades staff and office space for the employees. The Service Centre was built in 1981 and expanded in 1988 and as it ages, building maintenance costs are increasing. WNH commenced construction of a new Administration Building and Service Centre in 2010 to address the needs of all areas of the business as described in Exhibit 2 Table 2-31.45.

In 2007 the expense for Service Centre Building Maintenance saw a substantial increase in winter maintenance activities (\$27.5k) and communications (phone) costs (\$18.7k). Expenses in 2009 represent a more normal year for building maintenance. Similarly, 2010 and 2011 include a general increase in building maintenance costs.

Allocation - All Service Centre Building Maintenance is charged to a series of maintenance work orders in our ERP system. These expenses are then allocated on a monthly basis to the appropriate functional areas based on each department's square footage. The allocation of costs to other departments results in the building costs being charged to OM&A, Capital (via overheads that have a capital component) or recoverable activities.

Operations Administration

Activity	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Bridge	2011 Test
Operations Administration	812,626	702,260	550,665	577,150	574,966	585,831

Operations Administration captures the costs of providing operational administration and operations related costs. This overhead also captures the cost of any inclement weather downtime for lines staff.

The decrease in 2007 was primarily a result of a decrease in staffing levels, a decrease in inclement weather charges, offset by an increase in training for Apprentice Powerline Maintainers and an increase in personal protective equipment costs.

The decrease in 2008 was primarily a result of a temporary vacancies in staff levels, decreases in training, in personal protective equipment costs, and in clothing and footwear costs.

Allocation - Operations Administration is allocated by applying a percentage on the labour costs of line personnel, and as each labour hour is charged to a work order, the operations administration costs 'follows' the labour. These costs are allocated to capital, O&M and recoverable activities.

Health, Safety and Environment

Activity	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Bridge	2011 Test
Health, Safety & Environment	166,752	212,172	163,996	249,711	287,887	306,847

WNNH's Safety department includes the Manager of Health, Safety and Environment (HSE) and part-time clerical assistance. This department is responsible for the administration of all health, safety and environmental programs in the utility. This includes apprenticeship training, and proficiency training meeting the legally mandated Electrical Utility Safety Rules. The Health, Safety and Environment Department also arranges public safety initiatives including a Grade School Education program.

The net increase in cost in 2007 is primarily attributable to clerical assistance commencing and the cessation of EAC Safety Group Fees. The decrease in 2008 is primarily due to the Manager of HSE leaving part way throughout the year and the position was not replaced until 2009. The increase in 2009 is primarily attributable to the Manager of HSE position being filled for the entire year (vs. part year in 2008) and increased consulting services. Costs can be variable according to staff turnover, changes in work methods, legislated changes to the Occupational Health and Safety Act/Regulations, the Highway Traffic Act/Regulations, the Environmental Protection Act/Regulations and others. Costs included in this department would include the wages of the Manager of Health, Safety and Environment and clerical assistance, training cost for apprentices and journeypersons, monthly or quarterly safety meeting costs for staff, safety committee expenses and training, ergonomic improvements and training, and supervisory training. Maintenance and testing cost of vehicles are not included.

Allocation – HSE expense is allocated by attaching a percentage applied on the labour costs of all personnel. As “outside” personnel require a larger portion of the resources, a larger percentage of the costs is allocated to this group. As each labour hour is charged to a work order or expense account, the HSE costs ‘follows’ the labour. These costs are allocated to capital, OM&A and recoverable activities.

Purchasing/Stores Department

Activity	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Bridge	2011 Test
Purchasing/Stores	428,348	636,894	568,547	273,576	601,900	670,483

The Purchasing/Stores department is responsible for all of the purchasing activities at WNH as well as the care and control of all inventoried items.

This department has 3 employees including a Purchasing/Stores Supervisor and two warehouse staff. The warehouse measures approximately 6,000 square feet. A number of inventoried items are also stored outside in a fenced yard.

The increase in 2007 resulted primarily from an increase in write-off of obsolete inventory. WNH did a thorough review and investigation of its inventory on hand and determined that a considerable amount of material was considered obsolete and was removed from inventory.

The decrease in inventory in 2008 over 2007, resulted from obsolete inventory write offs being less in 2008 than in 2007 and reverting to more normal levels, and an adjustment of the tax recovery component within the inventory. The decrease in 2009 resulted from an adjustment of inventory due to cycle counts.

In 2010 costs reverted back to normal operating levels. The increase in 2011 is attributable to an increase in waste removal costs and increased overtime hours.

Allocation - Costs for this department are allocated based on inventory issues. For all inventory items issued from inventory a 15% material overhead is charged and the offset is credited against this cost center. The allocation of this cost center will be charged to operating & maintenance, capital and recoverable, depending on the actual work activity.

PAYMENTS-IN-LIEU OF INCOME TAXES (PILS):

WNL is subject to the payment of PILs under Section 93 of the *Electricity Act, 1998*, as amended. The Applicant does not pay Section 89 proxy taxes, and is exempt from the payment of income and capital taxes under the *Income Tax Act (Canada)* and the *Ontario Corporations Tax Act*. Table 4-28 below provides a summary of 2006 OEB Approved income taxes included in audited statements, 2010 Bridge Year estimate using current rates, and 2011 Test Year income taxes based on revised rates. A copy of the 2009 Federal T2 and Ontario C23 tax return has been provided in Appendix C. PILs amounts included in the 2009 financial statements are based on estimates and will differ from the actual PILs return. The difference between actual and estimate will be recorded in 2010 financial statements. A summary of PILs per the tax returns are presented in Table 4-26 for 2006 to 2009 as well as the 2010 Bridge and 2011 Test Years.

Tax Calculation

WNL has used the most recent tax rates available at present, which are provided in Table 4-27. WNL has not calculated Federal Large Corporation Tax as it has been discontinued and does not apply.

WNL has calculated PILs using the Board approved method and are summarized in Table 4-28, detailed calculations are shown in Table 4-29. WNL has included an estimated \$61,453 as its deduction for the Ontario Apprenticeship Training Tax Credit (ATTC) and the Co-operative Education Tax Credit. Historically, WNL has taken this deduction and therefore included it in 2010 and 2011. WNL has estimated the deduction for 2010 and 2011 as the same amount as claimed for 2009. WNL presents its historical and expected deductions in Table 4-30.

Adjustments to Accounting Income

WNL's adjustments to accounting income include the removal of accounting amortization, addition of capital cost allowance (CCA), the inclusion of the booked amount for the gain and loss on disposal of net assets, the adjustment of reserves, the addition of non-deductible meals and entertainment expense, the addition of capitalized interest, and the addition of the Ontario Apprenticeship and Co-operative Tax Credits. The 2010 adjustments to accounting income are in Table 4-31 and 2011 adjustments to accounting income are in Table 4-32.

WNL fully allocates the amortization charged on its Vehicles, Stores Equipment, and Engineering Hardware & Software from accounts 1930, 1935, 1940, and a portion of 1920 and 1925 respectively to other cost centers; however, the amortization charged is recognized in the taxation schedules. Detail is presented in Table 4-33.

Capital Cost Allowance (CCA)

WNL presents the calculations for CCA for the 2010 Bridge Year in Table 4-34 and for the 2011 Test Year in Table 4-35

WNL does not have any Cumulative Eligible Capital or associated deductions nor does WNL have any non-distribution eliminations.

WNL notes that it mirrored the tax treatment of dispositions in its CCA Schedules, namely that disposals are recorded at the lesser of capital cost or proceeds.

Upon the advice of its auditors, WNL has depreciated its Administration Building and Service Centre at 6% per annum.

Capital Taxes

WNH provides details of the calculation of Ontario Capital Taxes in Table 4-35A for the years 2006 Actual, 2007 Actual, 2008 Actual and 2009 Actual. Calculations for 2010 Bridge Year and 2011 Test Year are detailed in Table 4-29. The amounts for Ontario Capital Tax are \$86,367 for 2010 and \$Nil for 2011. This amount decreases from year to year due to decreasing Ontario Capital Tax rates and WNH has reflected the cessation of the capital tax rate effective July 1, 2010.

**Table 4-26
Summary of PILs**

Description	2006 Board Approved	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Bridge	2011 Test
Income Taxes	1,741,603	2,260,693	2,220,551	2,261,513	1,974,947	112,443	1,212,310
Large Corporation Tax	5,572	-	-	-	-	-	-
Ontario Capital Tax	295,387	332,791	309,227	256,193	208,472	86,367	-
Total Taxes	2,042,562	2,593,484	2,529,778	2,517,706	2,183,419	198,809	1,212,310

**Table 4-27
Corporate Tax Rates**

Corporate Tax Rates for Tax Year	2010 Bridge	2011 Test
OCT Exemption	15,000,000	-
Federal Income Tax	18.000%	16.500%
Ontario Income Tax	13.000%	11.750%
Combined Income Tax	31.000%	28.250%
Ontario Capital Tax Rate	0.075%	0.000%
Large Corporation Tax Rate	0.000%	0.000%

**Table 4-28
Summary of Income Taxes**

Description	2006 Board Approved	2010 Bridge	2011 Test
Income Taxes	1,741,603	112,443	1,212,310
Large Corporation Tax	5,572	-	-
Ontario Capital Tax	295,387	86,367	-
Total Taxes	2,042,562	198,809	1,212,310

Table 4-29
Tax Calculations

Description	2006 Board Approved	2010 Bridge	2011 Test
Determination of Taxable Income			
Utility Income Before Taxes	4,394,694	2,077,109	7,232,958
Book to Tax Adjustments			
Additions to Accounting Income:			
Amortization of tangible assets	6,023,732	8,218,561	8,498,731
Non-deductible meals & entertainment expense		32,078	32,078
Loss on Disposal		20,000	-
Tax Reserves End of Year	3,376,707	3,991,000	4,108,000
Capitalized Interest	-	-	264,961
ATTC and Co-operative Education Tax Credits		61,453	61,453
Total Additions	9,400,439	12,323,092	12,965,223
Deductions from Accounting Income:			
Gain on disposal of assets per financial statements		65,000	22,000
Capital Cost Allowance from Schedule 8	5,289,844	9,761,814	11,676,286
Tax Reserves Beginning of Year	3,141,233	4,012,433	3,991,000
Excess Interest	542,343	-	-
Total Deductions	8,973,420	13,839,247	15,689,286
Regulatory Taxable Income	4,821,713	560,953	4,508,895
Federal Corporate Income Tax Rate	22.12%	18.00%	16.50%
Provincial Corporate Income Tax Rate	14.00%	13.00%	11.75%
Subtotal	1,741,603	173,896	1,273,763
Less: ATTC, Co-operative Tax Credits		(61,453)	(61,453)
Regulatory Income Tax	1,741,603	112,443	1,212,310
Calculation of Utility Income Taxes			
Income Taxes	1,741,603	112,443	1,212,310
Large Corporation Tax	5,572	-	-
Ontario Capital Tax	295,387	86,367	-
Total Taxes	2,042,562	198,809	1,212,310
Calculation of Ontario Capital Tax			
Total Rate Base (2006 Taxable Capital Calculated)	108,462,251	130,155,551	152,808,317
Less Exemption	(10,000,000)	(15,000,000)	-
Taxable Capital/Deemed Taxable Capital	98,462,251	115,155,551	152,808,317
OCT Rate	0.300%	0.075%	0.000%
Ontario Capital Tax	295,387	86,367	-

Table 4-30
Number of Apprentices/Co-operative Education Tax Credits

	2006 Actual	2007 Actual	2008 Actual	2009 Actual	2010 Bridge	2011 Test
Co-operative Education \$ ⁴	1,928	5,000	4,986	23,031	23,031	23,031
ATTC #	5	5	6	5	5	5
ATTC \$	12,945	25,000	26,434	38,422	38,422	38,422

⁴ The number of persons eligible is dependent of length of their Co-operative Term

Table 4-31
Determination of Tax Adjustments to Accounting Income for 2010

Line Item	T2S1 Line #	Total for Legal Entity	Non- Distribution Eliminations	Utility Amount
Additions:				
Amortization of tangible assets	104	8,218,561		8,218,561
Non-deductible meals & entertainment expense	121	32,078		32,078
Loss on Disposal	111	20,000		20,000
Tax Reserves End of Year	126	3,991,000		3,991,000
ATTC and Co-operative Education Tax Credits	293	61,453		61,453
Total Additions		12,323,092	-	12,323,092
Deductions:				
Gain on disposal of assets per financial statements	401	65,000		65,000
Capital Cost Allowance from Schedule 8	403	9,761,814		9,761,814
Tax Reserves Beginning of Year	414	4,012,433		4,012,433
Total Deductions		13,839,247	-	13,839,247
Tax Adjustments to Accounting Income		(1,516,155)	-	(1,516,155)

Table 4-32
Determination of Tax Adjustments to Accounting Income for 2011

Line Item	T2S1 Line #	Total for Legal Entity	Non-Distribution Eliminations	Utility Amount
Additions:				
Amortization of tangible assets	104	8,549,121		8,549,121
Non-deductible meals & entertainment expense	121	32,078		32,078
Tax Reserves End of Year	126	4,108,000		4,108,000
Capitalized Interest	119	264,961		264,961
ATTC and Co-operative Education Tax Credits	293	61,453		61,453
Total Additions		13,015,614	-	13,015,614
Deductions:				
Gain on disposal of assets per financial statements	401	22,000		22,000
Capital Cost Allowance from Schedule 8	403	11,761,228		11,761,228
Tax Reserves Beginning of Year	414	3,991,000		3,991,000
Total Deductions		15,774,228	-	15,774,228
Tax Adjustments to Accounting Income		(2,758,614)	-	(2,758,614)

Table 4-33
Amortization per PILs Schedules

Description	2010 Bridge	2011 Test
Amortization per 5705	7,464,713	7,816,331
Allocated Amortization for Transportation, Stores, Engineering Hardware & Software	753,847	682,400
Amortization per PILs Schedules	8,218,561	8,498,731

Table 4-34
CCA Continuity Schedule (2010)

Class	Class Description	UCC Bridge Year Opening Balance	Additions	Disposals	UCC Before 1/2 Yr Adjustment	1/2 year Rule (1/2 Additions Less Disposals)	Reduced UCC	Rate %	CCA	UCC Ending Balance
1	Distribution System - 1988 to Feb 22/05	74,957,075	-	(4,282)	74,952,793	(2,141)	74,954,934	4%	2,998,197	71,954,595
8	General Office / Stores Equipment	8,516,260	210,988	-	8,727,248	105,494	8,621,754	20%	1,724,351	7,002,897
10	Computer Hardware / Vehicles	1,813,333	769,082	(31,531)	2,550,884	368,776	2,182,109	30%	654,633	1,896,252
12	Computer Software	3,725	629,483	-	633,208	314,741	318,466	100%	318,466	314,741
1b	Building - Non-Residential ¹	220,978	-	-	220,978	-	220,978	6%	13,259	207,719
45	Computer & Systems Hardware Acq'd Post Mar 22/04	694	-	-	694	-	694	45%	312	382
50	Computer & Systems Hardware Acq'd Post Mar 19/04	72,758	-	-	72,758	-	72,758	55%	40,017	32,741
47	Distribution System Post Feb 22/05	39,787,969	20,771,869	(33,340)	60,526,498	10,369,264	50,157,233	8%	4,012,579	56,513,919
SUB-TOTAL - UCC		125,372,792	22,381,422	(69,153)	147,685,061	11,156,134	136,528,926		9,761,814	137,923,247

¹ Accelerated CCA Rate, additional 2%, thus 6%, effective March 18, 2007

Table 4-35
CCA Continuity Schedule (2011)

Class	Class Description	UCC Bridge Year Opening Balance	Additions	Disposals	UCC Before 1/2 Yr Adjustment	1/2 year Rule (1/2 Additions Less Disposals)	Reduced UCC	Rate %	CCA	UCC Ending Balance
1	Distribution System - 1988 to Feb 22/05	71,954,595	-	-	71,954,595	-	71,954,595	4%	2,878,184	69,076,411
8	General Office / Stores Equipment	7,002,897	2,041,019	-	9,043,916	1,020,509	8,023,406	20%	1,604,681	7,439,234
10	Computer Hardware / Vehicles	1,896,252	920,012	-	2,816,264	460,006	2,356,258	30%	706,877	2,109,386
12	Computer Software	314,741	647,615	-	962,356	323,807	638,549	100%	638,549	323,807
1b	Building - Non-Residential ¹	207,719	22,499,791	-	22,707,510	11,249,895	11,457,615	6%	687,457	22,020,053
45	Computer & Systems Hardware Acq'd Post Mar 22/04	382	-	-	382	-	382	45%	172	210
50	Computer & Systems Hardware Acq'd Post Mar 19/04	32,741	-	-	32,741	-	32,741	55%	18,008	14,733
47	Distribution System Post Feb 22/05	56,513,919	15,531,124	-	72,045,043	7,765,562	64,279,481	8%	5,142,359	66,902,685
SUB-TOTAL - UCC		137,923,247	41,639,560	-	179,562,807	20,819,780	158,743,027		11,676,286	167,886,521

Table 4-35A
Calculation of Capital Taxes

Capital Tax Calculation	2006 Actual	2007 Actual	2008 Actual	2009 Actual
Paid-Up Capital Stock	26,887,104	26,887,104	26,887,104	26,887,104
Retained Earnings (if Deficit, deduct)	21,917,344	26,777,591	31,989,910	36,190,646
Loans and Advances	43,326,214	45,225,757	46,469,886	40,318,368
Bank Loans	8,966,667			
Deferred Credits	3,304,510	3,453,497	3,608,651	
Other Reserves not Allowed as Deductions for Income Tax Purposes	16,527,565	18,840,845	20,187,351	4,012,433
Net Paid-Up Capital	120,929,404	121,184,794	129,142,902	107,408,551
Investment Allowance		(184,247)	(279,258)	(224,888)
Taxable Capital	120,929,404	121,000,547	128,863,644	107,183,663
Prorate Share of Exemption*				(14,529,300)
Net Amount	120,929,404	121,000,547	128,863,644	92,654,363
Rate	0.300%	0.285%	0.225%	0.225%
Ontario Capital Tax before Capital Tax Deduction	362,788	344,852	289,943	208,472
Capital Tax Deduction	(29,997)	(35,625)	(33,750)	-
Capital Tax for Year	332,791	309,227	256,193	208,472
Exemption	10,000,000	12,500,000	15,000,000	15,000,000

PURCHASE OF PRODUCTS AND SERVICES FROM NON-AFFILIATES:

The four tables below contain information on the purchases of non-affiliate services for 2006 (Table 4-36), 2007 (Table 4-37), 2008 (Table 4-38) and 2009 (Table 4-39) by WNH. The total costs are the costs paid to Suppliers each year (excluding GST). The names of the suppliers have been redacted for confidentiality purposes. If parties feel that the information is required, WNH will follow the Ontario Energy Board's (the "Board") Practice Direction on Confidential Filings in order to provide the information. Suppliers have been included in the list if the total purchases exceed \$100,000 per year. Payroll remittances (benefits, Government remittances, etc.), payments to the IESO, OEFC, energy retailers, government organizations, distributors and affiliate transactions are excluded.

Like other distributors, WNH purchases many services and products from third parties. To ensure that the Corporation receives the value for its money, WNH has developed a Purchasing Policy which outlines the procedures to be followed by all employees of WNH when purchasing a product or service. The Purchasing Policy is attached as Appendix B of this Exhibit 4.

Beside each supplier reference in Tables 4-36 through 4-39 below, is an indication of the type(s) of procurement methodology employed.

Table 4-36
2006 Non-Affiliated Vendors > \$100,000 per Year

Supplier	Service Product	Procurement Method	\$
REDACTED			
	Computer Equipment/Repairs & Maintenance	Quote	135,937
	Cable	Quote	136,969
	Construction Services	Tender	351,194
	TS Equipment/Parts	Quote	135,645
	Postage, Rental	Sole Source	201,298
	Transformers	Quote	490,494
	Consulting Services	Contract	131,381
	Tree Trimming Services	Tender	116,560
	Capacitors	Quote	109,393
	Construction Services	Tender	143,180
	Construction Services	Tender	321,050
	TS Equipment/Parts	Quote	1,056,975
	Poles	Annual Pricing	302,174
	Line Hardware	Quote	272,416
	Line Hardware	Annual Pricing	660,302
	Consulting Services	Contract	157,465
	Construction Services	Tender	185,915
	Design Services	Quote	174,945
	Computer Equipment & Maintenance	Quote	396,529
	Insurance	Tender	194,746
	Transformers	Quote/As Required	336,164
	Wire	Annual Pricing	1,409,153
	Construction Services	Quote	189,829
	Meter Reading Services	Quote	256,001
	Vehicles	Tender	238,034
	Contracted Services	Quote	123,683
	TS Equipment/Parts	Quote	125,703
	Line Hardware	Annual Pricing/Quote	150,359

Table 4-37
2007 Non-Affiliated Vendors > \$100,000 per Year

Supplier	Service Product	Procurement Method	\$
REDACTED			
	Computer Equipment/Repairs & Maintenance	Quote	175,874
	Vehicles	Tender	226,149
	Line Hardware	Quote	121,818
	Construction Services	Tender	397,084
	Insurance	Quote	107,559
	Postage, Rental	Sole Source	213,063
	Transformers	Quote	455,582
	Consulting Services	Contract	113,210
	Tree Trimming Services	Tender	154,416
	Contractor Services	Tender	740,775
	Contracted Services - Locates	Quote	105,228
	Construction Services	Tender	445,190
	TS Equipment/Parts	Quote	125,488
	TS Equipment/Parts	Quote	138,951
	Poles	Annual Pricing	312,710
	Line Hardware	Quote	224,645
	Pole Line Hardware	Annual Pricing	734,768
	Consulting Services	Contract	191,245
	Furniture & Fixtures	Quote	103,804
	Insurance	Tender	158,624
	Transformers	Quote	524,519
	Wire	Annual Pricing	909,455
	Construction Services	Quote	885,614
	Meter Reading Services	Quote	334,498
	Vehicles	Tender	103,489
	3rd Tranche CDM Expenditure	Sole Source	137,138
	Line Hardware	As Required	101,177
	3rd Tranche CDM Expenditure	Quote	195,759
	Line Hardware	Annual Pricing/Quote	155,756

Table 4-38
2008 Non-Affiliated Vendors > \$100,000 per Year

Supplier	Service Product	Procurement Method	\$
REDACTED			
	Construction Services	Tender	119,041
	Computer Equipment/Repairs & Maintenance	Quote	166,653
	Construction Services	Tender	102,939
	Construction Services	Tender	409,734
	Insurance	Quote	128,598
	Postage, Rental	Sole Source	206,664
	Transformers	Quote	392,380
	Consulting Services	Contract	153,624
	Tree Trimming Services	Tender	275,349
	Contracted Services - Locates	Quote	115,743
	Construction Services	Tender	500,275
	Dues and Training Sessions	Sole Source	105,996
	Construction Services	Tender/Quote	267,740
	TS Equipment/Parts	Quote	318,698
	Poles	Annual Pricing	484,983
	Line Hardware	Quote	227,503
	Pole Line Hardware	Annual Pricing	918,728
	Handheld Meter Reading Devices	Quote	105,649
	Consulting Services	Contract	195,088
	Smart Meters	Tender	206,236
	Line Hardware	Quote	125,632
	Line Hardware	Quote	163,583
	Insurance	Tender	179,940
	TS # 4 Land	Quote	219,313
	Transformers	Quote	295,138
	Wire	Annual Pricing	1,354,010
	Meter Reading Services	Quote	283,036
	Vehicles	Tender	305,947
	Snow Removal / Stone Dust	Quote	120,409
	Line Hardware	Quote	200,659
	ERP Maintenance Fees - 2008 & 2009 (prepaid)	Contractural	134,838
	Contracted Services	Quote	111,840
	OPA CDM Programs	Quote	112,799
	Line Hardware	Annual Pricing	224,330

Table 4-39
2009 Non-Affiliated Vendors > \$100,000 per Year

Supplier	Service Product	Procurement Method	\$
REDACTED			
	Construction Services	Tender	519,563
	Transformers	Quote	351,793
	Computer Equipment/Repairs & Maintenance	Quote	251,429
	Consulting Services	Quote	135,741
	Construction Services	Quote	154,861
	Line Hardware	Quote	102,075
	Construction Services	Tender	507,959
	Insurance	Quote	126,467
	Postage, Rental	Sole Source	206,121
	TS Equipment and Service	Quote	102,310
	Transformers	Quote	318,941
	Consulting Services	Contract	109,602
	OPA CDM Programs	Sole Source	255,845
	Deposit - New Building/Service Centre Land	Quote	100,000
	Tree Trimming Services	Tender	151,253
	Contractor Services	Tender	272,528
	Billing System Maintenance Fees & Programming	Contractural	103,071
	Contracted Services - Locates	Quote	183,985
	Construction Services	Tender	445,056
	Poles	Annual Pricing	473,773
	Line Hardware	Quote	168,182
	Pole Line Hardware	Annual Pricing	1,194,729
	Consulting Services	Contract	132,499
	Construction Services	Tender	538,259
	Smart Meters	Tender	3,639,032
	Line Hardware	Quote	105,647
	Building Engineering Consulting Services	Tender	359,264
	Insurance	Tender	110,326
	New Building/Service Centre Land	Quote	1,807,535
	Transformers	Quote	988,349
	SCADA Equipment/Parts	Quote	331,269
	Wire	Annual Pricing	1,079,538
	Meter Reading Services	Quote	377,694
	Consulting Services	Contract	147,596
	Vehicles	Tender	371,523
	Line Hardware	Quote	195,607
	TS Equipment/Parts	Quote	1,007,308
	OPA CDM Programs	Quote	463,210
	Contracted Services	Quote	130,807
	OPA CDM Programs	Quote	291,803
	Billing Settlement Services	Quote	133,623
	Vehicles	Tender	378,963
	Line Hardware	Annual Pricing	215,517

BRIDGE AND TEST YEARS:

WNH has made commitments to Melloul-Blamey for the construction of its new Administration Building and Service Centre which will be constructed during 2010 and 2011. The contract was awarded in 2010 after the issuance of a Tender. Purchases for 2010 and 2011 will be determined by the operating and capital works occurring in each year. Purchases will continue to be based on the methodology outlined in the Purchasing Policy.

ONE-TIME COSTS:

WNH has included one-time costs in its 2011 distribution rate application for the cost of this application. WNH has estimated \$160,000 to prepare this application and has included one-quarter of this amount, \$40,000, in the test year.

WNH has not included any costs for low income consumer programs in this application as the government has recently allowed the Board to re-commence its proceeding with regards to low-income consumers. WNH will update this application, prior to the finalization of its rates, with any applicable charges at the time of Board issued instructions.

**SPECIAL PURPOSE CHARGES RELATED TO THE GREEN ENERGY AND GREEN
ECONOMY
ACT, 2009:**

WNH expects to complete Smart Meter installations in 2010 in accordance with the Minister's directive. In addition, WNH plans to continue with the delivery of standard OPA and CDM programs; and has not budgeted for any distribution system costs to connect renewable generation facilities under the FIT program or other renewable generation facilities. WNH is proposing that if any qualifying expenditure is required in the future, that it would be recorded in the Board approved Deferral Accounts.

There are currently 12 FIT Applications with the OPA in WNH's service area, however, no contracts have been awarded and WNH is unable to forecast if any of these projects will proceed. WNH notes that in its large rural territory, the vast majority of the farmland is classed above Class 3 (thus, ineligible for large Solar PV installations) and the small amount of farmland that is Class 3 is inappropriate for these PV installations. WNH is not anticipating a large number of renewable generation installations in its service area.

WNH has not filed a Distribution System Plan in accordance with EB-2009-0397, in which filing of this plan is optional for 2011 cost of service applications. As WNH is not requesting funds for recovery for connection of renewable generation facilities, WNH has not submitted a plan.

WNH has not included any costs related to the Green Energy Act in the 2011 Test Year distribution expenses.

Appendix A

Waterloo North Hydro Inc. Overhead Recovery Process – Year 2009

Overhead Type	Recovery Basis	From Department	To	Job Type
Allocation of Material Overheads	15% applied to cost of materials issued from inventory	Purchasing & Stores Burden	Work Orders	Capital, maintenance, operating, burden accounts and billable
Allocation of Labour Overheads	22.75% applied to direct labour dollars	Payroll Burden	Work Orders Salary G/L Accounts	Capital, maintenance, operating, burden accounts and billable
Allocation of Vehicle Overhead	Trucking hourly rate charged directly to work order of G/L account as used - Rates: Vary from \$4 - \$48, including vehicles and equipment	Vehicle Burden	Work Orders	Capital, maintenance, operating, burden accounts and billable
Allocation of Operation Administration	21.37% applied to lines persons only, applied to direct labour dollars	Operations Administration Burden	Work Orders	Capital, maintenance, operating, burden accounts and billable
Allocation of Engineering Cost	9% applied to total cost of specific capital projects	Engineering Burden	Work Orders	Capital jobs only (billable and non-billable)
Allocation of Administration Cost Recovery	15% applied to total cost of billable jobs	OperationSupervision Engineering General Administration	Work Orders	Billable jobs only
Allocation of Building Costs	Based on square footage each department occupies	Building Maintenance Burden	G/L Accounts	Operating, burden accounts
Allocation of Health,Safety & Environment Costs	5.16% applied to "outside" persons, 1.09% applied to inside staff, applied to direct labour dollars	Loss Control Burden	Work Orders G/L Accounts	Capital, maintenance, operating, burden accounts and billable

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Appendix B

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WNH Corporate

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Purchasing Policy

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WATERLOO NORTH HYDRO INC. STANDARD PROCEDURE	Code: Page:	G.32 Page 1 of 12
Title: PURCHASING POLICY	Date Issued: Date Revised:	1991 Nov.1, 2006
Department: Operations Section: General Prepared by: Eileen Allen Approved by: Rene W. Gatien	Distribution: President & CEO, All Vice-Presidents, HTE Team, Executive Assistant to the President, Purchasing Supervisor	

1. Corporate Statement for Purchasing

Waterloo North Hydro Inc. will maintain an open and competitive process with respect to the purchase of goods and services. We will actively investigate new sources and methods of procurement to provide the most effective and efficient products and services that comply with ESA and other applicable regulatory agencies. We will also pursue beneficial cooperative purchasing with other utilities, the local municipalities and the Region of Waterloo.

2. Goals and Objectives for Departments

To direct their activities towards the corporate statement, the goals and objectives of all departments in the purchasing of goods and services are as follows:

- a) provide clear, objective and approved specifications for all significant purchases,
- b) assist in identifying potential sources for purchases,
- c) develop and maintain reliable sources of supply,
- d) obtain a minimum of three competitive bids where possible and practical,
- e) negotiate major contracts,
- f) recommend sole source justification in accordance with the policies,
- g) select successful bidders and suppliers based on written quotations, tenders, bids and proposals,
- h) designate persons authorized to approve expenditures and their expenditure limits within their department,
- i) review purchases upon delivery to ensure compliance with specifications,
- j) comply with the approved purchasing policies and procedures of the corporation,
- k) ensure the timely and efficient procurement of quality goods and services for the needs of the corporation,

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Section:	General		
Prepared by:	Eileen Allen		
Approved by:	Rene W. Gatien		

- l) create and ensure standards of quality, safety and compatibility in the procurement of goods and services,
- m) standardize to reduce the kinds of goods used by the corporation to the smallest number practical to meet the needs of the departments.
- n) use the concepts of lowest overall cost (material and labour) and lowest life cycle cost when purchasing products and services.

3. Definitions

"Goods and services" shall include all supplies, materials, equipment, major tools, general maintenance and service contracts, subscriptions, publications, consultants' services, and construction contracts and shall not include the purchase or sale of land or buildings.

"Value" of a lease or rental shall be determined by multiplying the monthly payment by the number of months contained in the lease.

4. Environmentally Sound Procurement Policy

Wherever we can influence the life cycle of goods and services, departments shall apply the reduce, reuse, recycle and recover methodology, to reduce our environmental impact.

4.1 Review of Needs Prior to Sourcing Goods and Services

Before deciding on the need to acquire any goods and services the Corporation shall:

- a) Review whether other options for meeting the needs of the Corporation have been explored,
- b) Examine the feasibility of short-term rental or sharing the product as an alternative to purchasing,
- c) Review whether the quantity requested is appropriate,
- d) Determine whether the product will be completely used at the end of its cycle and if not, whether it may be easily reallocated or disposed

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Section:	General		
Prepared by:	Eileen Allen		
Approved by:	Rene W. Gatien		

4.2 Review of Goods and Services Prior to Purchase for Environmental Impacts

When seeking written quotations or tenders for the purchase of goods and services, the Corporation will request information from the vendor to demonstrate how the product meets the environmental impact criteria listed below. When selecting goods and services or goods for purchase without the submission of written quotations or tenders, the Corporation will conduct its own examination of the goods and services to determine whether the criteria have been met. The vendor will also be requested to propose alternate green solutions.

4.3 Product or Material Characteristics to Reduce Environmental Impact

We should consider the characteristics of the product or material and where practical, meet the following:

- a) Certified by the Environmental Choice Program,
- b) Designed to minimize waste,
- c) Energy efficient or included in the Energy Guide labeling program,
- d) Less polluting than competitive products,
- e) Free from hazardous ingredients that would require special disposal,
- f) Free from banned or restricted substances
- g) Is manufactured from recycled materials including a high percentage of post-consumer recycled content,
- h) supported by the WHMIS sheet records

4.4 Packaging to Reduce Environmental Impact

Where we can influence packaging we should ask for the following:

- a) Packaging is designed to minimize waste such as bulk packaging,
- b) Packaging is reusable by the end-user,
- c) Packaging is accepted by supplier for reuse, recycling or recovery,
- d) Packaging is recyclable locally,
- e) Packaging is made from recycled materials.

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Section:	General		
Prepared by:	Eileen Allen		
Approved by:	Rene W. Gatien		

4.5 Operational Characteristics of Product or Material

- a) Durable with a long service life,
- b) Clear and comprehensible operating instructions to ensure that it is used efficiently,
- c) Easy to maintain in good operating condition, economical to repair and easy to upgrade,
- d) Reusable or includes reusable parts such as rechargeable batteries,

4.6 Disposal after Use

- a) Suitability of the product or its components for use by other departments instead of being disposed of,
- b) Ability to return to the supplier for reuse, recycling or recovery,
- c) Eligibility for contribution to a waste exchange program,
- d) Ability to recycle the product locally,
- e) Eligibility for donation to other organizations.

5. Budgeted Purchases

Purchases must be provided for in the budget of the current year and adhere to the following schedule of approvals:

- a) up to \$5,000 by Supervisors, the Line Foremen, Line Superintendent or designate, as required
- b) up to \$100,000 by Vice Presidents,
- c) in excess of \$100,000 the Chief Financial Officer or the President must provide approval in addition to the Vice President,
- d) any computer hardware or software that is part of the corporate information systems, must be approved by the Vice President of Information Services in addition to the schedule above. The Vice President of Information Services shall be consulted on software systems that integrate data from the corporate information system or feed data into the corporate information system.
- e) In the event a purchase should cause the budget line item to be overspent by more than 10%, the purchase may be approved by the Department Vice President, provided the amount is found elsewhere within the department budget.

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- f) At least three competitive quotations should be obtained where the expenditure is to exceed \$10,000, except as noted under sole source procurement or under emergency situations written requests for quotation or tender.
- g) All expenditures in excess of \$100,000 will be subject to a sealed tender process whereby the subject tenders will be opened and reviewed by the Purchasing Agent and the Department Vice President.
- h) No transfers of budget funds from capital expenditures to operating expenses to be undertaken unless approved by the President and the CFO. Unusual circumstances will require Board approval.

6. Emergency Purchases

The President, Chief Financial Officer or a Vice President may authorize expenditures in the case of an emergency to restore service or maintain continuity of service to customers. Competitive quotations are not required in this circumstance.

7. Non-Budgeted Purchases

Purchases not provided for in the budget of the current year may be approved jointly by the Chief Financial Officer and the President up to \$25,000, provided the amount is found elsewhere within the global budget. Approval by the Board of Directors will be required for unbudgeted expenditures beyond \$25,000.

8. Purchase Order Approval Levels for Inventory

The Purchasing Officer and or Buyer is authorized to approve a purchase order for inventory items up to the amount of \$100,000 to an individual vendor. An order shall not be split into two separate purchase orders to avoid going to the next level for approval. The Vice President of Operations, or the Vice President of Engineering, or the President must approve purchase orders in excess of \$100,000 for inventory items.

Inventory levels are to be maintained at the lowest possible level to reduce stock on hand, yet still meet the needs of the Corporation to have material on hand when required.

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9. Purchase Order Approval Levels for Non-inventory Goods & Services

The Purchasing Officer is authorized to approve a purchase order for non-inventory items up to the amount of \$100,000 to an individual vendor. The Buyer is authorized to approve a purchase order for non-inventory items up to the amount of \$25,000 to an individual vendor. (An order shall not be split into two separate purchase orders to avoid going to the next level for approval). The Vice President of Operations, or the Vice President of Engineering, or the President must approve purchase orders in excess of \$100,000 for non-inventory items, providing that they have not originated or approved the requisition.

10. Purchases when only one Bid is Received

When only one bid is received on a tender or Request for Proposal (RFP), a decision will be made by the Vice President of the department involved, the Chief Financial Officer or the President as to whether the bid shall be opened or returned to the bidder unopened. The Purchasing or user department shall investigate the rationale for receiving only one (1) bid. If a new bid call is deemed appropriate, it should be due to a change in the specification, which may have limited bid participation.

11. Purchase Requisition

The purchase requisition starts the procurement process and is used to acquire materials, supplies, equipment or services.

The requisitioning department is responsible for providing all supporting documents such as specifications, sole source justification, a complete G/L number, work request number, project number if applicable and appropriate approval(s).

Departments should anticipate their requirements to allow adequate lead-time for tender/quotation, order processing and product delivery. Item descriptions should be complete and accurate to allow buyers to bid the requirements expeditiously.

12. Written Requests for Tenders/Bids/Quotations/Proposals

The Purchasing section is responsible for obtaining all written quotations, issuing all requests for proposals and tenders for goods and services other than construction services that are tendered by Engineering. Any non-inventory goods over \$100,000 and all vehicle purchases shall be tendered.

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The Purchasing section may, in consultation with the VP of Operations, contact other bidders other than the apparent lowest bidder for the purpose of seeking information, conducting interviews or requesting clarification of their submission.

13. Confidentiality of Bids/Quotations/Proposals

In accordance with fair and sound business practice, all information supplied by vendors in their bid, quotation or proposal will be held in strict confidence.

14. Late Bids/Quotations/Proposals

Late submissions will not be considered and shall be returned to the Vendor unopened.

15. Errors in Bids/Quotations/Proposals

Vendors are responsible for the accuracy of their quoted prices, in the event of an error between a unit price and its extension, the unit price will govern. Quotations may be amended or withdrawn by the vendor up to the closing date and time. Any amendments or withdrawals shall be in writing by the signing officer of the vendor.

16. Sole Source Procurement

Sole source items require detailed documentation from the requisitioning department to justify their purchase and to ensure that the cost charged by the vendor is reasonable. Sole Source Suppliers may be used in the following instances:

- a) when goods and services can be obtained only from one (1) person or firm,
- b) the expertise of an individual organization or individual is deemed to specifically required by the Corporation,
- c) when competition is precluded because of the existence of patent rights, copyrights, secret processes, control of raw material or other such conditions,
- d) when it is the only product or service that has been approved by the Corporation for use in the distribution system,
- e) when the procurement is for electric power or energy, gas, water or other utility services where it would not be practical to allow a contractor other than the utility company itself to work upon the system,

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- f) when the procurement is for technical services in connection with the assembly, installation or servicing of equipment of a highly technical or specialized nature,
- g) when the procurement is for parts or components to be used as replacements in support of equipment specifically designed by the manufacturer,
- h) the contractor is already at work on the site (based on an existing Purchase Order) and it would not be practical to engage another contractor, or
- i) specific Health and Safety items as approved by the Manager of Loss Prevention.

17. Demonstration Equipment and Sample Material

Vendors who supply demonstration equipment or sample material to departments must be advised by the department to provide their own insurance coverage. If the department is interested in purchasing the demonstration equipment or sample material, the standard purchasing and safety procedures must be followed.

18. Approvals for Construction and Alterations to Physical Space

Prior to all requisitions for construction, renovation or alteration to physical space at Corporate facilities require the review of the Department Vice President and final approval by the Vice President responsible for the facility or their designate

19. Emergency Order

An emergency shall be defined as any situation which, if not corrected immediately, would result in a hazard to persons or property, create improper working conditions could result in damage to buildings or facilities, would result in a violation of law, statute or ordinance established by governmental regulation, or in any other fashion, if not acted upon, would be seriously detrimental to the interest of the Corporation or its customers.

Failure to anticipate a need is not considered a valid emergency. Emergency orders are generally used for extremely urgent repairs.

The President, Chief Financial Officer or a Vice President may authorize any expenditure in the case of an emergency.

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If an emergency purchase is made by a department during non business hours, all supporting documentation must be forwarded to the appropriate approval authority the next business day, in order that a Purchase Order, if required, may be issued to the vendor.

20. Purchase Order Cancellation or Modification

Changes in a previously issued Purchase Order must be made by a requisition. This does not apply where the goods and services are being provided under a contract that contains provisions for the issuance of change orders in which case the terms of that contract shall govern the process.

The changes may refer to price, quantities, terms and conditions, delivery point, etc. As a result of these or any other changes, the accounting information may change. Cancellation of Purchase Order or minor changes must be communicated to purchasing via email.

A requisition is generated by the requisitioning department with comments explaining the need for the change. For larger contracts or complicated changes a letter or memorandum may need to be sent to Purchasing.

21. Leases/Lease Purchase and Rental Agreement

The policies governing the purchase of goods and services shall also apply to lease and rental agreements. A Corporate Officer must sign all forms of Leases, Lease Purchases or Rental Agreements for the procurement of equipment on behalf of the Corporation.

Regardless of the time period involved in these agreements, a formal Purchase Order will be issued (except for car rentals when traveling.) Departments should fully describe the equipment to be leased and indicate the proposed term. (number of months or years).

An analysis will be made to determine the economic soundness of whether the goods should be leased or purchased in cooperation with the Chief Financial Officer.

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Some of the factors which will be considered in making this determination are as follows:

- a) Implicit lease rate
- b) Title to the equipment at the end of the lease
- c) Estimated value of the equipment at the end of the lease
- d) Estimated life of the equipment at the end of the lease
- e) Estimate buy-out value at the end of the lease.

22. Terms and Conditions

Terms and conditions governing the purchase of goods and services are printed on the Corporation's Purchase Order that is sent to vendors. When a separate contract is required a copy of the contract must be sent to Purchasing (either hard copy or electronically) in order for the requisition to be processed into a purchase order.

Multiple requisitions against one contract will not require subsequent copies of the contract.

23. Computer Equipment and Software

Departments requiring the acquisition of computer and peripheral computer equipment and software shall contact the Information Services Department (IS) for instruction, research, assistance in system configuration and approval. IS shall prepare the appropriate specifications for use in obtaining competitive pricing.

24. Receipt of Goods and Services

Verification and processing of shipments from vendors and the receipt of proper documentation such as freight bills, bills of lading, packing slips containing the purchase order number, shipping orders or other documentation are the responsibility of the department receiving the goods.

Services from contractors or vendors shall be verified and processed by the department responsible for the service.

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Toxic / Hazardous Items

Any items falling under WHMIS such as chemicals require that a Material Safety Data Sheet (MSDS) must be received with the order and the MSDS is filed in the user facility WHMIS binder. If the order is sent without an MSDS sheet, the vendor or manufacturer is required to fax the MSDS sheet immediately. These items should be stored in accordance with current legislation.

25. Damages, Shortages, Mistakes in Shipping

In the case of visible damage or shortage of goods received a written notation must be made on the carrier's delivery receipt **at time of delivery**. A copy of this delivery receipt shall be directed to the Purchasing section for follow up with the vendor.

In case of concealed damage or shortage of shipment, the goods should be set aside and a written notation concerning the damage/shortage made on the packing slip and **reported immediately to the Purchasing section**, including the following details: Purchase Order number, date, vendor and extent of damage or shortage. Claims to vendors must be filed immediately. Failure to comply may result in the claim being denied.

26. Local Preference

The Corporation will award proposals for goods and services by giving preference to vendors located in the Waterloo region, when in all other respects, proposals are equal and there is no material difference in cost.

27. Conflicts of Interest

Acquisitions from a business in which an employee or family member has an interest, is prohibited unless full disclosure of the background facts are presented in writing to the Vice President of Finance.

28. Code of Conduct for Corporation Employees

Waterloo North Hydro employment policies outline a code of conduct that applies to all employees and their business relations with individuals and organizations that conduct business with the Corporation.

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29. Confidentiality and Right to Audit

All contracts for goods and services in which the contractor will or may have access to confidential information shall contain the Corporation's confidentiality and right to audit clauses. (Privacy Policy of the Corporation)

30. Personal Purchases by Employees

Pricing arrangements negotiated by the Corporation may be made available to employees of the corporation at the discretion of a Corporate Officer. However, any such purchase by staff shall be invoiced directly to the staff member. No personal purchases made by an employee shall be included on any invoice to the Corporation regardless of whether the employee reimburses the Corporation for the cost.

31. Charge Accounts

No credit card or charge accounts, other than those sponsored by the Corporation (e.g., the Visa Purchasing Card) can be opened.

32. Vendors– Approval

All new vendors are to be approved by the Finance Department with the exception of emergency purchases and some confidential professional services.

33. Purchasing of Goods and Services from Employees

WNH will not purchase goods and services from an employee.

Appendix C

2009

Income Tax Returns



Canada Revenue
Agency

Agence du revenu
du Canada

Business Consent form

Complete this form to consent to the release of confidential information about your program account(s) to the representative named below, or to cancel consent for an existing representative. **Send this completed form to your tax centre (see Instructions).** Make sure you complete this form correctly, since we cannot change the information that you provided. You can also give or cancel consent by providing the requested information online through My Business Account at www.cra.gc.ca/mybusinessaccount.

Note: Read all the instructions before completing this form.

Part 1 – Business information

Complete this part to identify your business (all fields have to be completed)

Business name: Waterloo North Hydro Inc.

BN: 865844575 Telephone Number: (519) 886-5090

Part 2 – Authorize a representative

Complete either part a) or b)

a) Authorize access by telephone, fax, mail or in person by appointment

If you are giving consent for an individual, enter that person's full name. If you are giving consent to a firm, enter the name and BN of the firm. If you want us to deal with a specific individual in that firm, enter **both** the individual's name and the firm's name and BN. If you do not identify an individual of the firm, then you are giving us consent to deal with anyone from that firm.

Note: If you are authorizing a representative (individual or firm) who is not registered with the Represent a client service, the phone number is required.

Name of Individual: _____

Name of Firm: _____

Telephone number: _____ Extension: _____ **BN:**

OR

b) Authorize online access (includes access by telephone, fax, mail or by appointment)

You can authorize your representative to deal with us through our online service for representatives. **The name of the firm must be the same name that is registered with the Represent a client service at www.cra.gc.ca/representatives.** Our online service does not have a year-specific option, so your representative will have access to **all years**. Please enter the name and RepID of the individual or name and BN of the firm.

Name of Individual: _____

Name of Firm: KPMG LLP

RepID: **BN:** 122363153

The Business Number must be registered with the
Represent a client service to be an online representative.

Part 3 – Select the program accounts, years and authorization level

a) Program Accounts – Select the program accounts the above individual or firm is authorized to access (tick only box A or B).

- A. ☒ This authorization applies to all program accounts and all years.
Online access is available for all years only.

Expiry date:

AND

Authorization Level (tick level 1 or 2)

- ☒ Level 1 lets CRA disclose information only on your program account(s) **or**
☐ Level 2 lets CRA disclose information **and** accept changes to your program account(s).

OR

- B. ☐ This authorization applies only to program accounts and periods listed in Part 3b). If you ticked this option, you must complete 3b).

Business Consent form (RC59 continued)

Part 3 – Select the program accounts, years and authorization level (continued)

b) Details of program accounts and fiscal periods — Complete this area only if you ticked box B in Part 3a) on page 1.

If you ticked box B in part 3a), you have to provide at least one program identifier (see Instructions on page 1). You can then tick the "All program accounts" box for that program identifier **or** enter a reference number. Provide the authorization level (tick **either** box 1 to disclose information or box 2 to disclose information **and** accept changes to your program account).

You can also tick the "All years" box to allow unlimited tax year access **or** enter a specific fiscal period (specific period authorization is **not available** for online access). You can also enter an expiry date to automatically cancel authorization. If more authorizations or more than four program identifiers are needed, complete another Form RC59.

Program identifier	All program accounts	Reference number	Authorization level	All years	or	Specific fiscal period (not available for online access)	Expiry date
			1 2			Year-end	
	☐ or	☐	☐	☐	or		
	☐ or	☐	☐	☐	or		
	☐ or	☐	☐	☐	or		
	☐ or	☐	☐	☐	or		

Part 4 – Cancel one or more authorizations

Complete this part **only** to cancel authorization(s)

☐ **A.** Cancel **all** authorizations.

☐ **B.** Cancel authorization for the individual or firm identified below.

☐ **C.** Cancel authorization for specific program account(s) _____

Name of Individual: _____

Name of Firm: _____

Part 5 – Certification

This form has to be signed by an authorized person of the business such as an owner, a partner of a partnership, a director of a corporation, an officer of a non-profit organization or a trustee of an estate. By signing and dating this form, you authorize the CRA to deal with the individual or firm listed in Part 2 of this form or cancel the authorizations listed in Part 4.

First name: Albert

Last name: Singh

Sign here  _____

Date 2010-06-09

We will not process this form unless it is **signed** and **dated** by an authorized person of the business.

Important Notice

Return not Compliant with CRA's Requirements

Although your return does not comply with the CRA's requirements, you have chosen to print the bar codes and ignore the CRA's diagnostics.

The return's processing may be delayed because of the occurrence of these diagnostics.

T2 BAR CODE RETURN

Name: Waterloo North Hydro Inc.

BN: 86584 4575 RC 0001

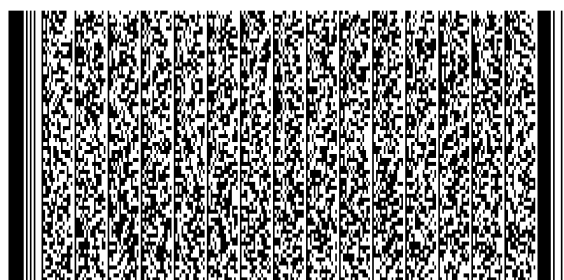
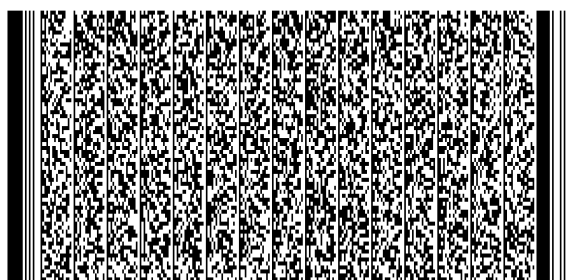
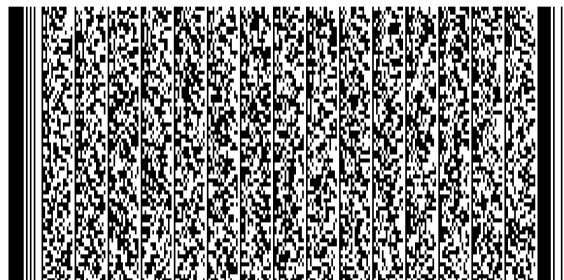
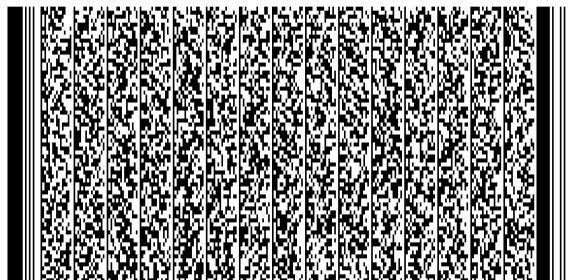
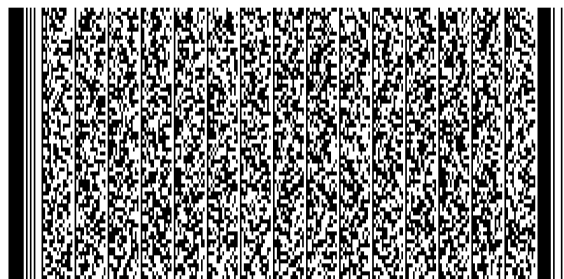
Tax Year Start: 2009-01-01

Tax Year End: 2009-12-31

For agency use
[055]

For agency use
[095] _____
[096] _____

X



This page must be sent to the Canada Revenue Agency

T2 BAR CODE RETURN

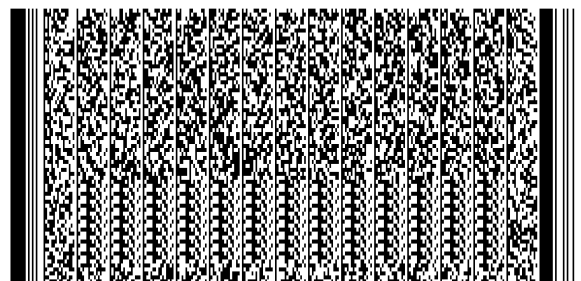
Waterloo North Hydro Inc.
EB-2010-0144
Filed: August 27, 2010
Exhibit 4 - Page 123 of 246

Name: Waterloo North Hydro Inc.

BN: 86584 4575 RC 0001

Tax Year Start: 2009-01-01

Tax Year End: 2009-12-31



This page must be sent to the Canada Revenue Agency

T2 BAR CODE RETURN

Waterloo North Hydro Inc.
EB-2010-0144
Filed: August 27, 2010
Exhibit 4 - Page 124 of 246

Name: Waterloo North Hydro Inc.

BN: 86584 4575 RC 0001

Tax Year Start: 2009-01-01

Tax Year End: 2009-12-31

Under the *Income Tax Act*, you must keep all records used to prepare your corporation income tax return, and provide this information to us upon request.

Certification

I, Albert Singh am an authorized signing officer of the corporation.

I certify that the following amounts are, to the best of my knowledge, correct and complete, and fully disclose the corporation's income tax payable. These amounts also reflect the information given on the corporation's income tax return for the taxation year noted on this return.

Net income (or loss) for income tax purposes from Schedule 001, financial statements or GIF1	\$	5 984 688
Part I tax payable	\$	1 133 096
Part II surtax payable	\$	0
Part III.1 tax payable	\$	0
Part IV tax payable	\$	0
Part IV.1 tax payable	\$	0
Part VI tax payable	\$	0
Part VI.1 tax payable	\$	0
Part XIII.1 tax payable	\$	0
Part XIV tax payable	\$	0
Net provincial and territorial tax payable	\$	984 875
Provincial tax on large corporations	\$	0
Enclosed payment	\$	0

I further certify that the method of calculating income for this taxation year is consistent with that of the previous year except as specifically disclosed in a statement attached to this return.

(519)886-5090

VP Finance & CEO

Signature of an authorized signing officer of the corporation Phone

Position, office or rank

2010-06-09

Contact person, if different to authorized signing officer Phone

Date

This page must be sent to the Canada Revenue Agency

Federal Tax Instalments

Federal tax instalments

For the taxation year ended 2010-12-31

The following is a list of federal instalments payable for the current taxation year. The last column indicates the instalments payable to Revenue Canada. The instalments are due no later than on the dates indicated, otherwise non-deductible interest will be charged. A cheque or money order should be made payable to the Receiver General. Payment may be made by cheque or money order payable to the Receiver General either to an authorized financial institution or filed with **the appropriate remittance voucher to the following address:**

Canada Revenue Agency
875 Heron Road
Ottawa ON K1A 1B1

Note that you may also be able to pay by telephone or Internet banking. For more information, consult the *Corporation Instalment Guide*.

Monthly instalment workchart

Date	Monthly tax instalments	Instalments paid	Cumulative difference	Instalments payable
2010-01-31	172,861			172,861
2010-02-28	172,861			172,861
2010-03-31	172,861			172,861
2010-04-30	172,861			172,861
2010-05-31	172,861			172,861
2010-06-30	172,861			172,861
2010-07-31	172,861			172,861
2010-08-31	172,861			172,861
2010-09-30	172,861			172,861
2010-10-31	172,861			172,861
2010-11-30	172,861			172,861
2010-12-31	172,860			172,860
Total	2,074,331			2,074,331



Canada Revenue Agency
 Agence du revenu du Canada

T2 CORPORATION INCOME TAX RETURN

200

This form serves as a federal, provincial, and territorial corporation income tax return, unless the corporation is located in Ontario (for tax years ending before 2009), Quebec, or Alberta. If the corporation is located in one of these provinces, you have to file a separate provincial corporation return.

Parts, sections, subsections, paragraphs, and subparagraphs mentioned on this return refer to the federal *Income Tax Act*. This return may contain changes that had not yet become law at the time of printing.

Send one completed copy of this return, including schedules and the *General Index of Financial Information* (GIFI), to your tax centre or tax services office. You have to file the return within six months after the end of the corporation's tax year.

For more information see www.cra.gc.ca or Guide T4012, *T2 Corporation – Income Tax Guide*.

055 Do not use this area

Identification

Business Number (BN) **001** 86584 4575 RC0001

Corporation's name

002 Waterloo North Hydro Inc.

Address of head office

Has this address changed since the last time you filed your T2 return? **010** 1 Yes ☐ 2 No ☒

(If **yes**, complete lines 011 to 018.)

011 300 Northfield Drive East

012 Box 640

City Province, territory, or state

015 Waterloo

016 ON

Country (other than Canada) Postal code/Zip code

017 **018** N2J 4A3

Mailing address (if different from head office address)

Has this address changed since the last time you filed your T2 return? **020** 1 Yes ☐ 2 No ☒

(If **yes**, complete lines 021 to 028.)

021 c/o

022

023

City Province, territory, or state

025 Waterloo

026 ON

Country (other than Canada) Postal code/Zip code

027 **028** N2J 4A3

Location of books and records

Has the location of books and records changed since the last time you filed your T2 return? **030** 1 Yes ☐ 2 No ☒

(If **yes**, complete lines 031 to 038.)

031 300 Northfield Drive East

032

City Province, territory, or state

035 Waterloo

036 ON

Country (other than Canada) Postal code/Zip code

037 **038** N2J 4A3

040 Type of corporation at the end of the tax year

1 ☒ Canadian-controlled private corporation (CCPC) 4 ☐ Corporation controlled by a public corporation

2 ☐ Other private corporation 5 ☐ Other corporation (specify, below)

3 ☐ Public corporation

If the type of corporation changed during the tax year, provide the effective date of the change.

043 YYYY MM DD

To which tax year does this return apply?

Tax year start Tax year-end
060 2009-01-01 **061** 2009-12-31
 YYYY MM DD YYYY MM DD

Has there been an acquisition of control to which subsection 249(4) applies since the previous tax year? **063** 1 Yes ☐ 2 No ☒

If **yes**, provide the date control was acquired **065** YYYY MM DD

Is the date on line 061 a deemed tax year-end in accordance with subsection 249(3.1)? **066** 1 Yes ☐ 2 No ☒

Is the corporation a professional corporation that is a member of a partnership? **067** 1 Yes ☐ 2 No ☒

Is this the first year of filing after:
 Incorporation? **070** 1 Yes ☐ 2 No ☒
 Amalgamation? **071** 1 Yes ☐ 2 No ☒

If **yes**, complete lines 030 to 038 and attach Schedule 24.

Has there been a wind-up of a subsidiary under section 88 during the current tax year? **072** 1 Yes ☐ 2 No ☒

If **yes**, complete and attach Schedule 24.

Is this the final tax year before amalgamation? **076** 1 Yes ☐ 2 No ☒

Is this the final return up to dissolution? **078** 1 Yes ☐ 2 No ☒

If an election was made under section 261, state the functional currency used **079**

Is the corporation a resident of Canada?
080 1 Yes ☒ 2 No ☐ If **no**, give the country of residence on line 081 and complete and attach Schedule 97.

081

Is the non-resident corporation claiming an exemption under an income tax treaty? **082** 1 Yes ☐ 2 No ☒

If **yes**, complete and attach Schedule 91.

If the corporation is exempt from tax under section 149, tick one of the following boxes:

085 1 ☐ Exempt under paragraph 149(1)(e) or (l)
 2 ☐ Exempt under paragraph 149(1)(j)
 3 ☐ Exempt under paragraph 149(1)(t)
 4 ☐ Exempt under other paragraphs of section 149

Do not use this area

091 **092** **093** **094** **095** **096**
100

Attachments**Financial statement information:** Use GIFI schedules 100, 125, and 141.**Schedules** – Answer the following questions. For each **Yes** response, **attach** to the T2 return the schedule that applies.

	Yes	Schedule
Is the corporation related to any other corporations?	150 ☒	9
Is the corporation an associated CCPC?	160 ☒	23
Is the corporation an associated CCPC that is claiming the expenditure limit?	161 ☐	49
Does the corporation have any non-resident shareholders?	151 ☐	19
Has the corporation had any transactions, including section 85 transfers, with its shareholders, officers, or employees, other than transactions in the ordinary course of business? Exclude non-arm's length transactions with non-residents	162 ☐	11
If you answered yes to the above question, and the transaction was between corporations not dealing at arm's length, were all or substantially all of the assets of the transferor disposed of to the transferee?	163 ☐	44
Has the corporation paid any royalties, management fees, or other similar payments to residents of Canada?	164 ☐	14
Is the corporation claiming a deduction for payments to a type of employee benefit plan?	165 ☐	15
Is the corporation claiming a loss or deduction from a tax shelter acquired after August 31, 1989?	166 ☐	T5004
Is the corporation a member of a partnership for which a partnership identification number has been assigned?	167 ☐	T5013
Did the corporation, a foreign affiliate controlled by the corporation, or any other corporation or trust that did not deal at arm's length with the corporation have a beneficial interest in a non-resident discretionary trust?	168 ☐	22
Did the corporation have any foreign affiliates during the year?	169 ☐	25
Has the corporation made any payments to non-residents of Canada under subsections 202(1) and/or 105(1) of the federal <i>Income Tax Regulations</i> ?	170 ☐	29
Has the corporation had any non-arm's length transactions with a non-resident?	171 ☐	T106
For private corporations: Does the corporation have any shareholders who own 10% or more of the corporation's common and/or preferred shares?	173 ☒	50
Has the corporation made payments to, or received amounts from, a retirement compensation plan arrangement during the year?	172 ☐	
Is the net income/loss shown on the financial statements different from the net income/loss for income tax purposes?	201 ☒	1
Has the corporation made any charitable donations; gifts to Canada, a province, or a territory; gifts of cultural or ecological property; or gifts of medicine?	202 ☐	2
Has the corporation received any dividends or paid any taxable dividends for purposes of the dividend refund?	203 ☐	3
Is the corporation claiming any type of losses?	204 ☐	4
Is the corporation claiming a provincial or territorial tax credit or does it have a permanent establishment in more than one jurisdiction?	205 ☒	5
Has the corporation realized any capital gains or incurred any capital losses during the tax year?	206 ☐	6
i) Is the corporation claiming the small business deduction and reporting income from: a) property (other than dividends deductible on line 320 of the T2 return), b) a partnership, c) a foreign business, or d) a personal services business; or ii) is the corporation claiming the refundable portion of Part I tax?	207 ☐	7
Does the corporation have any property that is eligible for capital cost allowance?	208 ☒	8
Does the corporation have any property that is eligible capital property?	210 ☐	10
Does the corporation have any resource-related deductions?	212 ☐	12
Is the corporation claiming reserves of any kind?	213 ☐	13
Is the corporation claiming a patronage dividend deduction?	216 ☐	16
Is the corporation a credit union claiming a deduction for allocations in proportion to borrowing or an additional deduction?	217 ☐	17
Is the corporation an investment corporation or a mutual fund corporation?	218 ☐	18
Is the corporation carrying on business in Canada as a non-resident corporation?	220 ☐	20
Is the corporation claiming any federal or provincial foreign tax credits, or any federal or provincial logging tax credits?	221 ☐	21
Does the corporation have any Canadian manufacturing and processing profits?	227 ☐	27
Is the corporation claiming an investment tax credit?	231 ☒	31
Is the corporation claiming any scientific research and experimental development (SR&ED) expenditures?	232 ☐	T661
Is the total taxable capital employed in Canada of the corporation and its related corporations over \$10,000,000?	233 ☒	
Is the total taxable capital employed in Canada of the corporation and its associated corporations over \$10,000,000?	234 ☒	
Is the corporation claiming a surtax credit?	237 ☐	37
Is the corporation subject to gross Part VI tax on capital of financial institutions?	238 ☐	38
Is the corporation claiming a Part I tax credit?	242 ☐	42
Is the corporation subject to Part IV.1 tax on dividends received on taxable preferred shares or Part VI.1 tax on dividends paid?	243 ☐	43
Is the corporation agreeing to a transfer of the liability for Part VI.1 tax?	244 ☐	45
Is the corporation subject to Part II - Tobacco Manufacturers' surtax?	249 ☐	46
For financial institutions: Is the corporation a member of a related group of financial institutions with one or more members subject to gross Part VI tax?	250 ☐	39
Is the corporation claiming a Canadian film or video production tax credit refund?	253 ☐	T1131
Is the corporation claiming a film or video production services tax credit refund?	254 ☐	T1177
Is the corporation subject to Part XIII.1 tax? (Show your calculations on a sheet that you identify as Schedule 92.)	255 ☐	92

Attachments – continued from page 2

		Yes	Schedule
Did the corporation have any foreign affiliates that are not controlled foreign affiliates?	256	☐	T1134-A
Did the corporation have any controlled foreign affiliates?	258	☐	T1134-B
Did the corporation own specified foreign property in the year with a cost amount over \$100,000?	259	☐	T1135
Did the corporation transfer or loan property to a non-resident trust?	260	☐	T1141
Did the corporation receive a distribution from or was it indebted to a non-resident trust in the year?	261	☐	T1142
Has the corporation entered into an agreement to allocate assistance for SR&ED carried out in Canada?	262	☐	T1145
Has the corporation entered into an agreement to transfer qualified expenditures incurred in respect of SR&ED contracts?	263	☐	T1146
Has the corporation entered into an agreement with other associated corporations for salary or wages of specified employees for SR&ED?	264	☐	T1174
Did the corporation pay taxable dividends (other than capital gains dividends) in the tax year?	265	☐	55
Has the corporation made an election under subsection 89(11) not to be a CCPC?	266	☐	T2002
Has the corporation revoked any previous election made under subsection 89(11)?	267	☐	T2002
Did the corporation (CCPC or deposit insurance corporation (DIC)) pay eligible dividends, or did its general rate income pool (GRIP) change in the tax year?	268	☒	53
Did the corporation (other than a CCPC or DIC) pay eligible dividends, or did its low rate income pool (LRIP) change in the tax year?	269	☐	54

Additional information

Did the corporation use the International Financial Reporting Standards (IFRS) when it prepared its financial statements?	270	1 Yes ☐	2 No ☒
Is the corporation inactive?	280	1 Yes ☐	2 No ☒
Has the major business activity changed since the last return was filed? (enter yes for first-time filers)	281	1 Yes ☐	2 No ☒
What is the corporation's major business activity? (Only complete if yes was entered at line 281)	282		
If the major business activity involves the resale of goods, show whether it is wholesale or retail	283	1 Wholesale ☐	2 Retail ☐
Specify the principal product(s) mined, manufactured, sold, constructed, or services provided, giving the approximate percentage of the total revenue that each product or service represents.	284	Electricity	285 100.000 %
	286		287 %
	288		289 %
Did the corporation immigrate to Canada during the tax year?	291	1 Yes ☐	2 No ☒
Did the corporation emigrate from Canada during the tax year?	292	1 Yes ☐	2 No ☒
Do you want to be considered as a quarterly instalment remitter if you are eligible?	293	1 Yes ☐	2 No ☐
If the corporation was eligible to remit instalments on a quarterly basis for part of the tax year, provide the date the corporation ceased to be eligible	294	YYYY MM DD	
If the corporation's major business activity is construction, did you have any subcontractors during the tax year?	295	1 Yes ☐	2 No ☐

Taxable income

Net income or (loss) for income tax purposes from Schedule 1, financial statements, or GIFL	300	5,984,688	A
Deduct: Charitable donations from Schedule 2	311		
Gifts to Canada, a province, or a territory from Schedule 2	312		
Cultural gifts from Schedule 2	313		
Ecological gifts from Schedule 2	314		
Gifts of medicine from Schedule 2	315		
Taxable dividends deductible under section 112 or 113, or subsection 138(6) from Schedule 3	320		
Part VI.1 tax deduction *	325		
Non-capital losses of previous tax years from Schedule 4	331		
Net capital losses of previous tax years from Schedule 4	332		
Restricted farm losses of previous tax years from Schedule 4	333		
Farm losses of previous tax years from Schedule 4	334		
Limited partnership losses of previous tax years from Schedule 4	335		
Taxable capital gains or taxable dividends allocated from a central credit union	340		
Prospector's and grubstaker's shares	350		
Subtotal			B
Subtotal (amount A minus amount B) (if negative, enter "0")		5,984,688	C
Add: Section 110.5 additions or subparagraph 115(1)(a)(vii) additions	355		D
Taxable income (amount C plus amount D)	360	5,984,688	
Income exempt under paragraph 149(1)(t)	370		
Taxable income for a corporation with exempt income under paragraph 149(1)(t) (line 360 minus line 370)		5,984,688	Z

* This amount is equal to 3 times the Part VI.1 tax payable at line 724.

Small business deduction

Canadian-controlled private corporations (CCPCs) throughout the tax year

Income from active business carried on in Canada from Schedule 7	400	5,984,688	A
Taxable income from line 360, minus 10/3 of the amount on line 632*, minus 3 times the amount on line 636**, and minus any amount that, because of federal law, is exempt from Part I tax	405	5,984,688	B

Calculation of the business limit:

For all CCPCs, calculate the amount at line 4 below.

400,000	x	Number of days in the tax year before 2009		=	.....	1
		Number of days in the tax year	365			
500,000	x	Number of days in the tax year after 2008	365	=	.....	500,000 2
		Number of days in the tax year	365			
Add amounts at lines 1 and 2						500,000 4

Business limit (see notes 1 and 2 below)	410	500,000	C
--	-----	---------	---

- Notes:**
- For CCPCs that are not associated, enter the amount from line 4 on line 410. However, if the corporation's tax year is less than 51 weeks, prorate the amount from line 4 by the number of days in the tax year divided by 365, and enter the result on line 410.
 - For associated CCPCs, use Schedule 23 to calculate the amount to be entered on line 410.

Business limit reduction:

Amount C	500,000	x	415 ***	245,128	D	=	.....	10,894,578	E
				11,250					
Reduced business limit (amount C minus amount E) (if negative, enter "0")							425		F

Small business deduction

Amount A, B, C, or F whichever is the least	x	Number of days in the tax year before January 1, 2008		x	16 %	=	.....	5
		Number of days in the tax year	365					
Amount A, B, C, or F whichever is the least	x	Number of days in the tax year after December 31, 2007	365	x	17 %	=	.....	6
		Number of days in the tax year	365					
Total of amounts 5 and 6 – enter on line 9								430 G

* Calculate the amount of foreign non-business income tax credit deductible on line 632 without reference to the refundable tax on the CCPC's investment income (line 604) and without reference to the corporate tax reductions under section 123.4.

** Calculate the amount of foreign business income tax credit deductible on line 636 without reference to the corporate tax reductions under section 123.4.

*** Large corporations

- If the corporation is not associated with any corporations in both the current and the previous tax years, the amount to be entered at line 415 is: (Total taxable capital employed in Canada for the **prior year** minus \$10,000,000) x 0.225%.
- If the corporation is not associated with any corporations in the current tax year, but was associated in the previous tax year, the amount to be entered at line 415 is: (Total taxable capital employed in Canada for the **current year** minus \$10,000,000) x 0.225%
- For corporations associated in the current tax year, see Schedule 23 for the special rules that apply.

General tax reduction for Canadian-controlled private corporations**Canadian-controlled private corporations throughout the tax year**

Taxable income from line 360	5,984,688	A
Lesser of amounts V and Y (line Z1) from Part 9 of Schedule 27		B
Amount QQ from Part 13 of Schedule 27		C
Amount used to calculate the credit union deduction from Schedule 17		D
Amount from line 400, 405, 410, or 425, whichever is the least		E
Aggregate investment income from line 440		F
Total of amounts B to F		G
Amount A minus amount G (if negative, enter "0")	5,984,688	H
Amount H	5,984,688	x
Number of days in the tax year before January 1, 2008		x
7 %	=	I
Number of days in the tax year	365	
Amount H	5,984,688	x
Number of days in the tax year after December 31, 2007, and before January 1, 2009		x
8.5 %	=	J
Number of days in the tax year	365	
Amount H	5,984,688	x
Number of days in the tax year after December 31, 2008, and before January 1, 2010	365	x
9 %	=	K
Number of days in the tax year	365	
Amount H	5,984,688	x
Number of days in the tax year after December 31, 2009, and before January 1, 2011		x
10 %	=	L
Number of days in the tax year	365	
Amount H	5,984,688	x
Number of days in the tax year after December 31, 2010, and before January 1, 2012		x
11.5 %	=	L1
Number of days in the tax year	365	
Amount H	5,984,688	x
Number of days in the tax year after 2011		x
13 %	=	L2
Number of days in the tax year	365	
General tax reduction for Canadian-controlled private corporations – Total of amounts I to L2	538,622	M

Enter amount M on line 638.

General tax reduction

Do not complete this area if you are a Canadian-controlled private corporation, an investment corporation, a mortgage investment corporation, mutual fund corporation, or any corporation with taxable income that is not subject to the corporation tax rate of 38%.

Taxable income from page 3 (line 360 or amount Z, whichever applies)		N
Lesser of amounts V and Y (line Z1) from Part 9 of Schedule 27		O
Amount QQ from Part 13 of Schedule 27		P
Amount used to calculate the credit union deduction from Schedule 17		Q
Total of amounts O to Q		R
Amount N minus amount R (if negative, enter "0")		S
Amount S		x
Number of days in the tax year before January 1, 2008		x
7 %	=	T
Number of days in the tax year	365	
Amount S		x
Number of days in the tax year after December 31, 2007, and before January 1, 2009		x
8.5 %	=	U
Number of days in the tax year	365	
Amount S		x
Number of days in the tax year after December 31, 2008, and before January 1, 2010	365	x
9 %	=	V
Number of days in the tax year	365	
Amount S		x
Number of days in the tax year after December 31, 2009, and before January 1, 2011		x
10 %	=	W
Number of days in the tax year	365	
Amount S		x
Number of days in the tax year after December 31, 2010, and before January 2012		x
11.5 %	=	W1
Number of days in the tax year	365	
Amount S		x
Number of days in the tax year after 2011		x
13 %	=	W2
Number of days in the tax year	365	
General tax reduction – Total of amounts T to W2		X

Enter amount X on line 639.

Refundable portion of Part I tax**Canadian-controlled private corporations throughout the tax year**

Aggregate investment income **440** x 26 2 / 3 % = A
 from Schedule 7

Foreign non-business income tax credit from line 632

Deduct:

Foreign investment income **445** x 9 1 / 3 % = B
 from Schedule 7 (if negative, enter "0")

Amount A minus amount B (if negative, enter "0") C

Taxable income from line 360 5,984,688

Deduct:

Amount from line 400, 405, 410, or 425, whichever is the least

Foreign non-business
income tax credit

from line 632 x 25 / 9 =

Foreign business

income tax credit

from line 636 x 3 =

5,984,688

x 26 2 / 3 % = 1,595,917 D

Part I tax payable minus investment tax credit refund (line 700 minus line 780) 1,133,096

Deduct: Corporate surtax from line 600

Net amount 1,133,096 E

Refundable portion of Part I tax – Amount C, D, or E, whichever is the least **450** F

Refundable dividend tax on hand

Refundable dividend tax on hand at the end of the previous tax year **460**

Deduct: Dividend refund for the previous tax year **465**

Add the total of:

Refundable portion of Part I tax from line 450 above

Total Part IV tax payable from Schedule 3

Net refundable dividend tax on hand transferred from a predecessor corporation on
amalgamation, or from a wound-up subsidiary corporation **480**

Refundable dividend tax on hand at the end of the tax year – Amount G plus amount H **485**

Dividend refund**Private and subject corporations at the time taxable dividends were paid in the tax year**

Taxable dividends paid in the tax year from line 460 of Schedule 3 x 1 / 3 I

Refundable dividend tax on hand at the end of the tax year from line 485 above J

Dividend refund – Amount I or J, whichever is less (enter this amount on line 784)

Part I tax

Base amount of Part I tax – Taxable income (line 360 or amount Z, whichever applies) multiplied by 38.00 % **550** 2,274,181 A

Corporate surtax calculation

Base amount from line A above 2,274,181 1

Deduct:

10 % of taxable income (line 360 or amount Z, whichever applies) 598,469 2

Investment corporation deduction from line 620 below 3 3

Federal logging tax credit from line 640 below 4 4

Federal qualifying environmental trust tax credit from line 648 below 5 5

For a mutual fund corporation or an investment corporation throughout the tax year, enter amount a, b, or c below on line 6, whichever is the least:

28.00 % of taxable income from line 360 a

28.00 % of taxed capital gains b 6

Part I tax otherwise payable c
 (line A plus lines C and D minus line F)

Total of lines 2 to 6 598,469 7

Net amount (line 1 minus line 7) 1,675,712 8

Corporate surtax*

Line 8 1,675,712 × Number of days in the tax year before January 1, 2008 × 4 % = **600** B
 Number of days in the tax year 365

* The corporate surtax is zero effective January 1, 2008.

Recapture of investment tax credit from Schedule 31 **602** C

Calculation for the refundable tax on the Canadian-controlled private corporation's (CCPC) investment income
 (if it was a CCPC throughout the tax year)

Aggregate investment income from line 440 i

Taxable income from line 360 5,984,688

Deduct:

Amount from line 400, 405, 410, or 425, whichever is the least 5,984,688

Net amount 5,984,688 ▶ 5,984,688 ii

Refundable tax on CCPC's investment income – 6 2 / 3 % of whichever is less: amount i or ii **604** D

Subtotal (add lines A to D) 2,274,181 E

Deduct:

Small business deduction from line 430 9

Federal tax abatement **608** 598,469

Manufacturing and processing profits deduction from Schedule 27 **616**

Investment corporation deduction **620**

Taxed capital gains **624** 624

Additional deduction – credit unions from Schedule 17 **628**

Federal foreign non-business income tax credit from Schedule 21 **632**

Federal foreign business income tax credit from Schedule 21 **636**

General tax reduction for CCPCs from amount M **638** 538,622

General tax reduction from amount X **639**

Federal logging tax credit from Schedule 21 **640**

Federal qualifying environmental trust tax credit **648**

Investment tax credit from Schedule 31 **652** 3,994

Subtotal 1,141,085 ▶ 1,141,085 F

Part I tax payable – Line E minus line F 1,133,096 G

Enter amount G on line 700.

Summary of tax and credits**Federal tax**

Part I tax payable	700	1,133,096
Part II surtax payable from Schedule 46	708	
Part III.1 tax payable from Schedule 55	710	
Part IV tax payable from Schedule 3	712	
Part IV.1 tax payable from Schedule 43	716	
Part VI tax payable from Schedule 38	720	
Part VI.1 tax payable from Schedule 43	724	
Part XIII.1 tax payable from Schedule 92	727	
Part XIV tax payable from Schedule 20	728	

Total federal tax **1,133,096****Add provincial or territorial tax:**
 Provincial or territorial jurisdiction **750** ON
 (if more than one jurisdiction, enter "multiple" and complete Schedule 5)

Net provincial or territorial tax payable (except Ontario [for tax years ending before 2009], Quebec, and Alberta)

Provincial tax on large corporations (New Brunswick* and Nova Scotia)

760 984,875**765**

984,875

984,875

Total tax payable **770** 2,117,971 A

* The New Brunswick tax on large corporations is eliminated effective January 1, 2009.

Deduct other credits:

Investment tax credit refund from Schedule 31	780	
Dividend refund	784	
Federal capital gains refund from Schedule 18	788	
Federal qualifying environmental trust tax credit refund	792	
Canadian film or video production tax credit refund (Form T1131)	796	
Film or video production services tax credit refund (Form T1177)	797	
Tax withheld at source	800	

 Total payments on which tax has been withheld **801**

Provincial and territorial capital gains refund from Schedule 18

Provincial and territorial refundable tax credits from Schedule 5

Tax instalments paid

808**812****840**

2,144,200

Total credits **890** 2,144,200

2,144,200 B

Refund code

894

1

Overpayment

26,229

Balance (line A minus line B) -26,229

**Direct deposit request**

To have the corporation's refund deposited directly into the corporation's bank account at a financial institution in Canada, or to change banking information you already gave us, complete the information below:

☐ Start ☐ Change information

914 Institution number

918 Branch number

If the corporation is a Canadian-controlled private corporation throughout the tax year, does it qualify for the one-month extension of the date the balance of tax is due?

 If the result is negative, you have an **overpayment**.
 If the result is positive, you have a **balance unpaid**.
 Enter the amount on whichever line applies.

Generally, we do not charge or refund a difference of \$2 or less.

Balance unpaid

Enclosed payment **898**
896 1 Yes ☐ 2 No ☒

PREPARED SOLELY FOR INCOME TAX PURPOSES WITHOUT AUDIT OR REVIEW FROM INFORMATION PROVIDED BY THE TAXPAYER.

CertificationI, **950** Singh**951** Albert**954** VP Finance & CEO

Last name in block letters

First name in block letters

Position, office, or rank

am an authorized signing officer of the corporation. I certify that I have examined this return, including accompanying schedules and statements, and that the information given on this return is, to the best of my knowledge, correct and complete. I further certify that the method of calculating income for this tax year is consistent with that of the previous year except as specifically disclosed in a statement attached to this return.

955 2010-06-09

Date (yyyy/mm/dd)

Signature of the authorized signing officer of the corporation

956 (519) 886-5090

Telephone number

Is the contact person the same as the authorized signing officer? If **no**, complete the information below**957** 1 Yes ☒ 2 No ☐**958**

Name in block letters

959

Telephone number

Language of correspondence – Langue de correspondance

Indicate your language of correspondence by entering 1 for English or 2 for French.

Indiquez votre langue de correspondance en inscrivant 1 pour anglais ou 2 pour français.

990

1

Schedule of Instalment Remittances

Name of corporation contact ALBERT SINGH
Telephone number (519) 886-5090

Effective interest date	Description (instalment remittance, split payment, assessed credit)	Amount of credit
	INSTALMENTS	2,144,200
Total amount of instalments claimed (carry the result to line 840 of the T2 Return)		2,144,200 A
Total instalments credited to the taxation year per T9		2,144,200 B

Transfer				
Account number	Taxation year end	Amount	Effective interest date	Description
From:				
To:				
From:				
To:				
From:				
To:				
From:				
To:				
From:				
To:				

Form identifier 100

GENERAL INDEX OF FINANCIAL INFORMATION – GIF1

Name of corporation	Business Number	Tax year end Year Month Day
Waterloo North Hydro Inc.	86584 4575 RC0001	2009-12-31

Balance sheet information

Account	Description	GIFI	Current year	Prior year
Assets				
	Total current assets	1599 +	27,471,390	41,474,289
	Total tangible capital assets	2008 +	109,980,991	98,682,279
	Total accumulated amortization of tangible capital assets	2009 –		
	Total intangible capital assets	2178 +		
	Total accumulated amortization of intangible capital assets	2179 –		
	Total long-term assets	2589 +	6,746,607	50,779
	* Assets held in trust	2590 +		
	Total assets (mandatory field)	2599 =	<u>144,198,988</u>	<u>140,207,347</u>
Liabilities				
	Total current liabilities	3139 +	23,290,636	19,985,871
	Total long-term liabilities	3450 +	57,830,602	61,344,462
	* Subordinated debt	3460 +		
	* Amounts held in trust	3470 +		
	Total liabilities (mandatory field)	3499 =	<u>81,121,238</u>	<u>81,330,333</u>
Shareholder equity				
	Total shareholder equity (mandatory field)	3620 +	63,077,750	58,877,014
	Total liabilities and shareholder equity	3640 =	<u>144,198,988</u>	<u>140,207,347</u>
Retained earnings				
	Retained earnings/deficit – end (mandatory field)	3849 =	<u>36,190,646</u>	<u>31,989,910</u>

* Generic item

PREPARED SOLELY FOR INCOME TAX PURPOSES WITHOUT AUDIT OR REVIEW FROM INFORMATION PROVIDED BY THE TAXPAYER.

SCHEDULE 100

Current Assets

Form identifier 1599

Account	Description	GIFI	Current year	Prior year
Cash and deposits				
	* Cash and deposits	1000	226,635	15,382,396
	Cash and deposits		<u>226,635</u>	<u>15,382,396</u>
Accounts receivable				
	* Accounts receivable	1060	11,944,598	10,070,162
	Trade accounts receivable	1062	12,520,720	13,504,247
	Accounts receivable		<u>24,465,318</u>	<u>23,574,409</u>
Inventories				
	* Inventories	1120	2,410,081	2,182,150
	Inventories		<u>2,410,081</u>	<u>2,182,150</u>
Other current assets				
	Prepaid expenses	1484	369,356	335,334
	Other current assets		<u>369,356</u>	<u>335,334</u>
	Total current assets	1599	<u>27,471,390</u>	<u>41,474,289</u>

* Generic item

PREPARED SOLELY FOR INCOME TAX PURPOSES WITHOUT AUDIT OR REVIEW FROM INFORMATION PROVIDED BY THE TAXPAYER.

Tangible Capital Assets and Accumulated Amortization

SCHEDULE 100

Form identifier 2008/2009

Account	Description	GIFI	Tangible capital assets	Accumulated amortization	Prior year
Machinery, equipment, furniture and fixtures					
	* Machinery, equipment, furniture, and fixtures . . .	1740	+	109,980,991	98,682,279
	Total			<u>109,980,991</u>	<u>98,682,279</u>
	Total tangible capital assets	2008	=	<u>109,980,991</u>	<u>98,682,279</u>
	Total accumulated amortization of tangible capital assets	2009	=	<u></u>	<u></u>

* Generic item

PREPARED SOLELY FOR INCOME TAX PURPOSES WITHOUT AUDIT OR REVIEW FROM INFORMATION PROVIDED BY THE TAXPAYER.

Long-term Assets

SCHEDULE 100

Form identifier 2589

Account	Description	GIFI	Current year	Prior year
Other long-term assets				
	* Other long-term assets	2420	50,779	50,779
	Future (deferred) income taxes	2421	6,695,828	
	Other long-term assets		6,746,607	50,779
	Total long-term assets	2589	6,746,607	50,779

* Generic item

PREPARED SOLELY FOR INCOME TAX PURPOSES WITHOUT AUDIT OR REVIEW FROM INFORMATION PROVIDED BY THE TAXPAYER.

SCHEDULE 100

Current Liabilities

Form identifier 3139

Account	Description	GIFI	Current year	Prior year
_____	* Bank overdraft	2600	+	3,092,097
Amounts payable and accrued liabilities				
_____	* Amounts payable and accrued liabilities	2620		17,179,533
_____	Trade payables to related parties	2622		674,879
_____	Interest payable	2629		1,360,684
	Amounts payable and accrued liabilities		+	<u>19,215,096</u>
Other current liabilities				
_____	Deposits received	2961		983,443
	Other current liabilities		+	<u>983,443</u>
_____	Total current liabilities	3139	=	<u>23,290,636</u>

* Generic item

PREPARED SOLELY FOR INCOME TAX PURPOSES WITHOUT AUDIT OR REVIEW FROM INFORMATION PROVIDED BY THE TAXPAYER.

Long-term Liabilities

SCHEDULE 100

Form identifier 3450

Account	Description	GIFI	Current year	Prior year
Long-term debt				
	* Long-term debt	3140	33,513,211	40,402,432
	Long-term debt		33,513,211	40,402,432
Other long-term liabilities				
	* Other long-term liabilities	3320	20,539,427	17,637,379
	Long-term obligations/commitments/capital leases	3321	3,777,964	3,304,651
	Other long-term liabilities		24,317,391	20,942,030
	Total long-term liabilities	3450	57,830,602	61,344,462

* Generic item

PREPARED SOLELY FOR INCOME TAX PURPOSES WITHOUT AUDIT OR REVIEW FROM INFORMATION PROVIDED BY THE TAXPAYER.

Attached Schedule with Total

GIFI code 3320 – Other long-term liabilities

Title GIFI code 3320 – Other long-term liabilities

Description	Amount	
Customer deposits	2,054,738	00
Net regulatory liabilities	18,484,689	00
Total	20,539,427	00

Shareholder Equity

SCHEDULE 100

Form identifier 3620

Account	Description	GIFI	Current year	Prior year
	* Common shares	3500	26,887,104	26,887,104
	* Retained earnings/deficit	3600	36,190,646	31,989,910
	Total shareholder equity	3620	63,077,750	58,877,014

* Generic item

PREPARED SOLELY FOR INCOME TAX PURPOSES WITHOUT AUDIT OR REVIEW FROM INFORMATION PROVIDED BY THE TAXPAYER.

Retained Earnings/Deficit

SCHEDULE 100

Form identifier 3849

Account	Description	GIFI	Current year	Prior year	
	* Retained earnings/deficit – start	3660	+	31,989,910	26,777,591
	* Net income/loss	3680	+	4,752,736	5,482,319
Dividends declared					
	* Dividends declared	3700		552,000	270,000
	Dividends declared		–	552,000	270,000
	Retained earnings/deficit – end	3849	=	36,190,646	31,989,910

* Generic item

PREPARED SOLELY FOR INCOME TAX PURPOSES WITHOUT AUDIT OR REVIEW FROM INFORMATION PROVIDED BY THE TAXPAYER.

Financial Statements – Five Years

This form is the result of the compilation of the data entered in the GIFI forms. This form is provided as a complement of information and do not replace in any ways the traditional financial statements.

This form reproduces the financial statements as they appear in the *CCH Profit Driver* program further to the export process. Consult the context-sensitive help to learn more about *CCH Profit Driver* and about how to export the data towards this program.

Model Properties

Corporation's name Waterloo North Hydro Inc.

Group name

Business number 86584 4575 RC0001

Industry code

Industry type Electricity

Legal form

Primary contact Albert Singh

Contact number (519) 886-5090

Contact email

Address

Street address 300 Northfield Drive East Box 640

City Waterloo

Province/State ON

Postal code N2J4A3

Country

Information about the preparer

Partner JS Manager

Analyst JSU Auditor

	Current year 2009-12-31	1st prior year 2008-12-31	2nd prior year 2007-12-31	3rd prior year 2006-12-31	4th prior year 2005-12-31
Income Statement					
Revenue	104,864,080	117,725,680	118,393,943	117,810,695	130,084,796
Revenue	104,864,080	117,725,680	118,393,943	117,810,695	130,084,796
Returns and allowances (-)					
COGS	79,864,565	92,877,433	93,714,317	94,092,408	107,717,101
COGS	79,864,565	92,877,433	93,714,317	94,092,408	107,717,101
Depreciation					
Gross Profit	24,999,515	24,848,247	24,679,626	23,718,287	22,367,695
Operating expenses	356,974	459,696	488,959	1,048,755	497,412
Operating expenses	356,974	459,696	488,959	1,048,755	497,412
Amortization					
Depreciation					
Bad debts written off					
Salaries and wages					
Officer compensation					
Lease/rent expense					

Current year
2009-12-31

1st prior year
2008-12-31

2nd prior year
2007-12-31

3rd prior year
2006-12-31

4th prior year
2005-12-31

Income Statement (continued)

Other expense (income)	14,767,449	14,110,760	13,370,718	12,869,985	10,573,091
Other expenses	16,465,136	15,838,429	14,985,677	14,820,571	14,492,164
Interest income (-)					
Other income (-)	-1,733,383	-1,690,015	-1,573,032	-1,950,586	-3,898,638
(Gain)/Loss disp. of assets	35,696	-37,654	-41,927		-20,435
Gain on derivatives (-)					
Loss on derivatives					
Income from subs/other (-)					
Non cash income (-)					
Non cash expenses					
EBIT	9,875,092	10,277,791	10,819,949	9,799,547	11,297,192
Interest expense	3,075,416	3,018,676	2,966,924	3,064,405	3,113,954
Interest expense	3,075,416	3,018,676	2,966,924	3,064,405	3,113,954
Deferred interest					
Capitalized interest (-)					
Profit before tax	6,799,676	7,259,115	7,853,025	6,735,142	8,183,238
Taxes	2,046,940	1,776,796		2,771,702	3,088,616
Taxes				2,771,702	3,088,616
Future (def) income tax	2,046,940	1,776,796			
Income tax credit (-)					
Non-Tax (income)/expenses					
Non-Tax (income)/expenses . . .					
Extraordinary items					
Minority interest					
Net income	4,752,736	5,482,319	7,853,025	3,963,440	5,094,622
Dividends	552,000	270,000			
Dividends	552,000	270,000			
Withdrawals					
Dividends – Stock					
Adjustments					
Adjustments					
Currency adjustment					
Retained earnings	4,200,736	5,212,319	7,853,025	3,963,440	5,094,622

	Current year 2009-12-31	1st prior year 2008-12-31	2nd prior year 2007-12-31	3rd prior year 2006-12-31	4th prior year 2005-12-31
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Balance Sheet

Cash and equivalents	226,635	15,382,396	14,338,744	16,695,473	15,390,494
Cash and equivalents	226,635	15,382,396	14,338,744	16,695,473	15,390,494
Short term liquid deposits					
Marketable securities					
Accreceivable	24,465,318	23,574,409	23,591,311	24,392,524	23,676,652
Accreceivable	24,465,318	23,574,409	23,591,311	24,392,524	23,676,652
Allow. – Doubt. accts (-)					
Inventory	2,410,081	2,182,150	2,406,040	2,529,882	2,111,244
Inventory	2,410,081	2,182,150	2,406,040	2,529,882	2,111,244
Raw materials					
Work in progress					
Finished goods					
Prov. slow moving/obs (-)					
Other curr assets	369,356	335,334	306,345	237,713	247,282
Other curr assets					
Tax receivable					
Notes receivable					
Non trade receivables					
Prepaid expenses	369,356	335,334	306,345	237,713	247,282
Loans to rel. parties – CP					
Future (def) income tax – CP					
Due from rel. parties – CP					
Costs in excess of billings					
Derivative assets – CP					
Non op current assets					
Current assets	27,471,390	41,474,289	40,642,440	43,855,592	41,425,672
Fixed assets	109,980,991	98,682,279	93,250,959	89,758,602	84,608,533
Fixed assets				89,758,602	84,608,533
Land					
Buildings					
Leasehold improvements					
Equipment	109,980,991	98,682,279	93,250,959		
Vehicles					
Furniture and fixtures					
Capital leases					
Capital work in progress					
Accumulated depn (-)					
Investments					
Investments					
Investment in subs					

Current year 2009-12-31	1st prior year 2008-12-31	2nd prior year 2007-12-31	3rd prior year 2006-12-31	4th prior year 2005-12-31
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Balance Sheet (continued)

Other non curr assets	6,746,607	50,779	50,779	50,779	1,250,779
Other non curr assets	50,779	50,779	50,779	50,779	50,779
Intangibles					
Notes receivable					
Future (def) income tax	6,695,828				
Loans to rel. parties – NC					1,200,000
Prepaid/deferred exps – NC					
Cash value life insurance					
Derivative assets – NC					
Non op non curr assets					
Non curr assets	116,727,598	98,733,058	93,301,738	89,809,381	85,859,312
Total assets	144,198,988	140,207,347	133,944,178	133,664,973	127,284,984

	Current year 2009-12-31	1st prior year 2008-12-31	2nd prior year 2007-12-31	3rd prior year 2006-12-31	4th prior year 2005-12-31
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Balance Sheet (continued)

Short term debt	3,092,097			8,966,667	9,366,667
Short term debt				8,966,667	9,366,667
Current maturity LTD					
Capital leases – CP					
Subordinated debt – CP					
Overdraft – Book	3,092,097				
Overdraft – Financing					
Line of credit					
Loans payable other					
Accounts payable	17,854,412	17,262,880	17,431,017	15,286,651	20,813,700
Accounts payable	17,854,412	17,262,880	17,431,017	15,286,651	20,813,700
Other curr liabilities	2,344,127	2,722,991	3,936,018	3,733,173	3,717,677
Other curr liabilities					
Accruals					
Tax payable					
Dividends payable					
Interest payable	1,360,684	1,364,412	2,721,368	2,774,829	2,719,825
Provisions					
Due to rel. parties – CP					
Non trade creditors			1,214,650	958,344	997,852
Billings in excess of costs	983,443	1,358,579			
Future (def) income tax – CP					
Loans from rel. comp. – CP					
Derivative liabilities – CP					
Non operating curr liabs					
Current liabilities	23,290,636	19,985,871	21,367,035	27,986,491	33,898,044
Long term debt	37,291,175	43,707,083	43,780,610	43,602,942	43,529,274
Long term debt	33,513,211	40,402,432	40,402,432	40,402,432	40,402,432
Long term capital lease	3,777,964	3,304,651	3,378,178	3,200,510	3,126,842
LT subordinated debt					
Deferred debt					
Deferred interest					
Other non current liabs	20,539,427	17,637,379	15,131,838	13,271,092	5,377,338
Other non current liabs	20,539,427	17,637,379	15,131,838	13,271,092	5,377,338
Future (def) income tax – NC					
Due to rel. parties – NC					
Provisions					
Minority interest					
Deferred revenue					
Loans from related Co – NC					
Derivative liabilities – NC					
Non op non curr liabs					
Non current liabilities	57,830,602	61,344,462	58,912,448	56,874,034	48,906,612
Total liabilities	81,121,238	81,330,333	80,279,483	84,860,525	82,804,656

	Current year 2009-12-31	1st prior year 2008-12-31	2nd prior year 2007-12-31	3rd prior year 2006-12-31	4th prior year 2005-12-31
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Balance Sheet (continued)

Stockholding	26,887,104	26,887,104	26,887,104	26,887,104	26,526,424
Stockholding				26,887,104	26,526,424
Preferred stock					
Common stock	26,887,104	26,887,104	26,887,104		
Paid in capital					
Other equity					
Other equity					
Stockholders loans					
Minority interest					
Reserves					
Treasury stock (-)					
Subordinated debt – Equity					
Accumulated OCI					
Currency adjustment					
Accumulated R/E	36,190,646	31,989,910	29,770,369	21,917,344	17,994,774
Retained earnings from I/S	4,200,736	5,212,319	7,853,025	3,963,440	5,094,622
Previous balance	31,989,910	26,777,591	21,917,344	17,953,904	12,900,152
Adjustments					
Equity	63,077,750	58,877,014	56,657,473	48,804,448	44,521,198
Liabilities & Equity	144,198,988	140,207,347	136,936,956	133,664,973	127,325,854



Canada Revenue Agency
 Agence du revenu
 du Canada

SCHEDULE 125

Form identifier 125

GENERAL INDEX OF FINANCIAL INFORMATION – GIFI

Name of corporation	Business Number	Tax year end Year Month Day
Waterloo North Hydro Inc.	86584 4575 RC0001	2009-12-31

Income statement information

Description	GIFI
Operating name	0001 _____
Description of the operation	0002 _____
Sequence Number	0003 <u>01</u>

Account	Description	GIFI	Current year	Prior year
---------	-------------	------	--------------	------------

Income statement information

Total sales of goods and services	8089 +	104,864,080	117,725,680
Cost of sales	8518 -	79,864,565	92,877,433
Gross profit/loss	8519 =	24,999,515	24,848,247
Cost of sales	8518 +	79,864,565	92,877,433
Total operating expenses	9367 +	19,897,526	19,316,801
Total expenses (mandatory field)	9368 =	99,762,091	112,194,234
Total revenue (mandatory field)	8299 +	106,561,767	119,453,349
Total expenses (mandatory field)	9368 -	99,762,091	112,194,234
Net non-farming income	9369 =	6,799,676	7,259,115

Farming income statement information

Total farm revenue (mandatory field)	9659 +		
Total farm expenses (mandatory field)	9898 -		
Net farm income	9899 =		

Net income/loss before taxes and extraordinary items	9970 =	6,799,676	7,259,115
---	---------------	-----------	-----------

Extraordinary items and income (linked to Schedule 140)

Extraordinary item(s)	9975 -		
Legal settlements	9976 -		
Unrealized gains/losses	9980 +		
Unusual items	9985 -		
Current income taxes	9990 -	2,046,940	1,776,796
Deferred income tax provision	9995 -		
Total – Other comprehensive income	9998 +		
Net income/loss after taxes and extraordinary items (mandatory field)	9999 =	4,752,736	5,482,319

PREPARED SOLELY FOR INCOME TAX PURPOSES WITHOUT AUDIT OR REVIEW FROM INFORMATION PROVIDED BY THE TAXPAYER.

Revenue

SCHEDULE 125

Form identifier 8299

Account	Description	GIFI	Current year	Prior year
_____	* Trade sales of goods and services	8000 +	104,864,080	117,725,680
_____	Total sales of goods and services	8089 =	104,864,080	117,725,680
Rental revenue				
_____	* Rental revenue	8140	246,620	245,771
_____	Rental revenue	+	246,620	245,771
Realized gains/losses on disposal of assets				
_____	* Realized gains/losses on disposal of assets	8210	-35,696	37,654
_____	Realized gains/losses on disposal of assets	+	-35,696	37,654
Other revenue				
_____	* Other revenue	8230	1,486,763	1,444,244
_____	Other revenue	+	1,486,763	1,444,244
_____	Total revenue	8299 =	106,561,767	119,453,349

* Generic item

PREPARED SOLELY FOR INCOME TAX PURPOSES WITHOUT AUDIT OR REVIEW FROM INFORMATION PROVIDED BY THE TAXPAYER.

Attached Schedule with Total

GIFI code 8230 – Amount – Other revenue

Title GIFI code 8230 – Amount – Other revenue

Description	Amount
Billing Services	690,851 00
Late Payment Charges	213,527 00
Miscellaneous	582,385 00
Total	1,486,763 00

Cost of Sales

SCHEDULE 125

Form identifier 8518

Account	Description	GIFI	Current year	Prior year
	* Purchases/cost of materials	8320	79,864,565	92,877,433
	Cost of sales	8518	<u>79,864,565</u>	<u>92,877,433</u>
* Generic item				

PREPARED SOLELY FOR INCOME TAX PURPOSES WITHOUT AUDIT OR REVIEW FROM INFORMATION PROVIDED BY THE TAXPAYER.

Operating Expenses

SCHEDULE 125

Form identifier 9367

Account	Description	GIFI	Current year	Prior year
Advertising and promotion				
	* Advertising and promotion	8520	149,716	119,696
	Advertising and promotion		<u>149,716</u>	<u>119,696</u>
Interest and bank charges				
	* Interest and bank charges	8710	3,075,416	3,018,676
	Interest and bank charges		<u>3,075,416</u>	<u>3,018,676</u>
Business taxes, licences, and memberships				
	* Business taxes, licences, and memberships	8760	207,258	340,000
	Business taxes, licences, and memberships		<u>207,258</u>	<u>340,000</u>
Other expenses				
	* Other expenses	9270	9,380,760	8,694,926
	Delivery, freight and express	9275	4,849,941	5,285,628
	General and administrative expenses	9284	2,234,435	1,857,875
	Other expenses		<u>16,465,136</u>	<u>15,838,429</u>
	Total operating expenses	9367	<u>19,897,526</u>	<u>19,316,801</u>

* Generic item

PREPARED SOLELY FOR INCOME TAX PURPOSES WITHOUT AUDIT OR REVIEW FROM INFORMATION PROVIDED BY THE TAXPAYER.

Attached Schedule with Total

GIFI code 8520 – Amount – Advertising and promotion

Title GIFI code 8520 – Amount – Advertising and promotion

Description	Amount	
Community Relations	149,716	00
Total	149,716	00

Attached Schedule with Total

GIFI code 9270 – Amount – Other expenses

Title GIFI code 9270 – Amount – Other expenses

Description	Amount	
Billing & Collecting	2,348,006	00
Amortization	6,832,754	00
Late payment charge settlement	200,000	00
Total	9,380,760	00



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SCHEDULE 141**NOTES CHECKLIST**

Corporation's name	Business Number	Tax year-end Year Month Day
Waterloo North Hydro Inc.	86584 4575 RC0001	2009-12-31

- Parts 1, 2, and 3 of this schedule must be completed from the perspective of the person (referred to in these parts as the "accountant") who prepared or reported on the financial statements.
- For more information, see Guide RC4088, *General Index of Financial Information (GIFI) for Corporations* and Guide T4012, *T2 Corporation – Income Tax Guide*.
- Complete this schedule, and include it with your T2 return along with the other GIFI schedules.

If the person preparing the tax return is not the accountant referred to above, they must still complete Parts 1, 2, 3, and 4, as applicable.

Part 1 – Information on the accountant preparing or reporting on the financial statements

Does the accountant have a professional designation? **095** 1 Yes ☒ 2 No ☐

Is the accountant connected* with the corporation? **097** 1 Yes ☐ 2 No ☒

* A person connected with a corporation can be: (i) a shareholder of the corporation who owns more than 10% of the common shares; (ii) a director, an officer, or an employee of the corporation; or (iii) a person not dealing at arm's length with the corporation.

Note: If the accountant does not have a professional designation **or** is connected to the corporation, you do not have to complete Parts 2 and 3 of this schedule. However, you do have to complete Part 4, as applicable.

Part 2 – Type of involvement with the financial statements

Choose the option that represents the highest level of involvement of the accountant: **198**

Completed an auditor's report 1 ☒

Completed a review engagement report 2 ☐

Conducted a compilation engagement 3 ☐

Part 3 – Reservations

If you selected option "1" or "2" under **Type of involvement with the financial statements** above, answer the following question:

Has the accountant expressed a reservation? **099** 1 Yes ☐ 2 No ☒

Part 4 – Other information

If you have a professional designation and are not the accountant associated with the financial statements in Part 1 above, choose one of the following options:

Prepared the tax return (financial statements prepared by client) **110** 1 ☐

Prepared the tax return and the financial information contained therein
(financial statements have not been prepared) 2 ☐

Were notes to the financial statements prepared? **101** 1 Yes ☒ 2 No ☐

If **yes**, complete lines 102 to 107 below:

Are any values presented at other than cost? **102** 1 Yes ☐ 2 No ☒

Has there been a change in accounting policies since the last return? **103** 1 Yes ☐ 2 No ☒

Are subsequent events mentioned in the notes? **104** 1 Yes ☐ 2 No ☒

Is re-evaluation of asset information mentioned in the notes? **105** 1 Yes ☐ 2 No ☒

Is contingent liability information mentioned in the notes? **106** 1 Yes ☒ 2 No ☐

Is information regarding commitments mentioned in the notes? **107** 1 Yes ☐ 2 No ☒

Does the corporation have investments in joint venture(s) or partnership(s)? **108** 1 Yes ☐ 2 No ☒

If **yes**, complete line 109 below:

Are you filing financial statements of the joint venture(s) or partnership(s)? **109** 1 Yes ☐ 2 No ☐



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NET INCOME (LOSS) FOR INCOME TAX PURPOSES

SCHEDULE 1

Corporation's name	Business Number	Tax year end Year Month Day
Waterloo North Hydro Inc.	86584 4575 RC0001	2009-12-31

- The purpose of this schedule is to provide a reconciliation between the corporation's net income (loss) as reported on the financial statements and its net income (loss) for tax purposes. For more information, see the T2 *Corporation Income Tax Guide*.
- Sections, subsections, and paragraphs referred to on this schedule are from the *Income Tax Act*.

Amount calculated on line 9999 from Schedule 125 4,752,736 A

Add:

Provision for income taxes – current	101	2,046,940	
Amortization of tangible assets	104	7,288,795	
Loss on disposal of assets	111	35,696	
Non-deductible meals and entertainment expenses	121	32,078	
Reserves from financial statements – balance at the end of the year	126	4,012,433	
Subtotal of additions		13,415,942	13,415,942

Other additions:**Miscellaneous other additions:**

600 Ontario capital tax accrued in financial statements	290	207,258	
601 2008 Federal Apprenticeship Credit Claimed in 2008	291	9,392	
Ontario Specified Tax Credits		61,453	
Total	293	61,453	
604			
Subtotal of other additions	199	278,103	278,103
Total additions	500	13,694,045	13,694,045

Deduct:

Capital cost allowance from Schedule 8	403	8,644,970	
Reserves from financial statements – balance at the beginning of the year	414	3,608,651	
Subtotal of deductions		12,253,621	12,253,621

Other deductions:**Miscellaneous other deductions:**

700 Actual Ontario Capital Tax	390	208,472	
704			
Total	394		
Subtotal of other deductions	499	208,472	208,472
Total deductions	510	12,462,093	12,462,093

Net income (loss) for income tax purposes – enter on line 300 of the T2 return **5,984,688**

* For reference purposes only

T2 SCH 1 E (09)

Canada

Attached Schedule with Total

Line 603 – Amount

Title Line 603 – Amount _____

Description	Amount	
Ontario Co-Operative Education Credit - Sch 550	23,031	00
Ontario Apprenticeship Training Tax Credit - Sch 552	38,422	00
Total	61,453	00



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SCHEDULE 5

TAX CALCULATION SUPPLEMENTARY – CORPORATIONS

Corporation's name	Business Number	Tax year-end Year Month Day
Waterloo North Hydro Inc.	86584 4575 RC0001	2009-12-31

- Use this schedule if, during the tax year, the corporation:
 - had a permanent establishment in more than one jurisdiction (corporations that have no taxable income should only complete columns A, B and D in Part 1); or
 - is claiming provincial or territorial tax credits or rebates (see Part 2).
- Regulations mentioned in this schedule are from the *Income Tax Regulations*.
- For more information, see the *T2 Corporation – Income Tax Guide*.
- Enter the regulation number in field 100 of Part 1.

Part 1 – Allocation of taxable income

100	402	Corporations not specified	Enter the regulation that applies (402 to 413).		
A Jurisdiction Tick yes if the corporation had a permanent establishment in the jurisdiction during the tax year. *	B Total salaries and wages paid in jurisdiction	C (B x taxable income**) / G	D Gross revenue	E (D x taxable income**) / H	F Allocation of taxable income (C + E) x 1/2 (where either G or H is nil, do not multiply by 1/2)
Newfoundland and Labrador	003 1 Yes ☐	103	143		
Newfoundland and Labrador offshore	004 1 Yes ☐	104	144		
Prince Edward Island	005 1 Yes ☐	105	145		
Nova Scotia	007 1 Yes ☐	107	147		
Nova Scotia offshore	008 1 Yes ☐	108	148		
New Brunswick	009 1 Yes ☐	109	149		
Quebec	011 1 Yes ☐	111	151		
Ontario	013 1 Yes ☒	113	153		
Manitoba	015 1 Yes ☐	115	155		
Saskatchewan	017 1 Yes ☐	117	157		
Alberta	019 1 Yes ☐	119	159		
British Columbia	021 1 Yes ☐	121	161		
Yukon	023 1 Yes ☐	123	163		
Northwest Territories	025 1 Yes ☐	125	165		
Nunavut	026 1 Yes ☐	126	166		
Outside Canada	027 1 Yes ☐	127	167		
Total	129 G		169 H		

* "Permanent establishment" is defined in Regulation 400(2).

** Starting in 2009, if the corporation has income or loss from an international banking centre; the taxable income is the amount on line 360 or line Z of the T2 return **plus** the total amount not required to be included, or **minus** the total amount not allowed to be deducted, in calculating the corporation's income under section 33.1 of the federal *Income Tax Act*.

Notes:

1. After determining the allocation of taxable income, you have to calculate the corporation's provincial or territorial tax payable. For more information on how to calculate the tax for each province or territory, see line 760 of the *T2 Corporation – Income Tax Guide*.
2. If the corporation has provincial or territorial tax payable, complete Part 2.

Part 2 – Ontario tax payable, tax credits, and rebates

Total taxable income	Income eligible for small business deduction	Provincial or territorial allocation of taxable income	Provincial or territorial tax payable before credits
5,984,688		5,984,688	795,356

Ontario basic income tax (from Schedule 500) **270** 837,856

Deduct: Ontario small business deduction (from schedule 500) **402** 42,500

Subtotal (if negative, enter "0") 795,356 ▶ 795,356 A6

Add:

Surtax re Ontario small business deduction (from Schedule 500) **272** 42,500

Ontario additional tax re Crown royalties (from Schedule 504) **274**

Ontario transitional tax debits (from Schedule 506) **276**

Recapture of Ontario research and development tax credit (from Schedule 508) **277**

Subtotal 42,500 ▶ 42,500 B6

Subtotal (amount A6 **plus** amount B6) 837,856 C6

Deduct:

Ontario resource tax credit (from Schedule 504) **404**

Ontario tax credit for manufacturing and processing (from Schedule 502) **406**

Ontario foreign tax credit (from Schedule 21) **408**

Ontario credit union tax reduction (from Schedule 500) **410**

Ontario transitional tax credits (from Schedule 506) **414**

Ontario political contributions tax credit (from Schedule 525) **415**

Subtotal ▶ D6

Subtotal (amount C6 **minus** amount D6) (if negative, enter "0") 837,856 E6

Ontario research and development tax credit (from Schedule 508) **416**

Ontario corporate income tax payable before Ontario corporate minimum tax credit (amount E6 **minus** amount on line 416) (if negative, enter "0") 837,856 F6

Deduct:

Ontario corporate minimum tax credit (from schedule 510) **418**

Ontario corporate income tax payable (amount F6 **minus** amount on line 418) (if negative, enter "0") 837,856 G6

Add:

Ontario corporate minimum tax (from Schedule 510) **278**

Ontario special additional tax on life insurance corporations (from Schedule 512) **280**

Ontario capital tax (from Schedule 514 or Schedule 515, whichever applies) **282** 208,472

Subtotal 208,472 ▶ 208,472 H6

Total Ontario tax payable before refundable credits (amount G6 **plus** amount H6) 1,046,328 I6

Deduct:

Ontario qualifying environmental trust tax credit **450**

Ontario co-operative education tax credit (from Schedule 550) **452** 23,031

Ontario apprenticeship training tax credit (from Schedule 552) **454** 38,422

Ontario computer animation and special effects tax credit (from Schedule 554) **456**

Ontario film and television tax credit (from Schedule 556) **458**

Ontario production services tax credit (from Schedule 558) **460**

Ontario interactive digital media tax credit (from Schedule 560) **462**

Ontario sound recording tax credit (from Schedule 562) **464**

Ontario book publishing tax credit (from Schedule 564) **466**

Ontario innovation tax credit (from Schedule 566) **468**

Ontario business-research institute tax credit (from Schedule 568) **470**

Subtotal 61,453 ▶ 61,453 J6

Net Ontario tax payable or refundable credit (amount I6 **minus** amount J6) **290** 984,875 K6

(if a credit, enter a negative amount) Include this amount on line 255.

Summary

Enter the total net tax payable or refundable credits for all provinces and territories at line 255.

Net provincial and territorial tax payable or refundable credits 255 984,875

If the amount on line 255 is positive, enter the net provincial and territorial tax payable on line 760 of the T2 return.
If the amount on line 255 is negative, enter the net provincial and territorial refundable tax credits on line 812 of the T2 return.

Attached Schedule with Total

Federal – Additions – (1/2 year rule)

Title Federal – Additions – (1/2 year rule)

Description	Amount	
General Class 8 Equipment	1,062,689	00
2009 Smart Meter Additions	4,521,840	00
2008 Smart Meter Additions (now considered in use)	630,116	00
Total	6,214,645	00

Attached Schedule with Total

Federal – Additions – (1/2 year rule)

Title Federal – Additions – (1/2 year rule)

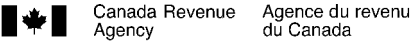
Description	Amount	
Gross Class 47 Additions	14,807,321	00
Less Contributed Capital Additions (Ss. 13(7.4) election)	-1,779,036	00
Total	13,028,285	00

Attached Schedule with Total

Federal – Additions – (1/2 year rule)

Title Federal – Additions – (1/2 year rule)

Description	Amount	
Easement/land right		
building additions	53,546	00
Total	53,546	00



CAPITAL COST ALLOWANCE (CCA)

Name of corporation	Business Number	Tax year end YearMonthDay
Waterloo North Hydro Inc.	86584 4575 RC0001	2009-12-31

For more information, see the section called "Capital Cost Allowance" in the *T2 Corporation Income Tax Guide*.

Is the corporation electing under regulation 1101(5q)? **101** 1 Yes ☐ 2 No ☒

1 Class number (See Note)	Description	2 Undepreciated capital cost at the beginning of the year (undepreciated capital cost at the end of last year)	3 Cost of acquisitions during the year (new property must be available for use)*	4 Net adjustments**	5 Proceeds of dispositions during the year (amount not to exceed the capital cost)	6 50% rule (1/2 of the amount, if any, by which the net cost of acquisitions exceeds column 5)***	7 Reduced undepreciated capital cost	8 CCA rate %	9 Recapture of capital cost allowance (line 107 of Schedule 1)	10 Terminal loss (line 404 of Schedule 1)	11 Capital cost allowance (column 7 multiplied by column 8; or a lower amount) (line 403 of Schedule 1)****	12 Undepreciated capital cost at the end of the year (column 6 plus column 7 minus column 11)
200		201	203	205	207	211		212	213	215	217	220
1. 1		78,080,286			0		78,080,286	4	0	0	3,123,211	74,957,075
2. 8		3,678,033	6,214,645		21,497	3,096,574	6,774,607	20	0	0	1,354,921	8,516,260
3. 10		1,441,378	962,747		16,431	473,158	1,914,536	30	0	0	574,361	1,813,333
4. 12		112,672	7,449		0	3,725	116,396	100	0	0	116,396	3,725
5. 47		29,653,060	13,028,285		0	6,514,143	36,167,202	8	0	0	2,893,376	39,787,969
6. 45		1,261			0		1,261	45	0	0	567	694
7. 50		127,718	21,082		0	10,541	138,259	55	0	0	76,042	72,758
8. 1b		179,828	53,546		0	26,773	206,601	6	0	0	12,396	220,978
9. 52			493,700		0		493,700	100	0	0	493,700	
Total		113,274,236	20,781,454		37,928	10,124,914	123,892,848				8,644,970	125,372,792

Note: Class numbers followed by a letter indicate the basic rate of the class taking into account the additional deduction allowed.
Class 1a: 4% + 6% = 10% (class 1 to 10%), class 1b: 4% + 2% = 6% (class 1 to 6%).

* Include any property acquired in previous years that has now become available for use. This property would have been previously excluded from column 3. List separately any acquisitions that are not subject to the 50% rule, see Regulation 1100(2) and (2.2).
** Include amounts transferred under section 85, or on amalgamation and winding-up of a subsidiary. See the *T2 Corporation Income Tax Guide* for other examples of adjustments to include in column 4.
*** The net cost of acquisitions is the cost of acquisitions (column 3) plus or minus certain adjustments from column 4. For exceptions to the 50% rule, see Interpretation Bulletin IT-285, *Capital Cost Allowance – General Comments*.
**** If the tax year is shorter than 365 days, prorate the CCA claim. Some classes of property do not have to be prorated. See the *T2 Corporation Income Tax Guide* for more information.



Fixed Assets Reconciliation

Reconciliation of change in fixed assets per financial statements to amounts used per tax return.

Tax return			
Additions for tax purposes – Schedule 8 regular classes		20,781,454	
Additions for tax purposes – Schedule 8 leasehold improvements	+		
Operating leases capitalized for book purposes	+		
Capital gain deferred	+		
Recapture deferred	+		
Deductible expenses capitalized for book purposes – Schedule 1	+		
Adjust additions to Book	+	3,031,633	
Total additions per books	=	23,813,087	23,813,087
Proceeds up to original cost – Schedule 8 regular classes		37,928	
Proceeds up to original cost – Schedule 8 leasehold improvements	+		
Proceeds in excess of original cost – capital gain	+		
Recapture deferred – as above	+		
Capital gain deferred – as above	+		
Pre V-day appreciation	+		
Smart Meter Additions In Regulatory Liabilities	+	5,151,956	
Total proceeds per books	=	5,189,884	5,189,884
Depreciation and amortization per accounts – Schedule 1	–		7,288,795
Loss on disposal of fixed assets per accounts	–		35,696
Gain on disposal of fixed assets per accounts	+		
Net change per tax return	=		11,298,712

Financial statements			
Fixed assets (excluding land) per financial statements			
Closing net book value			109,980,991
Opening net book value	–		98,682,279
Net change per financial statements	=		11,298,712

If the amounts from the tax return and the financial statements differ, explain why below.

Attached Schedule with Total

Tax return – Other – Amount

Title Tax return – Other – Amount

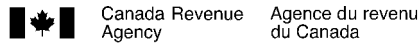
Description	Amount	
Additions to CWIP - Not in Use	3,286,875	00
Less Disposal Acc Am. allocated to additions	-255,240	00
Rounding	-2	00
Total	3,031,633	00

Attached Schedule with Total

Tax return – Other – Amount

Title Tax return – Other – Amount

Description	Amount	
2008 Smart Meters Capitalized to Regulatory Liabilities - Class 8 For Tax -	630,116	00
2009 Smart Meters Capitalized to Regulatory Liabilities - Class 8 For Tax	4,521,840	00
(2008 meters now considered in use)		
Total	5,151,956	00



SCHEDULE 9

RELATED AND ASSOCIATED CORPORATIONS

Name of corporation	Business Number	Tax year end Year Month Day
Waterloo North Hydro Inc.	86584 4575 RC0001	2009-12-31

This schedule is to be completed by a corporation having one or more of the following:

- related corporation(s)
- associated corporations(s)

Name	Country of resi- dence (if other than Canada)	Business Number (Canadian corporation only) (see note 1)	Rela- tion- ship code (see note 2)	Number of common shares owned	% of common shares owned	Number of preferred shares owned	% of preferred shares owned	Book value of capital stock
100	200	300	400	500	550	600	650	700
1. Waterloo North Hydro Holding Corp		87502 6924 RC0001	1					

Note 1: Enter "NR" if a corporation is not registered.

Note 2: Enter the code number of the relationship that applies from the following order: 1 – Parent 2 – Subsidiary 3 – Associated 4 – Related, but not associated.

Continuity of financial statement reserves (not deductible)

Financial statement reserves (not deductible)						
	Description	Balance at the beginning of the year	Transfer on amalgamation or wind-up of subsidiary	Add	Deduct	Balance at the end of the year
1	VESTED SICK LEAVE	76,977			76,977	
2	POST EMPLOYMENT BENEFITS	3,227,674		550,290		3,777,964
3	Doubtful accounts	304,000			69,531	234,469
4						
	Reserves from Part 2 of Schedule 13					
	Totals	3,608,651		550,290	146,508	4,012,433

The total opening balance plus the total transfers should be entered on line 414 of Schedule 1 as a deduction.

The total closing balance should be entered on line 126 of Schedule 1 as an addition.



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SCHEDULE 23

AGREEMENT AMONG ASSOCIATED CANADIAN-CONTROLLED PRIVATE CORPORATIONS TO ALLOCATE THE BUSINESS LIMIT

- For use by a Canadian-controlled private corporation (CCPC) to identify all associated corporations and to assign a percentage for each associated corporation. This percentage will be used to allocate the business limit for purposes of the small business deduction. Information from this schedule will also be used to determine the date the balance of tax is due and to calculate the reduction to the business limit.
- An associated CCPC that has more than one tax year ending in a calendar year, is required to file an agreement for each tax year ending in that calendar year.

Column 1: Enter the legal name of each of the corporations in the associated group. Include non-CCPCs and CCPCs that have filed an election under subsection 256(2) of the *Income Tax Act* (ITA) not to be associated for purposes of the small business deduction.

Column 2: Provide the Business Number for each corporation (if a corporation is not registered, enter "NR").

Column 3: Enter the association code that applies to each corporation:

- 1 – Associated for purposes of allocating the business limit (unless code 5 applies)
- 2 – CCPC that is a "third corporation" that has elected under subsection 256(2) not to be associated for purposes of the small business deduction
- 3 – Non-CCPC that is a "third corporation" as defined in subsection 256(2)
- 4 – Associated non-CCPC
- 5 – Associated CCPC to which code 1 does not apply because of a subsection 256(2) election made by a "third corporation"

Column 4: Enter the business limit for the year of each corporation in the associated group. The business limit is computed at line 4 on page 4 of each respective corporation's T2 return.

Column 5: Assign a percentage to allocate the business limit to each corporation that has an association code 1 in column 3. The total of all percentages in column 5 cannot exceed 100%.

Column 6: Enter the business limit allocated to each corporation by multiplying the amount in column 4 by the percentage in column 5. Add all business limits allocated in column 6 and enter the total at line A. Ensure that the total at line A falls within the range for the calendar year to which the agreement applies:

Calendar year	Acceptable range
2006	maximum \$300,000
2007	\$300,001 to \$400,000

Calendar year	Acceptable range
2008	maximum \$400,000
2009	\$400,001 to \$500,000

If the calendar year to which this agreement applies is after 2009, ensure that the total at line A does not exceed \$500,000.

Allocating the business limit

Date filed (do not use this area)

025

Year Month Day

Enter the calendar year to which the agreement applies

050

Year

2009

Is this an amended agreement for the above-noted calendar year that is intended to replace an agreement previously filed by any of the associated corporations listed below?

075

1 Yes ☐ 2 No ☒

	1 Names of associated corporations	2 Business Number of associated corporations	3 Asso- ciation code	4 Business limit for the year (before the allocation) \$	5 Percentage of the business limit %	6 Business limit allocated* \$
	100	200	300		350	400
1	Waterloo North Hydro Inc.	86584 4575 RC0001	1	500,000	100.0000	500,000
2	Waterloo North Hydro Holding Corporation	87502 6924 RC0001	1	500,000		
	Total				100.0000	500,000
						A

Business limit reduction under subsection 125(5.1) of the ITA

The business limit reduction is calculated in the small business deduction area of the T2 return. One of the factors used in this calculation is the "Large corporation amount" at line 415 of the T2 return. If the corporation is a member of an associated group** of corporations in the current tax year, the amount at line 415 of the T2 return is equal to $0.225\% \times (A - \$10,000,000)$ where, "A" is the total of taxable capital employed in Canada*** of each corporation in the associated group for its last tax year ending in the preceding calendar year.

* Each corporation will enter on line 410 of the T2 return, the amount allocated to it in column 6. However, if the corporation's tax year is less than 51 weeks, prorate the amount in column 6 by the number of days in the tax year divided by 365, and enter the result on line 410 of the T2 return.

Special rules apply if a CCPC has more than one tax year ending in a calendar year and is associated in more than one of those years with another CCPC that has a tax year ending in the same calendar year. If the tax year straddles January 1, 2009, the business limit for the second (or subsequent) tax year(s) will be equal to the lesser of the business limit that would have been determined for the first tax year ending in the calendar year, if \$500,000 was used in allocating the amounts among associated corporations and the business limit determined for the second (or subsequent) tax year(s) ending in the same calendar year. Otherwise, the business limit for the second (or subsequent) tax year(s) will be equal to the lesser of the business limit determined for the first tax year ending in the calendar year and the business limit determined for the second (or subsequent) tax year(s) ending in the same calendar year.

** The associated group includes the corporation filing this schedule and each corporation that has an "association code" of 1 or 4 in column 3.

*** "Taxable capital employed in Canada" has the meaning assigned by subsection 181.2(1) or 181.3(1) or section 181.4 of the ITA.

T2 SCH 23 (09)





INVESTMENT TAX CREDIT – CORPORATIONS

General information

1. For use by a corporation that during a tax year:
 - earned an investment tax credit (ITC);
 - is claiming a deduction against its Part I tax payable;
 - is claiming a refund of credit earned during the current tax year;
 - is claiming a carryforward of credit from previous tax years;
 - is transferring a credit following an amalgamation or wind-up of a subsidiary, as described under subsections 87(1) and 88(1) of the federal *Income Tax Act*;
 - is requesting a credit carryback; or
 - is subject to a recapture of ITC.
2. References to parts, sections, and subsections on this schedule are from the federal *Income Tax Act* and the federal *Income Tax Regulations*. References to interpretation bulletins and information circulars are to the latest versions.
3. The ITC is eligible for a three-year carryback (if not deductible in the year earned). It is also eligible for a twenty-year carryforward for credits earned in tax years that end after 1997 and did not expire before 2008 and a ten-year carryforward for credits earned in tax years that end before 1998. The apprenticeship job creation tax credit can only be carried back to tax years that end after May 1, 2006.
4. Investments or expenditures, as defined in subsection 127(9) and Part XLVI of the federal *Income Tax Regulations*, that earn the ITC are:
 - qualified property (Parts 4 to 7);
 - expenditures that are part of the SR&ED qualified expenditure pool (Parts 8 to 17). Complete and file Form T661, *Scientific Research and Experimental Development (SR&ED) Expenditures Claim*;
 - pre-production mining expenditures (Parts 18 to 20);
 - apprenticeship job creation expenditures (Parts 21 to 23); and
 - child care spaces expenditures (Parts 24 to 28).
5. Attach a completed copy of this schedule with the *T2 Corporation Income Tax Return*.
6. For more information on ITCs, see the section called "Investment Tax Credit" in the *T2 Corporation – Income Tax Guide*, Information Circular IC 78-4, *Investment Tax Credit Rates*, and its related Special Release. Also, see Interpretation Bulletin IT-151, *Scientific Research and Experimental Development Expenditures*.
7. For information on SR&ED, see Interpretation Bulletin IT-151 (**consolidated**), *Scientific Research and Experimental Development Expenditures*; Information Circular 86-4, *Scientific Research and Experimental Development*; Brochure RC4472, *Overview of the Scientific Research and Experimental Development Program (SR&ED) Tax Incentive Program*; Brochure RC4467, *Support for your R&D in Canada* and T4088, *Guide to Form T661 Scientific Research and Experimental Development (SR&ED) Expenditures Claim*.

Detailed information

1. For the purpose of this schedule, "**investment**" means:
 The capital cost of the property (excluding amounts added by an election under section 21), determined without reference to subsections 13(7.1) and 13(7.4), minus the amount of any government or non-government assistance that the corporation has received, is entitled to receive, or can reasonably be expected to receive for that property when it files the income tax return for the year in which the property was acquired.
2. An ITC deducted or refunded in a tax year for a depreciable property, other than a depreciable property deductible under paragraph 37(1)(b), reduces the capital cost of that property in the next tax year. It also reduces the undepreciated capital cost of that class in the next tax year. An ITC for SR&ED deducted or refunded in a tax year will reduce the balance in the pool of deductible SR&ED expenditures and the adjusted cost base (ACB) of an interest in a partnership in the next tax year. An ITC from pre-production mining expenditures deducted in a tax year reduces the balance in the pool of deductible cumulative Canadian exploration expenses in the next tax year.
3. Property acquired has to be "available for use" before a claim for an ITC can be made.
4. Expenditures for SR&ED and capital costs for a property qualifying for an ITC must be identified by the claimant on Form T661 and Schedule 31 no later than 12 months after the claimant's income tax return is due for the tax year in which the expenditures or capital costs were incurred.
5. Partnership allocations – Subsection 127(8) provides for the allocation of the amount that may reasonably be considered to be a partner's share of the ITCs of the partnership at the end of the fiscal period of the partnership. An allocation of ITCs is generally considered to be the partner's reasonable share of the ITCs if it is made in the same proportion in which the partners have agreed to share any income or loss and if section 103 of the Act is not applicable for the agreement to share any income or loss. For more information, see Interpretation Bulletin IT-151. Special rules apply to specified and limited partners.
6. For SR&ED expenditures, the expression "in Canada" includes the "exclusive economic zone" (as defined in the *Oceans Act* to generally consist of an area that is within 200 nautical miles from the Canadian coastline), including the airspace, seabed and subsoil for that zone.

Name of corporation	Business Number	Tax year-end Year Month Day
Waterloo North Hydro Inc.	86584 4575 RC0001	2009-12-31

Part 1 – Investments, expenditures and percentages

	Specified percentage
Investments	
Qualified property acquired primarily for use in Newfoundland and Labrador, Prince Edward Island, Nova Scotia, New Brunswick, the Gaspé Peninsula, or a prescribed offshore region	10 %
Expenditures	
If you are a Canadian-controlled private corporation (CCPC), this percentage may apply to the portion that you claim of the SR&ED qualified expenditure pool that does not exceed your expenditure limit (see Part 10)	35 %
Note: If your current year's qualified expenditures are more than the corporation's expenditure limit (see Part 10), the excess is eligible for an ITC calculated at the 20 % rate.	
If you are a corporation that is not a CCPC that incurred qualified expenditures for SR&ED in any area in Canada	20 %
If you are a taxable Canadian corporation that incurred pre-production mining expenditures	10 %
If you paid salary and wages to apprentices in the first 24 months of their apprenticeship contract for employment	10 %
If you incurred eligible expenditures after March 18, 2007, for the creation of licensed child care spaces for the children of your employees and, potentially, for other children	25 %

Part 2 – Determination of a qualifying corporation

Is the corporation a qualifying corporation? **101** 1 Yes ☐ 2 No ☒

For the purpose of a refundable ITC, a **qualifying corporation** is defined under subsection 127.1(2). The corporation has to be a CCPC and the taxable income (before any loss carrybacks) for its previous tax year cannot be more than its qualifying income limit for the particular tax year. If the corporation is associated with any other corporations during the tax year, the total of the taxable incomes of the corporation and the associated corporations (before any loss carrybacks), for their last tax year ending in the previous calendar year, cannot be more than their qualifying income limit for the particular tax year.

Note: A CCPC calculating a refundable ITC, is considered to be associated with another corporation if it meets any of the conditions in subsection 256(1), except where:

- one corporation is associated with another corporation solely because one or more persons own shares of the capital stock of both corporations; and
- one of the corporations has at least one shareholder who is not common to both corporations.

If you are a **qualifying** corporation, you will earn a **100%** refund on your share of any ITCs earned at the 35% rate on qualified **current** expenditures for SR&ED, up to the allocated expenditure limit. The 100% refund does not apply to qualified **capital** expenditures eligible for the 35% credit rate. They are only eligible for the **40%** refund.

Some CCPCs that are **not qualifying** corporations may also earn a **100%** refund on their share of any ITCs earned at the 35% rate on qualified **current** expenditures for SR&ED, up to the allocated expenditure limit. The expenditure limit can be determined in Part 10. The 100% refund does not apply to qualified **capital** expenditures eligible for the 35% credit rate. They are only eligible for the **40%** refund.

The 100% refund will not be available to a corporation that is an **excluded corporation** as defined under subsection 127.1(2). A corporation is an excluded corporation if, at any time during the year, it is a corporation that is either controlled by (directly or indirectly, in any manner whatever) or is related to:

- one or more persons exempt from Part I tax under section 149;
- Her Majesty in right of a province, a Canadian municipality, or any other public authority; or
- any combination of persons referred to in a) or b) above.

Part 3 – Corporations in the farming industry

Complete this area if the corporation is making SR&ED contributions

Is the corporation claiming a contribution in the current year to an agricultural organization whose goal is to finance SR&ED work (for example, check-off dues)? **102** 1 Yes ☐ 2 No ☒

If **yes**, complete Schedule 125, *Income Statement Information*, to identify the type of farming industry the corporation is involved in. For more information on Schedule 125, see the *Guide to the General Index of Financial Information (GIFI) for Corporations*. Enter contributions on line 350 of Part 8.

QUALIFIED PROPERTY**Part 4 – Eligible investments for qualified property from the current tax year**

CCA* class number	Description of investment	Date available for use	Location used (province or territory)	Amount of investment
105	110	115	120	125

*CCA: capital cost allowance

Total investment – enter in formula on line 240 in Part 5

Part 5 – Calculation of current-year credit and account balances – ITC from investments in qualified property

ITC at the end of the previous tax year

Deduct:

Credit deemed as a remittance of co-op corporations

Credit expired*

210

215

Subtotal



ITC at the beginning of the tax year

220

Add:

Credit transferred on amalgamation or wind-up of subsidiary

ITC from repayment of assistance

Total current-year credit: total of column 125

Credit allocated from a partnership

230

235

240

250

Subtotal



Total credit available

Deduct:

Credit deducted from Part I tax (enter on line B1 in Part 30)

Credit carried back to the previous year(s) (from Part 6)

Credit transferred to offset Part VII tax liability

260

280

Subtotal



Credit balance before refund

B

Deduct:

Refund of credit claimed on investments from qualified property (from Part 7)

310

ITC closing balance of investments from qualified property

320

* The credit expires after 20 tax years if it was earned in a tax year ending after 1997 and did not expire before 2008 and 10 tax years if it was earned in a tax year ending before 1998.

Part 6 – Request for carryback of credit from investments in qualified property

1st previous tax year

2nd previous tax year

3rd previous tax year

Year	Month	Day

Credit to be applied

Credit to be applied

Credit to be applied

901

902

903

Total (enter on line A in Part 5)

Part 7 – Calculation of refund for qualifying corporations on investments from qualified property

Current-year ITCs (total of lines 240 and 250 in Part 5)

Credit balance before refund (amount B from Part 5)

Refund (40 % of amount C or D, whichever is less)

C

D

E

Enter amount E or a lesser amount on line 310 in Part 5 (also enter it on line 780 of the T2 return if the corporation does not claim an SR&ED ITC refund).

Name of corporation	Business Number	Tax year-end Year Month Day
Waterloo North Hydro Inc.	86584 4575 RC0001	2009-12-31

SR&ED**Part 8 – Qualified expenditures for SR&ED****Current expenditures**

Current expenditures (from line 557 on Form T661)

Add:

Contributions to agricultural organizations for SR&ED under paragraph 37(1)(a)*

Deduct:

Government and non-government assistance*

Contributions to agricultural organizations for SR&ED*

Current expenditures (including contributions to agricultural organizations for SR&ED)* **350**Capital expenditures (from line 558 on Form T661) **360**Repayments made in the year (from line 560 on Form T661) **370****Total** (this must equal the amount from line 570 on Form T661)* **380**

* Do not file form T661 if you are only claiming contributions made to agricultural organizations for SR&ED.

Part 9 – Components of the SR&ED expenditure limit calculation**Part 9 only applies if the corporation is a CCPC.****Note:** A CCPC that calculates SR&ED expenditure limit, is considered to be associated with another corporation if it meets any of the conditions in subsection 256(1), except where:

- one corporation is associated with another corporation solely because one or more persons own shares of the capital stock of the corporation; and
- one of the corporations has at least one shareholder who is not common to both corporations.

Is the corporation associated with another CCPC for the purpose of calculating the SR&ED expenditure limit? **385** 1 Yes ☐ 2 No ☒Complete lines 390, 395 and 398, if you answered **no** to the question at line 385 above or if the corporation is not associated with any other corporations (the amounts for associated corporations will be determined on Schedule 49).a) Enter your taxable income for the previous tax year* (prior to any loss carry-backs applied). **390** 7,055,181b) Enter your reduced business limit** for the current tax year* (this amount cannot be more than the amount at line 4 on page 4 of the T2 return). **395**c) Enter your taxable capital employed in Canada for the previous tax year 58,877,014
minus \$10 million. If this amount is nil or negative, enter "0".
If this amount is over \$40 million, enter \$40 million. **398** 40,000,000* If either of the tax years referred to at line 390 or 395 is less than 51 weeks, multiply the taxable income or the business limit by the following result: 365 divided by the number of days in these tax years. For details on the expression "Reduced business limit," see line 652 of the *T2 Corporation – Income Tax Guide*.

** If the corporation is claiming only a portion of the business limit from line 4 on page 4 of the T2 return because of its association with other corporations, calculate your reduced business limit as if the corporation was not associated in the current tax year. Enter the result at line 395.

Part 10 – Calculation of SR&ED expenditure limit for a CCPC

For stand-alone corporations:

Calculation 1: Tax year ends before February 26, 2008.

[((\$6,000,000 **minus** (10 x (line 390 from Part 9 or \$400,000, whichever is more))) x ((line 395 from Part 9) **divided by** line 4 on page 4 of the T2 return)]

Calculation 2: Tax year starts after February 26, 2008 and ends before January 1, 2010.

[((\$7,000,000 **minus** (10 x (line 390 from Part 9 or \$400,000, whichever is more))) x (((\$40,000,000 **minus** line 398 from Part 9) **divided by** \$40,000,000)]

Calculation 3: Tax year includes February 26, 2008.

AA + [(BB **minus** AA) x (CC **divided by** DD)] where,

AA = [(\$6,000,000 **minus** (10 x (line 390 from Part 9 or \$400,000, whichever is more))) x ((line 395 from Part 9) **divided by** line 4 on page 4 of the T2 return)];

BB = [(\$7,000,000 **minus** (10 x (line 390 from Part 9 or \$400,000, whichever is more))) x (((\$40,000,000 **minus** line 398 from Part 9) **divided by** \$40,000,000)];

CC = number of days in the tax year after February 25, 2008;

DD = number of days in the tax year.

Calculation 4: Tax year starts after December 31, 2009.

[((\$8,000,000 **minus** (10 x (line 390 from Part 9 or \$500,000, whichever is more))) x (((\$40,000,000 **minus** line 398 from Part 9) **divided by** \$40,000,000)]

Calculation 5: Tax year includes January 1, 2010.

EE + [(FF **minus** EE) x (GG **divided by** HH)] where,

EE = [(\$7,000,000 **minus** (10 x (line 390 from Part 9 or \$400,000, whichever is more))) x (((\$40,000,000 **minus** line 398 from Part 9) **divided by** \$40,000,000)];

FF = [(\$8,000,000 **minus** (10 x (line 390 from Part 9 or \$500,000, whichever is more))) x (((\$40,000,000 **minus** line 398 from Part 9) **divided by** \$40,000,000)];

GG = number of days in the tax year after December 31, 2009;

HH = number of days in the tax year.

Enter the amount from Calculation 1, 2, 3, 4 or 5, whichever is applicable

*G

For associated corporations:

If associated, the allocation of the SR&ED expenditure limit as provided on Schedule 49

400

*H

Where the tax year of the corporation is less than 51 weeks, calculate the amount of the expenditure limit as follows:

Line G or H _____ x _____ Number of days in the tax year _____ 365 = _____ I

365

Your SR&ED expenditure limit for the year (enter the amount from line G, H, or I, whichever applies)

410

* Amount G or H cannot be more than \$3,000,000 (\$2,000,000 if tax year ending before February 26, 2008).

Part 11 – Calculation of investment tax credits on SR&ED expenditures

Enter whichever is less: current expenditures (line 350 from Part 8) or the expenditure limit (line 410 from Part 10)* **420** x 35 % = J

Line 350 minus line 410 (if negative, enter "0") **430** x 20 % = K

Line 410 minus line 350 (if negative, enter "0") L

Enter whichever is less: capital expenditures (line 360 from Part 8) or line L above* **440** x 35 % = M

Line 360 minus line L (if negative, enter "0") **450** x 20 % = N

Repayments (amount from line 370 in Part 8)

If a corporation makes a repayment of any government or non-government assistance, or contract payments that reduced the amount of qualified expenditures for ITC purposes, the amount of the repayment is eligible for a credit at the rate that would have applied to the repaid amount. Enter the amount of the repayment on the line that corresponds to the appropriate rate.

460 x 35 % =

480 x 20 % =

Total **O**

Current-year SR&ED ITC (total of lines J, K, M, N, and O; enter on line 540 in Part 12)

* For corporations that are not CCPCs, enter "0" on lines J and M.

Part 12 – Calculation of current-year credit and account balances – ITC from SR&ED expenditures

ITC at the end of the previous tax year

Deduct:

Credit deemed as a remittance of co-op corporations **510**

Credit expired* **515**

Subtotal **520**

ITC at the beginning of the tax year

Add:

Credit transferred on amalgamation or wind-up of subsidiary **530**

Total current-year credit **540**

Credit allocated from a partnership **550**

Subtotal **560**

Total credit available

Deduct:

Credit deducted from Part I tax (enter on line B2 in Part 30) **560**

Credit carried back to the previous year(s) (from Part 13) P

Credit transferred to offset Part VII tax liability **580**

Subtotal **590**

Credit balance before refund Q

Deduct:

Refund of credit claimed on expenditures of SR&ED (from Part 14 or 15, whichever applies) **610**

ITC closing balance on SR&ED **620**

* The credit expires after 20 tax years if it was earned in a tax year ending after 1997 and did not expire before 2008 and 10 tax years if it was earned in a tax year ending before 1998.

Part 13 – Request for carryback of credit from SR&ED expenditures

	Year	Month	Day		
1st previous tax year				 Credit to be applied	911
2nd previous tax year				 Credit to be applied	912
3rd previous tax year				 Credit to be applied	913
Total (enter on line P in Part 12)					.....

Name of corporation	Business Number	Tax year-end Year Month Day
Waterloo North Hydro Inc.	86584 4575 RC0001	2009-12-31

Part 14 – Calculation of refund of ITC for qualifying corporations – SR&ED

Complete this part only if you are a qualifying corporation as determined at line 101.

Is the corporation an excluded corporation as defined under subsection 127.1(2)? **650** 1 Yes ☐ 2 No ☒

Credit balance before refund (amount Q from Part 12) R

Current-year ITC (lines 540 plus 550 from Part 12 **minus** line O from Part 11) S

Refundable credits (amount R or S, whichever is less)* T

Amount J from Part 11 U

Subtract: Amount T or U, whichever is less V

Net amount (if negative, enter "0") W

Amount W x 40 % X

Add: Amount V Y

Refund of ITC (amounts X **plus** Y – enter this, or a lesser amount, on line 610 in Part 12) Z

Enter the total of lines 310 from Part 5 and 610 from Part 12 on line 780 of the T2 return.

* If you are also an excluded corporation [as defined in subsection 127.1(2)], this amount must be multiplied by 40%.
 Claim this, or a lesser amount, as your refund of ITC on line Z.

Part 15 – Calculation of refund of ITC for CCPCs that are not qualifying or excluded corporations – SR&ED

Complete this box only if you are a CCPC that is not a qualifying or excluded corporation as determined in Part 2.

Credit balance before refund (amount Q from Part 12) AA

Amount J from Part 11 BB

Subtract: Amount AA or BB, whichever is less CC

Net amount (if negative, enter "0") DD

Amount M from Part 11 EE

Amount DD or EE, whichever is less x 40 % FF

Add : Amount CC above GG

Refund of ITC (amounts FF **plus** GG) HH

Enter HH, or a lesser amount, on line 610 in Part 12 and also on line 780 of the T2 return.

RECAPTURE – SR&ED**Part 16 – Calculating the recapture of ITC for corporations and corporate partnerships – SR&ED**

You will have a recapture of ITC in a year when **all** of the following conditions are met:

- you acquired a particular property in the current year or in any of the 20 previous tax years, if the credit was earned in a tax year ending after 1997, or in any of the 10 previous tax years, if the credit was earned in a tax year ending before 1998;
- you claimed the cost of the property as a qualified expenditure for SR&ED on Form T661;
- the cost of the property was included in calculating your ITC or was the subject of an agreement made under subsection 127(13) to transfer qualified expenditures; and
- you disposed of the property or converted it to commercial use after February 23, 1998. This condition is also met if you disposed of or converted to commercial use a property that incorporates the particular property previously referred to.

Note

The recapture **does not apply** if you disposed of the property to a non-arm's length purchaser who intended to use it all or substantially all for SR&ED. When the non-arm's length purchaser later sells or converts the property to commercial use, the recapture rules will apply to the purchaser based on the historical ITC rate of the original user.

You will report a recapture on the T2 return for the year in which you disposed of the property or converted it to commercial use. In the following tax year, add the amount of the ITC recapture to the SR&ED expenditure pool.

If you have more than one disposition for calculations 1 and 2, complete the columns for each disposition for which a recapture applies, using the calculation formats below.

Calculation 1 – If you meet all of the above conditions

Amount of ITC you originally calculated for the property you acquired, or the original user's ITC where you acquired the property from a non-arm's length party, as described in the note above	Amount calculated using ITC rate at the date of acquisition (or the original user's date of acquisition) on either the proceeds of disposition (if sold in an arm's length transaction) or the fair market value of the property (in any other case)	Amount from column 700 or 710, whichever is less
700	710	
1.		

Subtotal (enter this amount on line LL in Part 17) _____

II

Calculation 2 – Only if you transferred all or a part of the qualified expenditure to another person under an agreement described in subsection 127(13); otherwise, enter nil at line JJ in Part 16.

A Rate percentage that the transferee used in determining its ITC for qualified expenditures under a subsection 127(13) agreement	B Proceeds of disposition of the property if you dispose of it to an arm's length person; or, in any other case, enter the fair market value of the property at conversion or disposition	C Amount, if any, already provided for in Calculation 1 (This allows for the situation where only part of the cost of a property is transferred under a subsection 127(13) agreement.)
720	730	740

Name of corporation	Business Number	Tax year-end Year Month Day
Waterloo North Hydro Inc.	86584 4575 RC0001	2009-12-31

Part 16 – Calculating the recapture of ITC for corporations and corporate partnerships – SR&ED (continued)

- Calculation 2 (continued) – Only if you transferred all or a part of the qualified expenditure to another person under an agreement described in subsection 127(13); otherwise, enter nil on line JJ below.

D Amount determined by the formula (A x B) - C	E ITC earned by the transferee for the qualified expenditures that were transferred	F Amount from column D or E, whichever is less
	750	

Subtotal (enter this amount on line MM in Part 17) _____ JJ

- Calculation 3

As a member of the partnership, you will report your share of the SR&ED ITC of the partnership after the SR&ED ITC has been reduced by the amount of the recapture. If this amount is a positive amount, you will report it on line 550 in Part 12. However, if the partnership does not have enough ITC otherwise available to offset the recapture, then the amount by which reductions to ITC exceed additions (the excess) will be determined and reported on line KK below.

Corporate partner's share of the excess of SR&ED ITC (amount to be reported on line NN in Part 17) **760** _____ KK

Part 17 – Total recapture of SR&ED investment tax credit

Recaptured ITC for calculation 1 from line II in Part 16	.....	_____	LL
Recaptured ITC for calculation 2 from line JJ in Part 16 above	.....	_____	MM
Recaptured ITC for calculation 3 from line KK in Part 16 above	.....	_____	NN
Total recapture of SR&ED investment tax credit – Add lines LL, MM and NN	.....	<u> </u>	OO
Enter amount OO at line A1 in Part 29.			

PRE-PRODUCTION MINING**Part 18 – Pre-production mining expenditures****Exploration information**

A mineral resource that qualifies for the credit means a mineral deposit from which the principal mineral to be extracted is diamond, a base or precious metal deposit, or a mineral deposit from which the principal mineral to be extracted is an industrial mineral that, when refined, results in a base or precious metal.

In column 800, list all minerals for which pre-production mining expenditures have taken place in the tax year.

List of minerals**800**

For each of the minerals reported in column 800 above, identify each project, mineral title, and mining division where title is registered. If there is no mineral title, identify the project and mining division only.

Project name 805	Mineral title 806	Mining division 807

Pre-production mining expenditures *

Pre-production mining expenditures that the corporation incurred in the tax year for the purpose of determining the existence, location, extent, or quality of a mineral resource in Canada:

Prospecting	810	PP
Geological, geophysical, or geochemical surveys	811	QQ
Drilling by rotary, diamond, percussion, or other methods	812	RR
Trenching, digging test pits, and preliminary sampling	813	SS

Pre-production mining expenditures incurred in the tax year for bringing a new mine in a mineral resource in Canada into production in reasonable commercial quantities and incurred before the new mine comes into production in such quantities:

Clearing, removing overburden, and stripping	820	TT
Sinking a mine shaft, constructing an adit, or other underground entry	821	UU

Other pre-production mining expenditures incurred in the tax year:

Description 825	Amount 826

Add amounts at column 826 **826** **VV**

Total pre-production mining expenditures (add amounts PP to VV) **830**

Deduct: Total of all assistance (grants, subsidies, rebates, and forgivable loans) or reimbursements that the corporation has received or is entitled to receive in respect of the amounts referred to at line 830 above **832**

Excess (line 830 minus line 832) (if negative, enter "0") **WW**

Add: Repayments of government and non-government assistance **835** **XX**

Pre-production mining expenditures (amount WW plus amount XX) **YY**

* A pre-production mining expenditure is defined under subsection 127(9) and does not include an amount renounced under subsection 66(12.6).

Name of corporation	Business Number	Tax year-end Year Month Day
Waterloo North Hydro Inc.	86584 4575 RC0001	2009-12-31

Part 19 – Calculation of current-year credit and account balances – ITC from pre-production mining expenditures

ITC at the end of the previous tax year

Deduct:

Credit deemed as a remittance of co-op corporations **841**

Credit expired* **845**

Subtotal **850**

ITC at the beginning of the tax year **850**

Add:

Credit transferred on amalgamation or wind-up of subsidiary **860**

Expenditures from line YY in Part 18 **870** x 10 % = **880**

Total credit available

Deduct:

Credit deducted from Part I tax (enter on line B3 in Part 30) **885**

Credit carried back to the previous year(s) (from Part 20) CCC

Subtotal **890**

ITC closing balance from pre-production mining expenditures **890**

* The credit is eligible for a 20 year carryforward effective for credits earned in 2003 and later tax years.

Part 20 – Request for carryback of credit from pre-production mining expenditures

1st previous tax year Credit to be applied **921**

2nd previous tax year Credit to be applied **922**

3rd previous tax year Credit to be applied **923**

Total (enter on line CCC in Part 19)

Year	Month	Day

APPRENTICESHIP JOB CREATION

Part 21 – Calculation of total current-year credit – ITC from apprenticeship job creation expenditures

If you are a related person as defined under subsection 251(2), has it been agreed in writing that you are the only employer who will be claiming the apprenticeship job creation tax credit for this tax year for each apprentice whose contract number (or social insurance number or name) appears below? (If not, you cannot claim the tax credit.)

..... **611** 1 Yes ☐ 2 No ☐

For each apprentice in their first 24 months of the apprenticeship, enter the apprenticeship contract number registered with Canada, or a province or territory, under an apprenticeship program designed to certify or license individuals in the trade. For the province, the trade must be a Red Seal trade. If there is no contract number, enter the social insurance number (SIN) or the name of the eligible apprentice. Also enter the name of the eligible trade, the eligible salary and wages* payable for employment after May 1, 2006, and 10% of this amount. Then enter the lesser of 10% of eligible salary and wages or \$2,000.

	A Contract number (SIN or name of apprentice)	B Name of eligible trade	C Eligible salary and wages*	D Column C x 10 %	E Lesser of column D or \$ 2,000
	601	602	603	604	605
1.	528-636-590	Lineworker	19,944	1,994	1,994
2.	525-898-920	Electrician: Power House Operator	40,550	4,055	2,000
3.					
4.					
Total current-year credit (enter at line 640)					3,994

* Net of any other government or non-government assistance received or to be received.

Part 22 – Calculation of current-year credit and account balances – ITC from apprenticeship job creation expenditures

ITC at the end of the previous tax year

Deduct:

Credit deemed as a remittance of co-op corporations **612**

Credit expired after 20 tax years **615**

Subtotal **625**

ITC at the beginning of the tax year **625**

Add:

Credit transferred on amalgamation or wind-up of subsidiary **630**

ITC from repayment of assistance **635**

Total current-year credit (total of column 605) **640** 3,994

Credit allocated from a partnership **655**

Subtotal **3,994**

Total credit available **3,994**

Deduct:

Credit deducted from Part I tax (enter on line B4 in Part 30) **660** 3,994

Credit carried back to the previous year(s) (from Part 23) DDD

Subtotal **3,994**

ITC closing balance from apprenticeship job creation expenditures **690**

Part 23 – Request for carryback of credit from apprenticeship job creation expenditures

Carryback of this credit is restricted to tax years ending after May 1, 2006.

	Year	Month	Day		
1st previous tax year				 Credit to be applied	931
2nd previous tax year				 Credit to be applied	932
3rd previous tax year				 Credit to be applied	933
Total (enter on line DDD in Part 22)					

Name of corporation	Business Number	Tax year-end Year Month Day
Waterloo North Hydro Inc.	86584 4575 RC0001	2009-12-31

CHILD CARE SPACES

Part 24 – Eligible child care spaces expenditures

Enter the eligible expenditures that the corporation incurred after March 18, 2007, to create licensed child care spaces for the children of the employees and, potentially, for other children. The corporation is not a child care services business. The eligible expenditures include:

- the cost of depreciable property (other than specified property); and
- the specified child care start-up expenditures;

acquired or incurred only to create new child care spaces at a licensed child care facility.

Cost of depreciable property from the current tax year

CCA* class number	Description of investment	Date available for use	Amount of investment	
665	675	685	695	
1.				
Total cost of depreciable property from the current tax year			715	EEE
Add: Specified child care start-up expenditures from the current tax year			705	FFF
Total gross eligible expenditures for child care spaces (line 715 plus line 705)				GGG
Deduct: Total of all assistance (including grants, subsidies, rebates, and forgivable loans) or reimbursements that the corporation has received or is entitled to receive in respect of the amounts referred to at line GGG)			725	HHH
Excess (amount GGG minus amount HHH) (if negative, enter "0")				III
Add: Repayments of government and non-government assistance			735	JJJ
Total eligible expenditures for child care spaces (amount III plus amount JJJ)			745	

* CCA: capital cost allowance

Part 25 – Calculation of current-year credit – ITC from child care spaces expenditures

The credit is equal to 25% of eligible child care spaces expenditures incurred after March 18, 2007, to a maximum of \$10,000 per child care space created in a licensed child care facility.

Eligible expenditures (line 745) x 25 % = KKK

Number of child care spaces **755** x \$ 10,000 = LLL

ITC from child care spaces expenditures (amount KKK or LLL, whichever is less) MMM

Part 26 – Calculation of current-year credit and account balances – ITC from child care spaces expenditures

ITC at the end of the previous tax year

Deduct:

Credit deemed as a remittance of co-op corporations **765**

Credit expired after 20 tax years **770**

Subtotal **775**

ITC at the beginning of the tax year **775**

Add:

Credit transferred on amalgamation or wind-up of subsidiary **777**

Total current-year credit (amount MMM above) **780**

Credit allocated from a partnership **782**

Subtotal **785**

Total credit available

Deduct:

Credit deducted from Part I tax (enter on line B5 in Part 30) **785**

Credit carried back to the previous year(s) (from Part 27) NNN

Subtotal **790**

ITC closing balance from child care spaces expenditures **790**

Part 27 – Request for carryback of credit from child care space expenditures

	Year	Month	Day		
1st previous tax year	2008	12	31	 Credit to be applied	941
2nd previous tax year	2007	12	31	 Credit to be applied	942
3rd previous tax year	2006	12	31	 Credit to be applied	943
Total (enter on line NNN in Part 26)					

Name of corporation	Business Number	Tax year-end Year Month Day
Waterloo North Hydro Inc.	86584 4575 RC0001	2009-12-31

RECAPTURE – CHILD CARE SPACES

Part 28 – Calculating the recapture of ITC for corporations and corporate partnerships – Child care spaces

The ITC will be recovered against the taxpayer's tax otherwise payable under Part I of the Act if, at any time within 60 months of the day on which the taxpayer acquired the property:

- the new child care space is no longer available; or
- property that was an eligible expenditure for the child care space is:
 - disposed of or leased to a lessee; or
 - converted to another use.

If the property disposed of is a child care space, the amount that can reasonably be considered to have been included in the original ITC (paragraph 127(27.12)(a))

792

ZZZ

In the case of eligible expenditures (paragraph 127(27.12)(b)), the lesser of:

The amount that can reasonably be considered to have been included in the original ITC

795

25% of either the proceeds of disposition (if sold in an arm's length transaction) or the fair market value (in any other case) of the property

797

Amount from line 795 or line 797, whichever is less

OOO

Corporate partnerships

As a member of the partnership, you will report your share of the child care spaces ITC of the partnership after the child care spaces ITC has been reduced by the amount of the recapture. If this amount is a positive amount, you will report it on line 782 in Part 26. However, if the partnership does not have enough ITC otherwise available to offset the recapture, then the amount by which reductions to ITC exceed additions (the excess) will be determined and reported on line PPP below.

Corporate partner's share of the excess of ITC 799

PPP

Total recapture of child care spaces investment tax credit – Add lines ZZZ, OOO, and PPP

Enter amount QQQ on line A2 in Part 29.

QQQ

Part 29 – Total recapture of investment tax credit

Recaptured SR&ED ITC from line OO in Part 17

A1

Recaptured child care spaces ITC from line QQQ in Part 28 above

A2

Total recapture of investment tax credit – Add lines A1 and A2

Enter amount A3 on line 602 of the T2 return.

A3

Part 30 – Total ITC deducted from Part I tax

ITC from investments in qualified property deducted from Part I tax (from line 260 in Part 5)

B1

ITC from SR&ED expenditures deducted from Part I tax (from line 560 in Part 12)

B2

ITC from pre-production mining expenditures deducted from Part I tax (from line 885 in Part 19)

B3

ITC from apprenticeship job creation expenditures deducted from Part I tax (from line 660 in Part 22)

3,994

B4

ITC from child care space expenditures deducted from Part I tax (from line 785 in Part 26)

B5

Total ITC deducted from Part I tax (add lines B1, B2, B3, B4, and B5)

3,994

B6

Enter amount B6 at line 652 of the T2 return.

Attached Schedule with Total

C – Eligible salary and wages

Title C – Eligible salary and wages

Description	Amount	
Total 2009 salary/wages per S31.1	24,053	00
Less Ontario credit per S552	-4,109	00
Total	19,944	00

Attached Schedule with Total

C – Eligible salary and wages

Title C – Eligible salary and wages

Description	Amount	
Total 2009 salary/wages per S31.1	49,385	00
Less Ontario credit per S552	-8,835	00
Total	40,550	00

Summary of Investment Tax Credit Carryovers

Continuity of investment tax credit carryovers

CCA class number 97 Apprenticeship job creation ITC

Current year

	Addition current year (A)	Applied current year (B)	Claimed as a refund (C)	Carried back (D)	ITC end of year (A-B-C-D)
	3,994	3,994			

Prior years

Taxation year	ITC beginning of year (E)	Adjustments (F)	Applied current year (G)	ITC end of year (E-F-G)
2008-12-31				
2007-12-31				
2006-12-31				
2005-12-31				
2004-12-31				
2003-12-31				
2002-12-31				
2001-12-31				
2000-12-31				
1999-12-31				*
1998-12-31				
1997-12-31				
1996-12-31				
1995-12-31				
1994-12-31				
1993-12-31				
1992-12-31				
1991-12-31				
1990-12-31				
1989-12-31				*
Total				

B+C+D+G **Total ITC utilized** 3,994

* The **ITC end of year** includes the amount of ITC expired from the 10th preceding year if it is before January 1, 1998, or the amount of ITC expired from the 20th preceding year if it is after December 31, 1997. Note that this credit will only expire at the beginning of the subsequent fiscal period. Consequently, this amount will be posted on line 215, 515, 615, 770 or 845, as applicable, in Schedule 31 of the subsequent fiscal year.



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SCHEDULE 33**TAXABLE CAPITAL EMPLOYED IN CANADA – LARGE CORPORATIONS**

Name of corporation	Business Number	Tax year-end Year Month Day
Waterloo North Hydro Inc.	86584 4575 RC0001	2009-12-31

- Use this schedule in determining if the total taxable capital employed in Canada of the corporation (other than a financial institution or an insurance corporation) and its related corporations is greater than \$10,000,000.
- Parts, sections, subsections, and paragraphs referred to on this schedule are from the federal *Income Tax Act* and the *Income Tax Regulations*.
- Subsection 181(1) defines the terms "financial institution," "long-term debt," and "reserves."
- Subsection 181(3) provides the basis to determine the carrying value of a corporation's assets or any other amount under Part I.3 for its capital, investment allowance, taxable capital, or taxable capital employed in Canada, or for a partnership in which it has an interest.
- If you are filing a provincial capital tax return with your *T2 Corporation Income Tax Return*, also file a completed Schedule 33 with the return no later than six months from the end of the tax year.
- This schedule may contain changes that had not yet become law at the time of publishing.

If the corporation was a non-resident of Canada throughout the year and carried on a business through a permanent establishment in Canada, go to Part 4, "Taxable capital employed in Canada."

Part 1 – Capital

Add the following amounts at the end of the year:

Reserves that have not been deducted in computing income for the year under Part I	101	4,012,433
Capital stock (or members' contributions if incorporated without share capital)	103	26,887,104
Retained earnings	104	36,190,646
Contributed surplus	105	
Any other surpluses	106	
Deferred unrealized foreign exchange gains	107	
All loans and advances to the corporation	108	40,318,368
All indebtedness of the corporation represented by bonds, debentures, notes, mortgages, hypothecary claims, bankers' acceptances, or similar obligations	109	
Any dividends declared but not paid by the corporation before the end of the year	110	
All other indebtedness of the corporation (other than any indebtedness for a lease) that has been outstanding for more than 365 days before the end of the year	111	
Proportion of the amount, if any, by which the total of all amounts (see note below) for the partnership of which the corporation is a member at the end of the year exceeds the amount of the partnership's deferred unrealized foreign exchange losses	112	
Subtotal		107,408,551 ▶ 107,408,551 A

Deduct the following amounts:

Deferred tax debit balance at the end of the year	121	
Any deficit deducted in computing its shareholders' equity (including, for this purpose, the amount of any provision for the redemption of preferred shares) at the end of the year	122	
Any amount deducted under subsection 135(1) in computing income under Part I for the year, as long as the amount may reasonably be regarded as being included in any of lines 101 to 112 above	123	
The amount of deferred unrealized foreign exchange losses at the end of the year	124	
Subtotal		▶ B
Capital for the year (amount A minus amount B) (if negative, enter "0")	190	107,408,551

Note: Lines 101, 107, 108, 109, 111, and 112 are determined as follows:

- If the partnership is a member of another partnership (tiered partnerships), include the amounts of the partnership and tiered partnerships.
- Amounts for the partnership and tiered partnerships are those that would be determined for lines 101, 107, 108, 109, 111, and 112 as if they apply in the same way that they apply to corporations.
- Do not include amounts owing to the member or to other corporations that are members of the partnership.
- Amounts are determined at the end of the last fiscal period of the partnership ending in the year of the corporation.
- The proportion of the total amounts is determined by the corporation's share of the partnership's income or loss for the fiscal period of the partnership.

Part 2 – Investment allowance

Add the carrying value at the end of the year of the following assets of the corporation:

A share of another corporation	401	
A loan or advance to another corporation (other than a financial institution)	402	224,888
A bond, debenture, note, mortgage, hypothecary claim, or similar obligation of another corporation (other than a financial institution)	403	
Long-term debt of a financial institution	404	
A dividend receivable on a share of the capital stock of another corporation	405	
A loan or advance to, or a bond, debenture, note, mortgage, hypothecary claim, or similar obligation of, a partnership all of the members of which, throughout the year, were other corporations (other than financial institutions) that were not exempt from tax under Part I.3 [other than by reason of paragraph 181.1(3)(d)]	406	
An interest in a partnership (see note 1 below)	407	
Investment allowance for the year (add lines 401 to 407)	490	224,888

Notes:

- Where the corporation has an interest in a partnership or in tiered partnerships, consider the following:
 - the investment allowance of a partnership is deemed to be the amount calculated at line 490 above, at the end of its fiscal period, as if it was a corporation;
 - the total of the carrying value of each asset of the partnership described in the above lines is for its last fiscal period ending at or before the end of the corporation's tax year; and
 - the carrying value of a partnership member's interest at the end of the year is its specified proportion [as defined in subsection 248(1)] of the partnership's investment allowance.
- Lines 401 to 405 should not include the carrying value of a share of the capital stock of, a dividend payable by, or indebtedness of a corporation that is exempt from tax under Part I.3 [other than by reason of paragraph 181.1(3)(d)].
- Where a trust is used as a conduit for loaning money from a corporation to another related corporation (other than a financial institution), the loan will be considered to have been made directly from the lending corporation to the borrowing corporation, according to subsection 181.2(6).

Part 3 – Taxable capital

Capital for the year (line 190)	107,408,551	C
Deduct: Investment allowance for the year (line 490)	224,888	D
Taxable capital for the year (amount C minus amount D) (if negative, enter "0")	500	107,183,663

Part 4 – Taxable capital employed in Canada**To be completed by a corporation that was resident in Canada at any time in the year**

Taxable capital for the year (line 500)	107,183,663	x	Taxable income earned in Canada	610	5,984,688	=	Taxable capital employed in Canada	690	107,183,663
			Taxable income		5,984,688				

- Notes:**
- Regulation 8601 gives details on calculating the amount of taxable income earned in Canada.
 - Where a corporation's taxable income for a tax year is "0," it shall, for the purposes of the above calculation, be deemed to have a taxable income for that year of \$1,000.
 - In the case of an airline corporation, Regulation 8601 should be considered when completing the above calculation.

To be completed by a corporation that was a non-resident of Canada throughout the year and carried on a business through a permanent establishment in Canada

Total of all amounts each of which is the carrying value at the end of the year of an asset of the corporation used in the year or held in the year, in the course of carrying on any business during the year through a permanent establishment in Canada	701
--	-----

Deduct the following amounts:

Corporation's indebtedness at the end of the year [other than indebtedness described in any of paragraphs 181.2(3)(c) to (f)] that may reasonably be regarded as relating to a business it carried on during the year through a permanent establishment in Canada

711

Total of all amounts each of which is the carrying value at the end of year of an asset described in subsection 181.2(4) of the corporation that it used in the year, or held in the year, in the course of carrying on any business during the year through a permanent establishment in Canada

712

Total of all amounts each of which is the carrying value at the end of year of an asset of the corporation that is a ship or aircraft the corporation operated in international traffic, or personal or movable property used or held by the corporation in carrying on any business during the year through a permanent establishment in Canada (see note below)

713

Total deductions (add lines 711, 712, and 713) **E**

Taxable capital employed in Canada (line 701 minus amount E) (if negative, enter "0")	790
--	------------

Note: Complete line 713 only if the country in which the corporation is resident did not impose a capital tax for the year on similar assets, or a tax for the year on the income from the operation of a ship or aircraft in international traffic, of any corporation resident in Canada during the year.

Part 5 – Calculation for purposes of the small business deduction

This part is applicable to corporations that are not associated in the current year, but were associated in the prior year.

Taxable capital employed in Canada (line 690 or 790, whichever applies) F

Deduct: 10,000,000 G

Excess (amount F minus amount G) (if negative, enter "0") H

Calculation for purposes of the small business deduction (amount H x 0.00225) I

Enter this amount at line 415 of the T2 return

Attached Schedule with Total

Part 1 – All loans and advances to the corporation

Title Part 1 – All loans and advances to the corporation

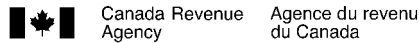
Description	Amount	
BANK DEBT - LINE OF CREDIT	3,092,097	00
LONG-TERM DEBT	33,513,211	00
CUSTOMER DEPOSITS - CURRENT	983,443	00
DUE TO R/P	674,879	00
CUSTOMER DEPOSITS - LONG TERM	2,054,738	00
Total	40,318,368	00

Attached Schedule with Total

Part 2 – A loan or advance to another corporation (other than a financial institution)

Title Part 2 – A loan or advance to another corporation (other than a financial ir

Description	Amount	
Prepaid Computer Contracts	89,640	08
Prepaid Other	135,247	81
Total	224,887	89



SCHEDULE 50

SHAREHOLDER INFORMATION

Name of corporation	Business Number	Tax year end Year Month Day
Waterloo North Hydro Inc.	86584 4575 RC0001	2009-12-31

All private corporations must complete this schedule for any shareholder who holds 10% or more of the corporation's common and/or preferred shares.

		Provide only one number per shareholder				
Name of shareholder (after name, indicate in brackets if the shareholder is a corporation, partnership, individual, or trust)		Business Number (If a corporation is not registered, enter "NR")	Social insurance number	Trust number	Percentage common shares	Percentage preferred shares
100		200	300	350	400	500
1	Waterloo North Hydro Holding Corporation	87502 6924 RC0001			100.000	
2						
3						
4						
5						
6						
7						
8						
9						
10						





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SCHEDULE 53

GENERAL RATE INCOME POOL (GRIP) CALCULATION

Name of corporation	Business Number	Tax year-end Year Month Day
Waterloo North Hydro Inc.	86584 4575 RC0001	2009-12-31

On: 2009-12-31

- If you are a Canadian-controlled private corporation (CCPC) or a deposit insurance corporation (DIC), use this schedule to determine the general rate income pool (GRIP).
- When an eligible dividend was paid in the tax year, file a completed copy of this schedule with your *T2 Corporation Income Tax Return*. Do not send your worksheets with your return, but keep them in your records in case we ask to see them later.
- Subsections referred to in this schedule are from the *Income Tax Act*.
- Subsection 89(1) defines the terms eligible dividend, excessive eligible dividend designation, general rate income pool, and low rate income pool.

Eligibility for the various additions

Answer the following questions to determine the corporation's eligibility for the various additions:

2006 addition

1. Is this the corporation's first taxation year that includes January 1, 2006? ☐ Yes ☒ No
2. If not, what is the date of the taxation year end of the corporation's first year that includes January 1, 2006?
 Enter the date and go directly to question 4 2006-12-31
3. During that first year, was the corporation a CCPC or would it have been a CCPC if not for the election of subsection 89(11) ITA? ☒ Yes ☐ No

If the answer to question 3 is yes, complete Part "GRIP addition for 2006".

Change in the type of corporation

4. Was the corporation a CCPC during its preceding taxation year? ☒ Yes ☐ No
5. Corporations that become a CCPC or a DIC ☐ Yes ☒ No

If the answer to question 5 is yes, complete Part 4.

Amalgamation (first year of filing after amalgamation)

6. Corporations that were formed as a result of an amalgamation ☐ Yes ☒ No
- If the answer to question 6 is yes, answer questions 7 and 8. If the answer is no, go to question 9.
7. Was one or more of the predecessor corporations neither a CCPC nor a DIC? ☐ Yes ☐ No
- If the answer to question 7 is yes, complete Part 4.
8. Was one or more of the predecessor corporation a CCPC or a DIC during the taxation year that ended immediately before amalgamation? ☐ Yes ☐ No
- If the answer to question 8 is yes, complete Part 3.

Winding-up

9. Corporations that wound-up a subsidiary ☐ Yes ☒ No
- If the answer to question 9 is yes, answer questions 10 and 11. If the answer is no, go to Part 1.
10. Was the subsidiary neither a CCPC nor a DIC during its last taxation year? ☐ Yes ☐ No
- If the answer to question 10 is yes, complete Part 4.
11. Was the subsidiary a CCPC or a DIC during its last taxation year? ☐ Yes ☐ No
- If the answer to question 11 is yes, complete Part 3.

Part 1 – Calculation of general rate income pool (GRIP)

GRIP at the end of the previous tax year	100	19,901,469	A
Taxable income for the year (DICs enter "0") *	110	5,984,688	B
Income for the credit union deduction * (amount E in Part 3 of Schedule 17)	120		
Amount on line 400, 405, 410, or 425 of the T2 return, whichever is less *	130		
For a CCPC, the lesser of aggregate investment income (line 440 of the T2 return) and taxable income *	140		
Subtotal (add lines 120, 130, and 140)			C
Income taxable at the general corporate rate (line B minus line C) (if negative enter "0")	150	5,984,688	
After-tax income (line 150 x general rate factor for the tax year ** 0.68)	190	4,069,588	D
Eligible dividends received in the tax year	200		
Dividends deductible under section 113 received in the tax year	210		
Subtotal (add lines 200 and 210)			E
GRIP addition:			
Becoming a CCPC (line PP from Part 4)	220		
Post-amalgamation (total of lines EE from Part 3 and lines PP from Part 4)	230		
Post-wind-up (total of lines EE from Part 3 and lines PP from Part 4)	240		
Subtotal (add lines 220, 230, and 240)	290		F
Subtotal (add lines A, D, E, and F)		23,971,057	G
Eligible dividends paid in the previous tax year	300		
Excessive eligible dividend designations made in the previous tax year	310		
Note: If becoming a CCPC (subsection 89(4) applies), enter "0" on lines 300 and 310.			
Subtotal (line 300 minus line 310)			H
GRIP before adjustment for specified future tax consequences (line G minus line H) (amount can be negative)	490	23,971,057	
Total GRIP adjustment for specified future tax consequences to previous tax years (amount W from Part 2)	560		
GRIP at the end of the tax year (line 490 minus line 560)	590	23,971,057	

Enter this amount on line 160 of Schedule 55.

* For lines 110, 120, 130, and 140, the income amount is the amount before considering specified future tax consequences. This phrase is defined in subsection 248(1). It includes the deduction of a loss carryback from subsequent tax years, a reduction of Canadian exploration expenses and Canadian development expenses that were renounced in subsequent tax years (e.g., flow-through share renunciations), reversals of income inclusions where an option is exercised in subsequent tax years, and the effect of certain foreign tax credit adjustments.

** The **general rate factor** for a tax year is 0.68 for any portion of the tax year that falls before 2010, 0.69 for any portion of the tax year that falls in 2010, 0.70 for any portion of the tax year that falls in 2011, and 0.72 for any portion of the tax year that falls after 2011. Calculate the general rate factor in Part 5 for tax years that straddle these dates.

Part 2 – GRIP adjustment for specified future tax consequences to previous tax years

Complete this part if the corporation's taxable income of any of the previous three tax years took into account the specified future tax consequences defined in subsection 248(1) from the current tax year. Otherwise, enter "0" on line 560.

First previous tax year 2008-12-31

Taxable income before specified future tax consequences from the current tax year	7,055,181	J1
Enter the following amounts before specified future tax consequences from the current tax year:		
Income for the credit union deduction (amount E in Part 3 of Schedule 17)	K1	
Amount on line 400, 405, 410, or 425 of the T2 return, whichever is less	L1	
Aggregate investment income (line 440 of the T2 return)	M1	
Subtotal (add lines K1, L1, and M1)	N1	
Subtotal (line J1 minus line N1) (if negative, enter "0")	7,055,181	O1

Part 2 – GRIP adjustment for specified future tax consequences to previous tax years (continued)

Future tax consequences that occur for the current year					
Amount carried back from the current year to a prior year					
Non-capital loss carry-back (paragraph 111 (1)(a) ITA)	Capital loss carry-back	Restricted farm loss carry-back	Farm loss carry-back	Other	Total carrybacks

Taxable income after specified future tax consequences P1

Enter the following amounts after specified future tax consequences:

Income for the credit union deduction

(amount E in Part 3 of Schedule 17) Q1

Amount on line 400, 405, 410, or 425

of the T2 return, whichever is less R1

Aggregate investment income

(line 440 of the T2 return) S1

Subtotal (add lines Q1, R1, and S1) T1Subtotal (line P1 minus line T1) (if negative, enter "0") U1Subtotal (line O1 minus line U1) (if negative, enter "0") V1**GRIP adjustment for specified future tax consequences to the first previous tax year**(line V1 multiplied by the general rate factor for the tax year 0.68) **500****Second previous tax year 2007-12-31**

Taxable income before specified future tax consequences from

the current tax year 7,163,065 J2

Enter the following amounts before specified future tax

consequences from the current tax year:

Income for the credit union deduction

(amount E in Part 3 of Schedule 17) K2

Amount on line 400, 405, 410, or 425

of the T2 return, whichever is less L2

Aggregate investment income

(line 440 of the T2 return) M2

Subtotal (add lines K2, L2, and M2) N2Subtotal (line J2 minus line N2) (if negative, enter "0") 7,163,065 7,163,065 O2

Future tax consequences that occur for the current year					
Amount carried back from the current year to a prior year					
Non-capital loss carry-back (paragraph 111 (1)(a) ITA)	Capital loss carry-back	Restricted farm loss carry-back	Farm loss carry-back	Other	Total carrybacks

Taxable income after specified future tax consequences P2

Enter the following amounts after specified future tax consequences:

Income for the credit union deduction

(amount E in Part 3 of Schedule 17) Q2

Amount on line 400, 405, 410, or 425

of the T2 return, whichever is less R2

Aggregate investment income

(line 440 of the T2 return) S2

Subtotal (add lines Q2, R2, and S2) T2Subtotal (line P2 minus line T2) (if negative, enter "0") U2Subtotal (line O2 minus line U2) (if negative, enter "0") V2**GRIP adjustment for specified future tax consequences to the second previous tax year**(line V2 multiplied by the general rate factor for the tax year 0.68) **520**

Part 2 – GRIP adjustment for specified future tax consequences to previous tax years (continued)

Third previous tax year 2006-12-31

Taxable income before specified future tax consequences from the current tax year 7,360,301 J3

Enter the following amounts before specified future tax consequences from the current tax year:

Income for the credit union deduction (amount E in Part 3 of Schedule 17) K3

Amount on line 400, 405, 410, or 425 of the T2 return, whichever is less 300,000 L3

Aggregate investment income (line 440 of the T2 return) M3

Subtotal (add lines K3, L3, and M3) 300,000 ▶ 300,000 N3

Subtotal (line J3 minus line N3) (if negative, enter "0") 7,060,301 ▶ 7,060,301 O3

Future tax consequences that occur for the current year					
Amount carried back from the current year to a prior year					
Non-capital loss carry-back (paragraph 111 (1)(a) ITA)	Capital loss carry-back	Restricted farm loss carry-back	Farm loss carry-back	Other	Total carrybacks

Taxable income after specified future tax consequences P3

Enter the following amounts after specified future tax consequences:

Income for the credit union deduction (amount E in Part 3 of Schedule 17) Q3

Amount on line 400, 405, 410, or 425 of the T2 return, whichever is less R3

Aggregate investment income (line 440 of the T2 return) S3

Subtotal (add lines Q3, R3, and S3) ▶ T3

Subtotal (line P3 minus line T3) (if negative, enter "0") ▶ U3

Subtotal (line O3 minus line U3) (if negative, enter "0") V3

GRIP adjustment for specified future tax consequences to the third previous tax year

(line V3 multiplied by the general rate factor for the tax year 0.68) 540

Total GRIP adjustment for specified future tax consequences to previous tax years:

(add lines 500, 520, and 540) (if negative, enter "0") W

Enter amount W on line 560.

Part 3 – Worksheet to calculate the GRIP addition post-amalgamation or post-wind-up (predecessor or subsidiary was a CCPC or a DIC in its last tax year)

nb. 1 Postamalgamation ☐ Post-wind-up ☐

Complete this part when there has been an amalgamation (within the meaning assigned by subsection 87(1)) or a wind-up (to which subsection 88(1) applies) and the predecessor or subsidiary corporation was a CCPC or a DIC in its last tax year. In the calculation below, **corporation** means a predecessor or a subsidiary. The last tax year for a predecessor corporation was its tax year that ended immediately before the amalgamation and for a subsidiary corporation was its tax year during which its assets were distributed to the parent on the wind-up.

For a post-wind-up, include the GRIP addition in calculating the parent's GRIP at the end of its tax year that immediately follows the tax year during which it receives the assets of the subsidiary.

Complete a separate worksheet for **each** predecessor and **each** subsidiary that was a CCPC or a DIC in its last tax year. Keep a copy of this calculation for your records, in case we ask to see it later.

Corporation's GRIP at the end of its last tax year AA

Eligible dividends paid by the corporation in its last tax year BB

Excessive eligible dividend designations made by the corporation in its last tax year CC

Subtotal (line BB minus line CC) ▶ DD

GRIP addition post-amalgamation or post-wind-up (predecessor or subsidiary was a CCPC or a DIC in its last tax year)

(line AA minus line DD) EE

After you complete this calculation for each predecessor and each subsidiary, calculate the total of all the EE lines. Enter this total amount on:

- line 230 for post-amalgamation; or
- line 240 for post-wind-up.

Part 5 – General rate factor for the tax year

Complete this part to calculate the general rate factor for the tax year. Calculate your results to four decimal places.

0.68	x	number of days in the tax year before January 1, 2010	365	.....	=	0.6800	QQ
		number of days in the tax year	365				
0.69	x	number of days in the tax year in 2010		.....	=		RR
		number of days in the tax year	365				
0.7	x	number of days in the tax year in 2011		.....	=		SS
		number of days in the tax year	365				
0.72	x	number of days in the tax year after December 31, 2011		.....	=		TT
		number of days in the tax year	365				
General rate factor for the tax year (total of lines QQ to TT)						0.6800	UU



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SCHEDULE 500**ONTARIO CORPORATION TAX CALCULATION**

Name of corporation	Business Number	Tax year-end Year Month Day
Waterloo North Hydro Inc.	86584 4575 RC0001	2009-12-31

- Use this schedule if the corporation had a permanent establishment (as defined in section 400 of the federal *Income Tax Regulations*) in Ontario at any time in the tax year and had Ontario taxable income in the year.
- References to subsections and paragraphs are from the federal *Income Tax Act*.
- This schedule is a worksheet only and does not have to be filed with your *T2 Corporation Income Tax Return*.

Part 1 – Calculation of Ontario basic rate of tax for the year

Number of days in the tax year before July 1, 2010	365	x	14.00 %	=	14.00000 %	A1
Number of days in the tax year	365					
Number of days in the tax year after June 30, 2010 and before July 1, 2011		x	12.00 %	=	%	A2
Number of days in the tax year	365					
Number of days in the tax year after June 30, 2011 and before July 1, 2012		x	11.50 %	=	%	A3
Number of days in the tax year	365					
Number of days in the tax year after June 30, 2012 and before July 1, 2013		x	11.00 %	=	%	A4
Number of days in the tax year	365					
Number of days in the tax year after June 30, 2013		x	10.00 %	=	%	A5
Number of days in the tax year	365					

Ontario basic rate of tax for the year (total of rates A1 to A5) 14.00000 ► 14.00000 % A6

Part 2 – Calculation of Ontario basic income tax

Ontario taxable income * 5,984,688 B

Ontario basic income tax: amount B multiplied by Ontario basic rate of tax for the year (rate A6 from Part 1) 837,856 C

If the corporation has a permanent establishment in more than one jurisdiction, or is claiming an Ontario tax credit, in addition to Ontario basic income tax, or has Ontario corporate minimum tax, Ontario special additional tax on life insurance corporations or Ontario capital tax payable, enter amount C on line 270 of Schedule 5, *Tax Calculation Supplementary – Corporations*. Otherwise, enter it on line 760 of the T2 return.

* If the corporation has a permanent establishment only in Ontario, enter the amount from line 360 or line Z, whichever applies, from the T2 return. Otherwise, enter the taxable income allocated to Ontario from column F in Part 1 of Schedule 5.

Part 3 – Ontario small business deduction (OSBD)

Complete this part if the corporation claimed the federal small business deduction under subsection 125(1) or would have claimed it if subsection 125(5.1) had not been applicable in the tax year.

Income from active business carried on in Canada (amount from line 400 of the T2 return)					5,984,688	1
Federal taxable income, less adjustment for foreign tax credit (amount from line 405 of the T2 return)					5,984,688	2
Federal business limit before the application of subsection 125(5.1) (amount from line 410 of the T2 return)	500,000	x	500,000	=	500,000	3
			500,000			
			line 4 on page 4 of the T2 return			
Enter the least of amounts 1, 2, and 3					500,000	D
Ontario domestic factor:	Ontario taxable income *	5,984,688.00	=		1.00000	E
	taxable income earned in all provinces and territories **	5,984,688				
Ontario small business income (amount D multiplied by amount E)					500,000	F

Number of days in the tax year before July 1, 2010	365	x	8.50 %	=	8.50000 %	G1
Number of days in the tax year	365					
Number of days in the tax year after June 30, 2010 and before July 1, 2011		x	7.50 %	=	%	G2
Number of days in the tax year	365					
Number of days in the tax year after June 30, 2011 and before July 1, 2012		x	7.00 %	=	%	G3
Number of days in the tax year	365					
Number of days in the tax year after June 30, 2012 and before July 1, 2013		x	6.50 %	=	%	G4
Number of days in the tax year	365					
Number of days in the tax year after June 30, 2013		x	5.50 %	=	%	G5
Number of days in the tax year	365					

OSBD rate for the year (total of rates G1 to G5) 8.50000 % G6

Ontario small business deduction: amount F **multiplied** by OSBD rate for the year (rate G6) 42,500 H

Enter amount H on line 402 of Schedule 5.

* Enter amount B from Part 2.

** Includes the offshore jurisdictions for Nova Scotia, and Newfoundland and Labrador.

Part 4 – Calculation of surtax re Ontario small business deduction

Complete this part if the corporation is claiming the OSBD, and its adjusted taxable income, **plus** the adjusted taxable income of each corporation with which the corporation was associated during its tax year, is greater than \$500,000. If the corporation is a member of an associated group, complete Schedule 501, *Ontario Adjusted Taxable Income of Associated Corporations to Determine Surtax re Ontario Small Business Deduction*.

Note: You do not need to complete this part if the corporation's tax year begins after June 30, 2010.

Adjusted taxable income *	5,984,688	I
Adjusted taxable income of all associated corporations (amount from line 500 of Schedule 501)		J
Aggregate adjusted taxable income (amount I plus amount J)	5,984,688	K

Deduct:

Ontario business limit	500,000	
Subtotal (amount K minus Ontario business limit) (if negative, enter "0" on this line and on line P)	5,484,688	L

Small business surtax rate for the year:

Number of days in the tax year before July 1, 2010	365	x	4.25 %	=	4.25 %	M
Number of days in the tax year	365					

Note: For days in the tax year after June 30, 2010, the small business surtax rate is reduced to 0%.

Multiply: Amount L	x	% on line M	=	233,099	N
Amount N	x	Ontario small business income (amount F from Part 3)	=	233,099	O
		500,000		500,000	

Surtax re Ontario small business deduction: lesser of amount O and OSBD (amount H in Part 3)	42,500	P
---	--------	---

Enter amount P on line 272 of Schedule 5.

* Adjusted taxable income is equal to the corporation's taxable income or taxable income earned in Canada for the year **plus** the amount of the corporation's adjusted Crown royalties for the year **minus** the amount of the corporation's notional resource allowance for the year (from Schedule 504, *Ontario Resource Tax Credit and Ontario Additional Tax re Crown Royalties*).

If the tax year of the corporation is less than 51 weeks, **multiply** the adjusted taxable income of the corporation for the year by 365 and **divide** by the number of days in the tax year.

Part 5 – Ontario adjusted small business income

Complete this part if the corporation was a Canadian-controlled private corporation throughout the tax year and is claiming the Ontario tax credit for manufacturing and processing or the Ontario credit union tax reduction.

Amount D in Part 3	500,000	Q
Surtax payable (amount P from Part 4)	42,500	
Ontario domestic factor (amount E from Part 3) x OSBD rate (rate G6 from Part 3)	8.50000 %	
	0.08500	R

Note: Enter "0" on line R for tax years beginning after June 30, 2010

Ontario adjusted small business income (amount Q minus amount R) (if negative, enter "0")		S
---	--	---

Enter amount S on line U in Part 6 or on line B in Part 2 of Schedule 502, *Ontario Tax Credit for Manufacturing and Processing*, whichever applies.

Part 6 – Calculation of credit union tax reduction

Complete this part and Schedule 17, *Credit Union Deductions*, if the corporation was a credit union throughout the tax year.

Amount D in Part 3 of Schedule 17 T

Deduct:

Ontario adjusted small business income (amount S from Part 5) U

Subtotal (amount T **minus** amount U) (if negative, enter "0") V

OSBD rate for the year (rate G6 from Part 3) 8.50000 %

Amount V **multiplied** by the OSBD rate for the year W

Ontario domestic factor (amount E from Part 3) 1.00000 X

Ontario credit union tax reduction (amount W **multiplied** by amount X) Y

Enter amount Y on line 410 on Schedule 5.



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SCHEDULE 501

**ONTARIO ADJUSTED TAXABLE INCOME OF ASSOCIATED CORPORATIONS TO
 DETERMINE SURTAX RE ONTARIO SMALL BUSINESS DEDUCTION**

Name of corporation	Business Number	Tax year-end Year Month Day
Waterloo North Hydro Inc.	86584 4575 RC0001	2009-12-31

- For use by Canadian-controlled private corporations (CCPCs) to report the adjusted taxable income of all corporations (Canadian and foreign) with which the filing corporation was associated at any time during the tax year.
- Include the adjusted taxable income for the tax year of the associated corporation that ends at or before the date of the filing corporation's tax year-end.
- Attach additional schedules if more space is required.
- File this schedule with the *T2 Corporation Income Tax Return*.

	Names of associated corporations*	Business number of associated corporations**	Tax year-end	Adjusted taxable income *** (if loss, enter "0")
	100	200	300	400
1	Waterloo North Hydro Holding Corporation	87502 6924 RC0001	2009-12-31	
Total				500

Enter the total adjusted taxable income from line 500 on line J in Part 4 of Schedule 500, *Ontario Corporation Tax Calculation*.

* Subsection 256(2) of the federal *Income Tax Act* may deem the filing corporation to be associated with another corporation, because both corporations are associated with a third corporation. If so, do not list the other corporation, nor the third corporation if it is not a CCPC or has elected under subsection 256(2) of the federal Act not to be associated for purposes of section 125 of the federal Act.

** Enter "NR" if a corporation is not registered.

***** Rules for adjusted taxable income:**

- If the associated corporation's tax year ends after December 31, 2008, its adjusted taxable income is equal to its taxable income or taxable income earned in Canada **plus** its adjusted Crown royalties **minus** its notional resource allowance for the year.
- If the associated corporation's tax year is less than 51 weeks and is the only tax year of the associated corporation that ends in the filing corporation's tax year, **multiply** the associated corporation's adjusted taxable income by 365 and **divide** by the number of days in the associated corporation's tax year.
- If the associated corporation has two or more tax years ending in the filing corporation's tax year, enter the last tax year-end date on line 300 and, for the entry on line 400, **multiply** the sum of the adjusted taxable income for each of those tax years by 365, and **divide** by the total number of days in all of those tax years.



ONTARIO CORPORATE MINIMUM TAX

Name of corporation	Business Number	Tax year-end Year Month Day
Waterloo North Hydro Inc.	86584 4575 RC0001	2009-12-31

- File this schedule if the corporation is subject to Ontario corporate minimum tax (CMT). CMT is levied under section 55 of the *Taxation Act, 2007* (Ontario).
- Complete Part 1 to determine if the corporation is subject to CMT for the tax year.
- A corporation not subject to CMT in the tax year is still required to file this schedule if it is deducting a CMT credit, has a CMT credit carryforward, or has a CMT loss carryforward or a current year CMT loss.
- A corporation that has Ontario special additional tax on life insurance corporations (SAT) payable in the tax year must complete Part 4 of this schedule even if it is not subject to CMT for the tax year.
- A corporation is exempt from CMT if, throughout the tax year, it was one of the following:
 - 1) a corporation exempt from income tax under section 149 of the federal *Income Tax Act*;
 - 2) a mortgage investment corporation under subsection 130.1(6) of the federal Act;
 - 3) a deposit insurance corporation under subsection 137.1(5) of the federal Act;
 - 4) a congregation or business agency to which section 143 of the federal Act applies;
 - 5) an investment corporation as referred to in subsection 130(3) of the federal Act; or
 - 6) a mutual fund corporation under subsection 131(8) of the federal Act.
- File this schedule with the *T2 Corporation Income Tax Return*.

Part 1 – Determination of CMT applicability

Total assets of the corporation at the end of the tax year *	112	144,198,988
Share of total assets from partnership(s) and joint venture(s) *	114	
Total assets of associated corporations (amount from line 450 on Schedule 511)	116	35,607,651
Total assets (total of lines 112 to 116)		179,806,639
Total revenue of the corporation for the tax year **	142	106,561,767
Share of total revenue from partnership(s) and joint venture(s) **	144	
Total revenue of associated corporations (amount from line 550 on Schedule 511)	146	2,610,577
Total revenue (total of lines 142 to 146)		109,172,344

The corporation is subject to CMT if:

- for tax years ending before July 1, 2010, the total assets at the end of the year of the corporation or the associated group of corporations are more than \$5,000,000, or the total revenue for the year of the corporation or the associated group of corporations is more than \$10,000,000.
- for tax years ending after June 30, 2010, the total assets at the end of the year of the corporation or the associated group of corporations are equal to or more than \$50,000,000, and the total revenue for the year of the corporation or the associated group of corporations is equal to or more than \$100,000,000.

If the corporation is not subject to CMT, do not complete the remaining parts unless the corporation is deducting a CMT credit, or has a CMT credit carryforward, a CMT loss carryforward, a current year CMT loss, or SAT payable in the year.

*** Rules for total assets**

- Report total assets according to generally accepted accounting principles, adjusted so that consolidation and equity methods are not used.
- Do not include unrealized gains and losses on assets and foreign currency gains and losses on assets that are included in net income for accounting purposes but not in income for corporate income tax purposes.
- The amount on line 114 is determined at the end of the last fiscal period of the partnership or joint venture that ends in the tax year of the corporation. Add the proportionate share of the assets of the partnership(s) and joint venture(s), and deduct the recorded asset(s) for the investment in partnerships and joint ventures.
- A corporation's share in a partnership or joint venture is determined under paragraph 54(5)(b) of the *Taxation Act, 2007* (Ontario) and, if the partnership or joint venture had no income or loss, is calculated as if the partnership's or joint venture's income were \$1 million. For a corporation with an indirect interest in a partnership or joint venture, determine the corporation's share according to paragraph 54(5)(c) of the *Taxation Act, 2007* (Ontario).

**** Rules for total revenue**

- Report total revenue in accordance with generally accepted accounting principles, adjusted so that consolidation and equity methods are not used.
- If the tax year is less than 51 weeks, **multiply** the total revenue of the corporation or the partnership, whichever applies, by 365 and **divide** by the number of days in the tax year.
- The amount on line 144 is determined for the partnership or joint venture fiscal period that ends in the tax year of the corporation. If the partnership or joint venture has 2 or more fiscal periods ending in the filing corporation's tax year, **multiply** the sum of the total revenue for each of the fiscal periods by 365 and **divide** by the total number of days in all the fiscal periods.
- A corporation's share in a partnership or joint venture is determined under paragraph 54(5)(b) of the *Taxation Act, 2007* (Ontario) and, if the partnership or joint venture had no income or loss, is calculated as if the partnership's or joint venture's income were \$1 million. For a corporation with an indirect interest in a partnership or joint venture, determine the corporation's share according to paragraph 54(5)(c) of the *Taxation Act, 2007* (Ontario).

Part 2 – Calculation of adjusted net income/loss for CMT purposes

Net income/loss per financial statements *		210	4,752,736
Add (to the extent reflected in income/loss):			
Provision for current income taxes/cost of current income taxes	220	2,046,940	
Provision for deferred income taxes (debits)/cost of future income taxes	222		
Equity losses from corporations	224		
Financial statement loss from partnerships and joint ventures	226		
Dividends deducted as interest expense on financial statements (subsection 57(2) of the <i>Taxation Act, 2007</i> (Ontario)), excluding dividends paid by credit unions under subsection 137(4.1) of the federal Act	230		
Other additions (see note below):			
Share of adjusted net income of partnerships and joint ventures **	228		
Total patronage dividends received, not already included in net income/loss	232		
281	282		
283	284		
	Subtotal	2,046,940	2,046,940 A
Deduct (to the extent reflected in income/loss):			
Provision for recovery of current income taxes/benefit of current income taxes	320		
Provision for deferred income taxes (credits)/benefit of future income taxes	322		
Equity income from corporations	324		
Financial statement income from partnerships and joint ventures	326		
Dividends deductible under section 112, section 113, or subsection 138(6) of the federal Act	330		
Dividends not taxable under section 83 of the federal Act (from Schedule 3)	332		
Gain on donation of listed security or ecological gift	340		
Accounting gain on transfer of property to a corporation under section 85 or 85.1 of the federal Act ***	342		
Accounting gain on transfer of property to/from a partnership under section 85 or 97 of the federal Act ****	344		
Accounting gain on disposition of property under subsection 13(4), subsection 14(6), or section 44 of the federal Act *****	346		
Accounting gain on a windup under subsection 88(1) of the federal Act or an amalgamation under section 87 of the federal Act	348		
Other deductions (see note below):			
Share of adjusted net loss of partnerships and joint ventures **	328		
Tax payable on dividends under subsection 191.1(1) of the federal Act multiplied by 3	334		
Interest deducted/deductible under paragraph 20(1)(c) or (d) of the federal Act, not already included in net income/loss	336		
Patronage dividends paid (from Schedule 16) not already included in net income/loss	338		
381	382		
383	384		
385	386		
387	388		
389	390		
	Subtotal		B
Adjusted net income/loss for CMT purposes (line 210 plus amount A minus amount B)	490	6,799,676	

If the amount on line 490 is positive and the corporation is subject to CMT as determined in Part 1, enter the amount on line 515 in Part 3.

If the amount on line 490 is negative, enter the amount on line 760 in Part 7 (enter as a positive amount).

Note

In accordance with *Ontario Regulation 37/09*, in calculating net income for CMT purposes, accounting income should be adjusted to remove unrealized gains and losses on mark-to-market property, as well as foreign currency gains and losses on assets, that are included in income for accounting purposes but not in income for income tax purposes. In later years, accounting income is adjusted in arriving at net income for CMT purposes by including these gains or losses when they are realized.

These realized gains and losses apply to the disposition of mark-to-market property:

- that is not capital property in the year;
- that is capital property and realized in the year or the preceding tax year that ends after March 22, 2007.

The mark-to-market rules also apply to partnerships. A corporate partner's share of a partnership's adjusted income flows through on a proportionate basis to the corporate partner.

*** Rules for net income/loss**

- Banks must report net income/loss as per the report accepted by the Superintendent of Financial Institutions under the federal *Bank Act*, adjusted so consolidation and equity methods are not used.
- Life insurance corporations must report net income/loss as per the report accepted by the federal Superintendent of Financial Institutions or equivalent provincial insurance regulator, before SAT and adjusted so consolidation and equity methods are not used. If the life insurance corporation is resident in Canada and carries on business in and outside of Canada, **multiply** the net income/loss by the ratio of the Canadian reserve liabilities **divided** by the total reserve liability. The reserve liabilities are calculated in accordance with Regulation 2405(3) of the federal Act.

Part 2 – Calculation of adjusted net income/loss for CMT purposes (continued)

- Other corporations must report net income/loss in accordance with generally accepted accounting principles, except that consolidation and equity methods must not be used. When the equity method has been used for accounting purposes, equity losses and equity income are removed from book income/loss on lines 224 and 324 respectively.
- Corporations, other than insurance corporations, should report net income from line 9999 of the GIF1 (Schedule 125) on line 210.
- ** The share of the adjusted net income of a partnership or joint venture is calculated as if the partnership or joint venture were a corporation and the tax year of the partnership or joint venture were its fiscal period. For a corporation with an indirect interest in a partnership through one or more partnerships, determine the corporation's share according to clause 54(5)(c) of the *Taxation Act, 2007* (Ontario).
- *** A joint election will be considered made under subsection 60(1) of the *Taxation Act, 2007* (Ontario) if there is an entry on line 342, and an election has been made for transfer of property to a corporation under subsection 85(1) of the federal Act.
- **** A joint election will be considered made under subsection 60(2) of the *Taxation Act, 2007* (Ontario) if there is an entry on line 344, and an election has been made under subsection 85(2) or 97(2) of the federal Act.
- ***** A joint election will be considered made under subsection 61(1) of the *Taxation Act, 2007* (Ontario) if there is an entry on line 346, and an election has been made under subsection 13(4) or 14(6) and/or section 44 of the federal Act.

For more information on how to complete this part, see the *T2 Corporation – Income Tax Guide*.

Part 3 – Calculation of CMT payable

Adjusted net income for CMT purposes (line 490 in Part 2, if positive) **515** 6,799,676

Deduct:

CMT loss available (amount R from Part 7)

Minus: Adjustment for an acquisition of control * **518**

Adjusted CMT loss available **C**

Net income subject to CMT calculation (if negative, enter "0") **520** 6,799,676

Amount from line 520 6,799,676 x $\frac{\text{Number of days in the tax year before July 1, 2010}}{\text{Number of days in the tax year}}$ $\frac{365}{365}$ x 4 % = 271,987 1

Amount from line 520 6,799,676 x $\frac{\text{Number of days in the tax year after June 30, 2010}}{\text{Number of days in the tax year}}$ $\frac{365}{365}$ x 2.7 % = 2

Subtotal (amount 1 **plus** amount 2) 271,987 3

Gross CMT: amount on line 3 above x OAF ** **540** 271,987

Deduct:

Foreign tax credit for CMT purposes *** **550**

CMT after foreign tax credit deduction (line 540 **minus** line 550) (if negative, enter "0") 271,987 D

Deduct:

Ontario corporate income tax payable before CMT credit (amount F6 from Schedule 5) 837,856

Net CMT payable (if negative, enter "0") **E**

Enter amount E on line 278 of Schedule 5, *Tax Calculation Supplementary – Corporations*, and complete Part 4.

* Portion of CMT loss available that exceeds the adjusted net income for the tax year from business(es) continued from before the acquisition of control. See subsection 58(3) of the *Taxation Act, 2007* (Ontario).

*** Enter "0" on line 550 for life insurance corporations as they are not eligible for this deduction. For all other corporations, enter the cumulative total of amount J for the province of Ontario from Part 9 of Schedule 21 on line 550.

**** Calculation of the Ontario allocation factor (OAF):**

If the provincial or territorial jurisdiction entered on line 750 of the T2 return is "Ontario," enter "1" on line F.

If the provincial or territorial jurisdiction entered on line 750 of the T2 return is "multiple," complete the following calculation, and enter the result on line F:

Ontario taxable income **** = Taxable income *****

Ontario allocation factor 1.00000 F

**** Enter the amount allocated to Ontario from column F in Part 1 of Schedule 5. If the taxable income is nil, calculate the amount in column F as if the taxable income were \$1,000.

***** Enter the taxable income amount from line 360 or amount Z of the T2 return, whichever applies. If the taxable income is nil, enter "1,000."

Part 4 – Calculation of CMT credit carryforward

CMT credit carryforward at the end of the previous tax year *	.....	G
Deduct:		
CMT credit expired *	 600	
CMT credit carryforward at the beginning of the current tax year * (see note below)	.....	620
Add:		
CMT credit carryforward balances transferred on an amalgamation or the windup of a subsidiary (see note below)	.....	650
CMT credit available for the tax year (amount on line 620 plus amount on line 650)	.....	H
Deduct:		
CMT credit deducted in the current tax year (amount P from Part 5)	.....	I
	Subtotal (amount H minus amount I)	J
Add:		
Net CMT payable (amount E from Part 3)	.....	
SAT payable (amount O from Part 6 of Schedule 512)	.....	
	Subtotal	K
CMT credit carryforward at the end of the tax year (amount J plus amount K)	.....	670 L

* For the first harmonized T2 return filed with a tax year that includes days in 2009:

- do not enter an amount on line G or line 600;
- for line 620, enter the amount from line 2336 of Ontario CT23 Schedule 101, *Corporate Minimum Tax (CMT)*, for the last tax year that ended in 2008.

For other tax years, enter on line G the amount from line 670 of Schedule 510 from the previous tax year.

Note: If you entered an amount on line 620 or line 650, complete Part 6.

Part 5 – Calculation of CMT credit deducted from Ontario corporate income tax payable

CMT credit available for the tax year (amount H from Part 4)	.....	M
Ontario corporate income tax payable before CMT credit (amount F6 from Schedule 5)	 837,856	1
For a corporation that is not a life insurance corporation:		
CMT after foreign tax credit deduction (amount D from Part 3)	 271,987	2
For a life insurance corporation:		
Gross CMT (line 540 from Part 3)	.....	3
Gross SAT (line 460 from Part 6 of Schedule 512)	.....	4
The greater of amounts 3 and 4	.....	5
	Deduct: line 2 or line 5, whichever applies:	271,987 6
	Subtotal (if negative, enter "0")	565,869 N
Ontario corporate income tax payable before CMT credit (amount F6 from Schedule 5)	 837,856	
Deduct:		
Total refundable tax credits excluding Ontario qualifying environmental trust tax credit (amount J6 minus line 450 from Schedule 5)	 61,453	
	Subtotal (if negative, enter "0")	776,403 O
CMT credit deducted in the current tax year (least of amounts M, N, and O)	.....	P
Enter amount P on line 418 of Schedule 5 and on line I in Part 4 of this schedule.		
Is the corporation claiming a CMT credit earned before an acquisition of control?	 675	1 Yes ☐ 2 No ☒
If you answered yes to the question at line 675, the CMT credit deducted in the current tax year may be restricted. For information on how the deduction may be restricted, see subsections 53(6) and (7) of the <i>Taxation Act, 2007</i> (Ontario).		

Part 6 – Analysis of CMT credit available for carryforward by year of origin

Complete this part if:

- the tax year includes January 1, 2009; or
- the previous tax year-end is deemed to be December 31, 2008, under subsection 249(3) of the federal Act.

Year of origin	CMT credit balance *
10th previous tax year	680
9th previous tax year	681
8th previous tax year	682
7th previous tax year	683
6th previous tax year	684
5th previous tax year	685
4th previous tax year	686
3rd previous tax year	687
2nd previous tax year	688
1st previous tax year	689
Total **	

* CMT credit that was earned (by the corporation, predecessors of the corporation, and subsidiaries wound up into the corporation) in each of the previous 10 tax years and has not been deducted.

** Must equal the total of the amounts entered on lines 620 and 650 in Part 4.

Part 7 – Calculation of CMT loss carryforward

CMT loss carryforward at the end of the previous tax year * Q

Deduct:

CMT loss expired * 700

CMT loss carryforward at the beginning of the tax year * (see note below) 720

Add:

CMT loss transferred on an amalgamation under section 87 of the federal Act ** (see note below) 750

CMT loss available (line 720 plus line 750) R

Deduct:

CMT loss deducted against adjusted net income for the tax year (lesser of line 490 (if positive) and line C in Part 3) S

Subtotal (if negative, enter "0") S

Add:

Adjusted net loss for CMT purposes (amount from line 490 in Part 2, if **negative**) (enter as a positive amount) 760

CMT loss carryforward balance at the end of the tax year (amount S plus line 760) 770 T

* For the first harmonized T2 return filed with a tax year that includes days in 2009:

- do not enter an amount on line Q or line 700;
- for line 720, enter the amount from line 2214 of Ontario CT23 Schedule 101, *Corporate Minimum Tax (CMT)*, for the last tax year that ended in 2008.

For other tax years, enter on line Q the amount from line 770 of Schedule 510 from the previous tax year.

** Do not transfer a loss on a vertical amalgamation under subsection 87(2.11) of the federal Act or other amalgamation of a parent and its subsidiary.

Note: If you entered an amount on line 720 or line 750, complete Part 8.

Part 8 – Analysis of CMT loss available for carryforward by year of origin

Complete this part if:

- the tax year includes January 1, 2009; or
- the previous tax year-end is deemed to be December 31, 2008, under subsection 249(3) of the federal Act.

Year of origin	Balance earned in a tax year ending before March 23, 2007 *	Balance earned in a tax year ending after March 22, 2007 **
10th previous tax year	810	820
9th previous tax year	811	821
8th previous tax year	812	822
7th previous tax year	813	823
6th previous tax year	814	824
5th previous tax year	815	825
4th previous tax year	816	826
3rd previous tax year	817	827
2nd previous tax year	818	828
1st previous tax year		829
Total ***		

* Adjusted net loss for CMT purposes that was earned (by the corporation, by subsidiaries wound up into or amalgamated with the corporation before March 22, 2007, and by other predecessors of the corporation) in each of the previous 10 tax years that ended before March 23, 2007, and has not been deducted.

** Adjusted net loss for CMT purposes that was earned (by the corporation and its predecessors, but not by a subsidiary predecessor) in each of the previous 20 tax years that ended after March 22, 2007, and has not been deducted.

*** The total of these two columns must equal the total of the amounts entered on lines 720 and 750.



ONTARIO CORPORATE MINIMUM TAX – TOTAL ASSETS AND REVENUE FOR ASSOCIATED CORPORATIONS

Name of corporation	Business Number	Tax year-end Year Month Day
Waterloo North Hydro Inc.	86584 4575 RC0001	2009-12-31

- For use by corporations to report the total assets and total revenue of all the Canadian or foreign corporations with which the filing corporation was associated at any time during the tax year. These amounts are required to determine if the filing corporation is subject to corporate minimum tax.
- Total assets and total revenue include the associated corporation's share of any partnership(s)/joint venture(s) total assets and total revenue.
- Attach additional schedules if more space is required.
- File this schedule with the *T2 Corporation Income Tax Return*.

Names of associated corporations	Business number (Canadian corporation only) (see Note 1)	Total assets* (see Note 2)	Total revenue** (see Note 2)
200	300	400	500
1 Waterloo North Hydro Holding Corporation	87502 6924 RC0001	35,607,651	2,610,577
Total		450 35,607,651	550 2,610,577

Enter the total assets from line 450 on line 116 in Part 1 of Schedule 510, *Ontario Corporate Minimum Tax*.

Enter the total revenue from line 550 on line 146 in Part 1 of Schedule 510.

Note 1: Enter "NR" if a corporation is not registered.

Note 2: If the associated corporation does not have a tax year that ends in the filing corporation's current tax year but was associated with the filing corporation in the previous tax year of the filing corporation, enter the total revenue and total assets from the tax year of the associated corporation that ends in the previous tax year of the filing corporation.

* Rules for total assets

- Report total assets in accordance with generally accepted accounting principles, adjusted so that consolidation and equity methods are not used.
- Include the associated corporation's share of the total assets of partnership(s) and joint venture(s) but exclude the recorded asset(s) for the investment in partnerships and joint ventures.
- Exclude unrealized gains and losses on assets that are included in net income for accounting purposes but not in income for corporate income tax purposes.

** Rules for total revenue

- Report total revenue in accordance with generally accepted accounting principles, adjusted so that consolidation and equity methods are not used.
- If the associated corporation has 2 or more tax years ending in the filing corporation's tax year, **multiply** the sum of the total revenue for each of those tax years by 365 and **divide** by the total number of days in all of those tax years.
- If the associated corporation's tax year is less than 51 weeks and is the only tax year of the associated corporation that ends in the filing corporation's tax year, **multiply** the associated corporation's total revenue by 365 and **divide** by the number of days in the associated corporation's tax year.
- Include the associated corporation's share of the total revenue of partnerships and joint ventures.
- If the partnership or joint venture has 2 or more fiscal periods ending in the associated corporation's tax year, **multiply** the sum of the total revenue for each of the fiscal periods by 365 and **divide** by the total number of days in all the fiscal periods.



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SCHEDULE 515**ONTARIO CAPITAL TAX ON OTHER THAN FINANCIAL INSTITUTIONS**

Name of corporation	Business Number	Tax year-end Year Month Day
Waterloo North Hydro Inc.	86584 4575 RC0001	2009-12-31

- Complete this schedule for a corporation with a permanent establishment in Ontario at any time in the tax year and that is a corporation other than a financial institution. The Ontario capital tax on other than financial institutions is levied under section 64 of the *Taxation Act, 2007* (Ontario).
- To complete this schedule, you have to complete Schedule 33, *Part I.3 Tax on Large Corporations*. File completed copies of both schedules with the *T2 Corporation Income Tax Return* within six months of the end of the tax year.
- A corporation is exempt from Ontario capital tax if it was one of the following:
 - 1) a corporation that is liable to the special additional tax according to section 74 of the *Corporations Tax Act* (Ontario);
 - 2) a credit union;
 - 3) a deposit insurance corporation according to section 137.1 of the federal *Income Tax Act*;
 - 4) a family farm corporation for the year as defined by subsection 64(3) of the *Taxation Act, 2007* (Ontario), other than a corporation for which a determination has been made under subsection 31(2) of the federal Act;
 - 5) a family fishing corporation, as defined by subsection 64(3) of the *Taxation Act, 2007* (Ontario); or
 - 6) a corporation exempt from income tax according to section 149 of the federal Act.

Part 1 – Taxable capital of a corporation resident in Canada other than a financial institution

Amount A from Part 1 of Schedule 33	100	107,408,551	
Add:			
Accumulated other comprehensive income at the end of the year	105		
		Subtotal	107,408,551
			107,408,551 A
Deduct:			
Amount B from Part 1 of Schedule 33	110		
Amount on line 490 from Part 2 of Schedule 33	115	224,888	
		Subtotal	224,888
			224,888 B
Taxable capital (amount A minus amount 8) (if negative, enter "0")	120		107,183,663

Part 2 – Capital deduction

Complete this part only if the corporation is associated.

Are you electing under subsection 83(2) of the *Taxation Act, 2007* (Ontario)? 190 1 Yes ☒ 2 No ☐

If you answered **no** to the question at line 190, complete line 220. If you answered **yes** to the question at line 190, complete line 305 by using Schedule 516, *Capital Deduction Election of Associated Group for the Allocation of Net Deduction*, to calculate the amount to be entered on line 300.

Taxable capital (from line 120) or taxable capital employed in Canada of a corporation that was a non-resident of Canada (from line 790 in Part 4 of Schedule 33) 200 210 x 15,000,000 \$ = Capital deduction 220

Taxable capital or taxable capital employed in Canada of every corporation with a permanent establishment in Canada and associated for the last tax year *

* This amount includes the filing corporation's taxable capital or taxable capital employed in Canada. Do not include an amount from a financial institution or corporation that is exempt from capital tax under Division E of the *Taxation Act, 2007* (Ontario) or Part III of the *Corporations Tax Act* (Ontario).

Allocation of net deduction (from line 600 for the filing corporation from Schedule 516) 300 14,529,300 = Capital deduction 305 14,529,300

Ontario allocation factor (OAF) (amount I in Part 3) 1.00000

Part 3 – Ontario capital tax payable

Taxable capital (enter amount from line 120 in Part 1) or taxable capital employed in Canada of a corporation that was a non-resident of Canada (enter amount from line 790 in Part 4 of Schedule 33), whichever applies

320 107,183,663

Deduct:

Capital deduction (Enter \$15,000,000 if the corporation is not associated. Otherwise, enter the amount from line 220 or line 305, whichever applies, from Part 2)

14,529,300 B

Net amount (line 320 minus amount B) (if negative, enter "0")

92,654,363 C

Amount C 92,654,363 x Number of days in the tax year before January 1, 2010

365 x 0.00225 = 208,472 D

Number of days in the tax year 365

Amount C 92,654,363 x Number of days in the tax year after December 31, 2009 and before July 1, 2010

x 0.00150 = E

Number of days in the tax year 365

Subtotal (amount D plus amount E) 208,472 F

Amount F 208,472 x OAF (amount on line I) 1.00000 = 208,472 G

Amount G 208,472 x Number of days in the tax year * 365 = 208,472 H

365

Deduct:

Capital tax credit for manufacturers (enter amount J from Part 4)

350

Ontario capital tax payable (amount H minus line 350) (if negative, enter "0")

400 208,472

Enter amount from line 400 on line 282 of Schedule 5, *Tax Calculation Supplementary - Corporations*.

* Enter either 365 if there are at least 51 weeks in the tax year, or the number of days in the year, whichever applies.

Calculation of the Ontario allocation factor (OAF)

If the provincial or territorial jurisdiction entered on line 750 of the T2 return is "Ontario," enter "1" on line I.

If the provincial or territorial jurisdiction entered on line 750 of the T2 return is "multiple," complete the following calculation and enter the result on line I:

Ontario taxable income ** = Taxable income ***

Ontario allocation factor 1.00000 I

** Enter the amount allocated to Ontario from column F in Part 1 of Schedule 5. If the taxable income is nil, calculate the amount in column F as if the taxable income were \$1,000.

*** Enter the taxable income amount from line 360 or line Z of the T2 return, whichever applies. If the taxable income is nil, enter "1,000."

Part 4 – Capital tax credit for manufacturers

Ontario manufacturing labour cost* **405** x 100 = **420** %
Total Ontario labour cost** **410**

If the percentage on line 420 is 20% or less, enter "0" on line J.

If the percentage on line 420 is at least 50%, enter amount H from Part 3 on line J.

If the percentage on line 420 is more than 20% but less than 50%, complete the following calculation and enter the result on line J:

(percentage from line 420) – 20% % x 208,472 Amount H from Part 3 =
30% 30.000 %

Capital tax credit for manufacturers J

Enter amount J on line 350 in Part 3

* As defined in subsection 83.1(4) of the *Taxation Act, 2007* (Ontario)

** As defined in subsection 83.1(5) of the *Taxation Act, 2007* (Ontario)



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SCHEDULE 516**CAPITAL DEDUCTION ELECTION OF ASSOCIATED GROUP FOR THE ALLOCATION OF NET DEDUCTION**

Name of corporation	Business Number	Tax year-end Year Month Day
Waterloo North Hydro Inc.	86584 4575 RC0001	2009-12-31

- Complete this schedule to allocate the associated group's net deduction for the capital deduction election under subsection 83(2) of the *Taxation Act*, 2007 (Ontario). The associated group includes the filing corporation (see line 190 of Part 2 of Schedule 515, *Ontario Capital Tax on Other than Financial Institutions*).
- If you need more space, attach more schedules.
- File this schedule with the *T2 Corporation Income Tax Return*.

	A Names of eligible corporations in the associated group	B Business Number of associated corporations (enter "NR" if a corporation is not registered)	C Ontario allocation factor (OAF)* (enter as a percentage)	D Total assets**	E Net deduction (\$15 million x line 300) multiplied by line 400 line 700	F Allocation of net deduction ***
	100	200	300	400	500	600
1.	Waterloo North Hydro Inc.	86584 4575 RC0001	100.000	140,207,347	8,695,145	14,529,300
2.	Waterloo North Hydro Holding Corporation	87502 6924 RC0001	100.000	101,664,425	6,304,855	470,700
Total assets of associated group (total of amounts in column D)				700 241,871,772		
Total net deduction (total of amounts in column E)					800 15,000,000	
Total allocated net deduction (total of amounts in column F) (not to exceed amount on line 800)						900 15,000,000

* OAF from the last tax year ending in the calendar year preceding the calendar year in which the filing corporation's tax year ends.

** Total assets of each corporation in the associated group as recorded in the books and records for the last tax year ending in the calendar year preceding the calendar year in which the filing corporation's tax year ends. If the corporation is not resident in Canada, enter the amount of its total assets situated in Canada.

*** Enter the amount from this column allocated to the filing corporation on line 300 of Schedule 515.



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SCHEDULE 524**ONTARIO SPECIALTY TYPES**

Name of corporation	Business Number	Tax year-end Year Month Day
Waterloo North Hydro Inc.	86584 4575 RC0001	2009-12-31

- Use this schedule to identify the specialty type of a corporation carrying on business in the province of Ontario through a permanent establishment if:
 - its tax year includes January 1, 2009;
 - the tax year is the first year after incorporation or an amalgamation; or
 - there is a change to the specialty type.
- If none of the listed specialty types applies, tick box 99 "Other."
- Unless otherwise noted, references to sections, subsections, and clauses are from the *Taxation Act, 2007* (Ontario).

Specialty types

100 Identify the specialty type that applies to your corporation:

- ☐ 01 Family farm corporation – See subsection 64(3).
- ☐ 02 Family fishing corporation – See subsection 64(3).
- ☐ 03 Mortgage investment corporation – See subsection 130.1(6) of the federal *Income Tax Act*.
- ☐ 04 Credit union – See subsection 137(6) of the federal Act.
- ☐ 06 Bank – See subsection 248(1) of the federal Act.
- ☐ 08 Financial institution prescribed by regulation only – See clause 66(2)(f).
- ☐ 09 Registered securities dealer – See subsection 248(1) of the federal Act.
- ☐ 10 Farm feeder finance co-operative corporation
- ☐ 11 Insurance corporation – See subsection 248(1) of the federal Act.
- ☐ 12 Mutual insurance – See subsection 27(2) of the *Taxation Act, 2007* (Ontario) and paragraph 149(1)(m) of the federal Act.
- ☐ 13 Specialty mutual insurance
- ☐ 14 Mutual fund corporation – See subsection 131(8) of the federal Act.
- ☐ 15 Bare trustee corporation
- ☐ 16 Professional corporation (incorporated professional only) – See subsection 248(1) of the federal Act.
- ☐ 17 Limited liability corporation
- ☐ 18 Generator of electrical energy for sale, or producer of steam for use in the generation of electrical energy for sale – See subsection 33(7).
- ☒ 19 Hydro successor, municipal electrical utility, or subsidiary of either – See subsection 91.1(1) and section 88 of the *Electricity Act, 1998* (Ontario).
- ☐ 20 Producer and seller of steam for uses other than for the generation of electricity – See subsection 33(7).
- ☐ 21 Mining corporation
- ☐ 22 Non-resident corporation
- ☐ 99 Other (if none of the previous descriptions apply)



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SCHEDULE 546**CORPORATIONS INFORMATION ACT ANNUAL RETURN FOR ONTARIO CORPORATIONS**

Name of corporation	Business Number	Tax year-end Year Month Day
Waterloo North Hydro Inc.	86584 4575 RC0001	2009-12-31

- This schedule should be completed by a corporation that is incorporated, continued, or amalgamated in Ontario and subject to the *Business Corporations Act* (BCA) or *Corporations Act* (CA), except for registered charities under the federal *Income Tax Act*. This completed schedule serves as a *Corporations Information Act* Annual Return under the Ontario *Corporations Information Act*.
- Complete parts 1 to 4. Complete parts 5 to 7 only to report change(s) in the information recorded on the Ontario Ministry of Government Services (MGS) public record.
- This schedule must set out the required information for the corporation as of the date of delivery of this schedule.
- A completed Ontario *Corporations Information Act* Annual Return must be delivered within six months after the end of the corporation's tax year-end. The MGS considers this return to be delivered on the date that it is filed with the Canada Revenue Agency (CRA) together with the corporation's income tax return.
- It is the corporation's responsibility to ensure that the information shown on the MGS public record is accurate and up to date. To review the information shown for the corporation on the public record maintained by the MGS, obtain a Corporation Profile Report. For more information, visit www.ServiceOntario.ca.
- This schedule contains non-tax information collected under the authority of the Ontario *Corporations Information Act*. This information will be sent to the MGS for the purposes of recording the information on the public record maintained by the MGS.

Part 1 – Identification

100 Corporation's name (exactly as shown on the MGS public record)	Waterloo North Hydro Inc.		
Jurisdiction incorporated, continued, or amalgamated, whichever is the most recent	110 Date of incorporation or amalgamation, whichever is the most recent	Year Month Day	120 Ontario Corporation No.
Ontario		2000-03-01	1404168

Part 2 – Head or registered office address (P.O. box not acceptable)

200 Care of (if applicable)			
210 Street number	220 Street name	230 Suite number	
300	Northfield Drive East		
240 Additional address information	Box 640		
250 Municipality (e.g., city, town)	260 Province/state	270 Country	280 Postal/zip code
Waterloo	ON	CA	N2J 4A3

Part 3 – Change identifier

Have there been any changes in any of the information most recently filed for the public record maintained by the MGS with respect to names, addresses for service, and the date elected/appointed and date ceased of the directors and five most senior officers, or the corporation's mailing address or language of preference? Obtain a Corporation Profile Report to review the information shown for the corporation on the public record maintained by the MGS. For more information, visit www.ServiceOntario.ca.

- 300** ☐ **1** If there have been no changes, enter **1** in this box and then go to "Part 4 – Certification."
 If there are changes, enter **2** in this box and complete the applicable parts on the next page, and then go to "Part 4 – Certification."

Part 4 – Certification

I certify that all information given in this *Corporations Information Act* Annual Return is true, correct, and complete.

450 Singh **451** Albert
 Last name First name

454 _____,
 Middle name(s)

- 460** ☐ **2** Please enter one of the following numbers in this box for the above-named person: enter **1** for director, **2** for officer, or **3** for other individual having knowledge of the affairs of the corporation. If you are a director and officer, enter **1** or **2**.

Note: Sections 13 and 14 of the Ontario *Corporations Information Act* provide penalties for making false or misleading statements or omissions.

Complete the applicable parts to report changes in the information recorded on the MGS public record.**Part 5 – Mailing address**

500	☐	Please enter one of the following numbers in this box:	1 - Show no mailing address on the MGS public record. 2 - The corporation's mailing address is the same as the head or registered office address in Part 2 of this schedule. 3 - The corporation's complete mailing address is as follows:
510	Care of (if applicable)		
520	Street number	530	Street name
		540	Suite number
550	Additional address information		
560	Municipality (e.g., city, town)	570	Province/state
		580	Country
		590	Postal/zip code

Part 6 – Language of preference

600	☐	Indicate your language preference by entering 1 for English or 2 for French. This is the language of preference recorded on the MGS public record for communication with the corporation. This may be different from line 990 on the T2 return.
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SCHEDULE 550**ONTARIO CO-OPERATIVE EDUCATION TAX CREDIT**

Name of corporation	Business Number	Tax year-end Year Month Day
Waterloo North Hydro Inc.	86584 4575 RC0001	2009-12-31

- Use this schedule to claim an Ontario co-operative education tax credit (CETC) under section 88 of the *Taxation Act, 2007* (Ontario).
- The CETC is a refundable tax credit that is equal to an eligible percentage (10% to 30%) of the eligible expenditures incurred by a corporation for a qualifying work placement. The maximum credit amount is \$1,000 for each qualifying work placement ending before March 27, 2009, and \$3,000 for each qualifying work placement beginning after March 26, 2009. For a qualifying work placement that straddles March 26, 2009, the maximum credit amount is prorated.
- Eligible expenditures are salaries and wages (including taxable benefits) paid or payable to a student in a qualifying work placement, or fees paid or payable to an employment agency for services performed by the student in a qualifying work placement. These expenditures must be paid on account of employment or services, as applicable, at a permanent establishment of the corporation in Ontario. Expenditures for a work placement (WP) are not eligible expenditures if they are greater than the amounts that would be paid to an arm's length employee.
- A WP must meet all of the following conditions to be a qualifying work placement:
 - the student performs employment duties for a corporation under a qualifying co-operative education program (QCEP);
 - the WP has been developed or approved by an eligible educational institution as a suitable learning situation;
 - the terms of the WP require the student to engage in productive work;
 - the WP is for a period of at least 10 consecutive weeks or, in the case of an internship program, not less than 8 consecutive months and not more than 16 consecutive months;
 - the student is paid for the work performed in the WP;
 - the corporation is required to supervise and evaluate the job performance of the student in the WP;
 - the institution monitors the student's performance in the WP; and
 - the institution has certified the WP as a qualifying work placement.
- Make sure you keep a copy of the letter of certification from the Ontario eligible educational institution containing the name of the student, the employer, the institution, the term of the WP, and the name/discipline of the QCEP to support the claim. Do not submit the letter of certification with the *T2 Corporation Income Tax Return*.
- File this schedule with the *T2 Corporation Income Tax Return*.

Part 1 – Corporate information

110 Name of person to contact for more information	120 Telephone number including area code
Albert Singh	(519) 886-5090

Is the claim filed for a CETC earned through a partnership? **150** 1 Yes ☐ 2 No ☒

If you answered **yes** to the question at line 150, what is the name of the partnership? **160**

Enter the percentage of the partnership's CETC allocated to the corporation **170** %

* When a corporate member of a partnership is claiming an amount for eligible expenditures incurred by a partnership, complete a Schedule 550 for the partnership as if the partnership were a corporation. Each corporate partner, other than a limited partner, should file a separate Schedule 550 to claim the partner's share of the partnership's CETC. The allocated amounts can not exceed the amount of the partnership's CETC.

Part 2 – Eligibility

1. Did the corporation have a permanent establishment in Ontario in the tax year?	200 1 Yes ☒ 2 No ☐
2. Was the corporation exempt from tax under Part III of the <i>Taxation Act, 2007</i> (Ontario)?	210 1 Yes ☐ 2 No ☒

If you answered **no** to question 1 or **yes** to question 2, then the corporation is **not eligible** for the CETC.

Part 3 – Eligible percentage for determining the eligible amount

Corporation's salaries and wages paid in the previous tax year * **300** 8,399,096

For eligible expenditures incurred before March 27, 2009:

- If line 300 is \$400,000 or less, enter 15% on line 310.
- If line 300 is \$600,000 or more, enter 10% on line 310.
- If line 300 is more than \$400,000 and less than \$600,000, enter the percentage on line 310 using the following formula:

$$\text{Eligible percentage} = 15\% - \left[5\% \times \left(\frac{\text{amount on line 300} - \$400,000}{\$200,000} \right) \right]$$

Eligible percentage for determining the eligible amount **310** 10.000 %

For eligible expenditures incurred after March 26, 2009:

- If line 300 is \$400,000 or less, enter 30% on line 312.
- If line 300 is \$600,000 or more, enter 25% on line 312.
- If line 300 is more than \$400,000 and less than \$600,000, enter the percentage on line 312 using the following formula:

$$\text{Eligible percentage} = 30\% - \left[5\% \times \left(\frac{\text{amount on line 300} - \$400,000}{\$200,000} \right) \right]$$

Eligible percentage for determining the eligible amount **312** 25.000 %

* If this is the first tax year of an amalgamated corporation and subsection 88(9) of the *Taxation Act, 2007* (Ontario) applies, enter the salaries and wages paid in the previous tax year by the predecessor corporations.

Part 4 – Calculation of the Ontario co-operative education tax credit

Complete a separate entry for each student for each qualifying work placement that ended in the corporation's tax year. If a qualifying work placement would otherwise exceed four consecutive months, divide the WP into periods of four consecutive months and enter each full period of four consecutive months as a separate WP. If the WP does not divide equally into four-month periods and if the period that is less than 4 months is 10 or more consecutive weeks, then enter that period as a separate WP. If that period is less than 10 consecutive weeks, then include it with the WP for the last period of 4 consecutive months. Consecutive WPs with two or more associated corporations are deemed to be with only one corporation, as designated by the corporations.

A Name of university, college, or other eligible educational institution 400		B Name of qualifying co-operative education program 405	
1.	University of Guelph	Engineering Systems & Computing	
2.	University of Guelph	Engineering Systems & Computing	
3.	Mohawk College	Electrical Engineering Technology	
4.	Mohawk College	Electrical Engineering Technology	
5.	Fanshawe College	Electrical Engineering Technology	
6.	Fanshawe College	Electrical Engineering Technology	
7.	Mohawk College	Electrical Engineering Technology	
8.	Mohawk College	Electrical Engineering Technology	
9.	University of Waterloo	Mechatronics Engineering	
10.	Conestoga College	Mechanical Engineering Technology	

C Name of student 410		D Start date of WP (see note 1 below) 430	E End date of WP (see note 2 below) 435
1.	Chalie Lam 521-135-517	2009-01-05	2009-05-04
2.	Chalie Lam 521-135-517	2009-05-05	2009-09-04
3.	Stephen Lavell 536-042-336	2009-04-05	2009-09-04
4.	Stephen Lavell 536-042-336	2009-09-05	2009-12-31
5.	Garrett Moons 520-926-049	2009-01-01	2009-04-30
6.	Garrett Moons 520-926-049	2009-05-01	2009-08-31

C Name of student		D Start date of WP (see note 1 below)	E End date of WP (see note 2 below)
410		430	435
7.	Elizabeth Pitcher 536-182-215	2009-04-05	2009-09-04
8.	Elizabeth Pitcher 536-182-215	2009-09-05	2009-12-31
9.	Hassan Qazi 537-882-656	2009-01-15	2009-04-17
10.	James Sowden 524-861-192	2009-01-05	2009-04-30
Note 1: When the WP has been divided into separate periods because it exceeds four consecutive months, enter the start date for the separate WP. Note 2: When the WP has been divided into separate periods because it exceeds four consecutive months, enter the end date for the separate WP.			

Part 4 – Calculation of the Ontario co-operative education tax credit (continued)

	F1 Eligible expenditures before March 27, 2009 (see note 1 below)		F2 Eligible expenditures after March 26, 2009 (see note 1 below)		X Number of consecutive weeks of the WP completed by the student before March 27, 2009 (see note 3 below)	Y Total number of consecutive weeks of the student's WP (see note 3 below)
	450		452			
1.	8,492	10.000 %	3,821	25.000 %	11	17
2.		%	12,453	25.000 %		
3.		%	13,930	25.000 %		
4.		%	10,765	25.000 %		
5.	7,962	10.000 %	3,318	25.000 %	11	16
6.		%	11,280	25.000 %		
7.		%	13,806	25.000 %		
8.		%	10,669	25.000 %		
9.	5,579	10.000 %	1,522	25.000 %	9	13
10.	7,032	10.000 %	3,516	25.000 %	11	16

	G Eligible amount (eligible expenditures multiplied by eligible percentage) (see note 2 below)	H Maximum CETC per WP (see note 3 below)	I CETC on eligible expenditures (column G or H, whichever is less)	J CETC on repayment of government assistance (see note 4 below)	K CETC for each WP (column I or column J)
	460	462	470	480	490
1.	1,804	1,706	1,706		1,706
2.	3,113	3,000	3,000		3,000
3.	3,483	3,000	3,000		3,000
4.	2,691	3,000	2,691		2,691
5.	1,626	1,626	1,626		1,626
6.	2,820	3,000	2,820		2,820
7.	3,452	3,000	3,000		3,000
8.	2,667	3,000	2,667		2,667
9.	939	1,615	939		939
10.	1,582	1,626	1,582		1,582

Ontario co-operative education tax credit (total of amounts in column K) **500**

23,031 L

or, if the corporation answered **yes** at line 150 in Part 1, determine the partner's share of amount L:

Amount L _____ x percentage on line 170 in Part 1 _____ % = _____ **M**

Enter amount L or M, whichever applies, on line 452 of Schedule 5, *Tax Calculation Supplementary – Corporations*. If you are filing more than one Schedule 550, add the amounts from line L or M, whichever applies, on all the schedules and enter the total amount on line 452 of Schedule 5.

Note 1: Reduce eligible expenditures by all government assistance, as defined under subsection 88(21) of the *Taxation Act, 2007* (Ontario), that the corporation has received, is entitled to receive, or may reasonably expect to receive, for the eligible expenditures, on or before the filing due date of the *T2 Corporation Income Tax Return* for the tax year.

Note 2: Calculate the eligible amount (Column G) using the following formula:

Column G = (column F1 x percentage on line 310) + (column F2 x percentage on line 312)

Note 3: If the WP ends before March 27, 2009, the maximum credit amount for the WP is \$1,000.

If the WP begins after March 26, 2009, the maximum credit amount for the WP is \$3,000.

If the WP begins before March 27, 2009, and ends after March 26, 2009, calculate the maximum credit amount using the following formula:

$(\$1,000 \times X/Y) + [\$3,000 \times (Y - X)/Y]$

where "X" is the number of consecutive weeks of the WP completed by the student before March 27, 2009, and "Y" is the total number of consecutive weeks of the student's WP.

Note 4: When claiming a CETC for repayment of government assistance, complete a **separate entry** for each repayment and complete columns A to E and J and K with the details for the previous year WP in which the government assistance was received. Include the amount of government assistance repaid in the tax year multiplied by the eligible percentage for the tax year in which the government assistance was received, to the extent that the government assistance reduced the CETC in that tax year.



Canada Revenue
 Agency

Agence du revenu
 du Canada

SCHEDULE 552

ONTARIO APPRENTICESHIP TRAINING TAX CREDIT

Name of corporation	Business Number	Tax year-end Year Month Day
Waterloo North Hydro Inc.	86584 4575 RC0001	2009-12-31

- Use this schedule to claim an Ontario apprenticeship training tax credit (ATTC) under section 89 of the *Taxation Act, 2007* (Ontario).
- The ATTC is a refundable tax credit that is equal to a specified percentage (25% to 45%) of the eligible expenditures incurred by a corporation for a qualifying apprenticeship. Before March 27, 2009, the maximum credit for each apprentice is \$5,000 per year to a maximum credit of \$15,000 over the first 36-month period of the qualifying apprenticeship. After March 26, 2009, the maximum credit for each apprentice is \$10,000 per year to a maximum credit of \$40,000 over the first 48-month period of the qualifying apprenticeship. The maximum credit amount is prorated for an employment period of an apprentice that straddles March 26, 2009.
- Eligible expenditures are salaries and wages (including taxable benefits) paid to an apprentice in a qualifying apprenticeship or fees paid to an employment agency for the provision of services performed by the apprentice in a qualifying apprenticeship. These expenditures must be:
 - paid on account of employment or services, as applicable, at a permanent establishment of the corporation in Ontario;
 - for services provided by the apprentice during the first 36 months of the apprenticeship program, if incurred before March 27, 2009; and
 - for services provided by the apprentice during the first 48 months of the apprenticeship program, if incurred after March 26, 2009.
- An expenditure is not eligible for an ATTC if:
 - the same expenditure was used, or will be used, to claim a co-operative education tax credit; or
 - it is more than an amount that would be paid to an arm's length apprentice.
- An apprenticeship must meet the following conditions to be a qualifying apprenticeship:
 - the apprenticeship is in a qualifying skilled trade approved by the Ministry of Training, Colleges and Universities (Ontario); and
 - the corporation and the apprentice must be participating in an apprenticeship program in which the training agreement has been registered under the *Ontario College of Trades and Apprenticeship Act, 2009* or the *Apprenticeship and Certification Act, 1998* or in which the contract of apprenticeship has been registered under the *Trades Qualification and Apprenticeship Act*.
- Make sure you keep a copy of the training agreement or contract of apprenticeship to support your claim. Do not submit the training agreement or contract of apprenticeship with your *T2 Corporation Income Tax Return*.
- File this schedule with your *T2 Corporation Income Tax Return*.

Part 1 – Corporate information (please print)

110 Name of person to contact for more information	120 Telephone number including area code
Albert Singh	(519) 886-5090

Is the claim filed for an ATTC earned through a partnership? * **150** 1 Yes ☐ 2 No ☒

If **yes** to the question at line 150, what is the name of the partnership? **160**

Enter the percentage of the partnership's ATTC allocated to the corporation **170** %

* When a corporate member of a partnership is claiming an amount for eligible expenditures incurred by a partnership, complete a Schedule 552 for the partnership as if the partnership were a corporation. Each corporate partner, other than a limited partner, should file a separate Schedule 552 to claim the partner's share of the partnership's ATTC. The total of the partners' allocated amounts can never exceed the amount of the partnership's ATTC.

Part 2 – Eligibility

1. Did the corporation have a permanent establishment in Ontario in the tax year?	200	1 Yes ☒	2 No ☐
2. Was the corporation exempt from tax under Part III of the <i>Taxation Act, 2007</i> (Ontario)?	210	1 Yes ☐	2 No ☒

If you answered **no** to question 1 or **yes** to question 2, then you are **not eligible** for the ATTC.

Part 3 – Specified percentage

Corporation's salaries and wages paid in the previous tax year * **300** 8,399,096

For eligible expenditures incurred before March 27, 2009:

- If line 300 is \$400,000 or less, enter 30% on line 310.
- If line 300 is \$600,000 or more, enter 25% on line 310.
- If line 300 is more than \$400,000 and less than \$600,000, enter the percentage on line 310 using the following formula:

$$\text{Specified percentage} = 30\% - \left[5\% \times \left(\frac{\text{amount on line 300} - 400,000}{200,000} \right) \right]$$

Specified percentage **310** 25.000 %

For eligible expenditures incurred after March 26, 2009:

- If line 300 is \$400,000 or less, enter 45% on line 312.
- If line 300 is \$600,000 or more, enter 35% on line 312.
- If line 300 is more than \$400,000 and less than \$600,000, enter the percentage on line 312 using the following formula:

$$\text{Specified percentage} = 45\% - \left[10\% \times \left(\frac{\text{amount on line 300} - 400,000}{200,000} \right) \right]$$

Specified percentage **312** 35.000 %

* If this is the first tax year of an amalgamated corporation and subsection 89(6) of the *Taxation Act, 2007* (Ontario) applies, enter salaries and wages paid in the previous tax year by the predecessor corporations.

Part 4 – Calculation of the Ontario apprenticeship training tax credit

Complete a **separate entry** for each apprentice that is in a qualifying apprenticeship with the corporation. When claiming an ATTC for repayment of government assistance, complete a **separate entry** for each repayment, and complete columns A to G and M and N with the details for the employment period in the previous tax year in which the government assistance was received.

A Trade code	B Apprenticeship program/ trade name	C Name of apprentice	D Original contract or training agreement number	E Original registration date of apprenticeship contract or training agreement (see note 1 below)	F Start date of employment as an apprentice in the tax year (see note 2 below)	G End date of employment as an apprentice in the tax year (see note 3 below)
400	405	410	420	425	430	435
1. 434a	Lineworker	Jason Thomson 478-752-553				
2. 434a	Lineworker	Mark Beaudoin 528-636-590				
3. 434a	Lineworker	Ryan Foell 515-561-512				
4. 434a	Lineworker	Michael Kroetsch 519-766-588				
5. 207s	Electrician: Power House Operator	Brad Simmons 525-898-920				
1. D 29049				2006-01-11	2009-01-01	2009-12-31
2. PA 6232				2008-10-31	2009-02-09	2009-07-31
3. A 75754				2006-08-29	2009-01-01	2009-12-31
4. A 75753				2006-08-29	2009-01-01	2009-12-31
5.				2008-09-18	2009-01-01	2009-12-31

Note 1: Enter the original registration date of the apprenticeship contract or training agreement in all cases, even when multiple employers employed the apprentice.

Note 2: When there are multiple employment periods as an apprentice in the tax year with the corporation, enter the date that is the first day of employment as an apprentice in the tax year with the corporation. When claiming an ATTC for repayment of government assistance, enter the start date of employment as an apprentice for the tax year in which the government assistance was received.

Note 3: When there are multiple employment periods as an apprentice in the tax year with the corporation, enter the date that is the last day of employment as an apprentice in the tax year with the corporation. When claiming an ATTC for repayment of government assistance, enter the end date of employment as an apprentice for the tax year in which the government assistance was received.

Part 4 – Calculation of the Ontario apprenticeship training tax credit (continued)

	H1 Number of days employed as an apprentice in the tax year before March 27, 2009 (see note 1 below) 441	H2 Number of days employed as an apprentice in the tax year after March 26, 2009 (see note 1 below) 442	H3 Number of days employed as an apprentice in the tax year (column H1 plus column H2) 440	I Maximum credit amount for the tax year (see note 2 below) 445
1.	10	280	290	7,808
2.	46	127	173	4,109
3.	85	280	365	8,835
4.	85	280	365	8,835
5.	85	280	365	8,835
	J1 Eligible expenditures before March 27, 2009 (see note 3 below) 451	J2 Eligible expenditures after March 26, 2009 (see note 3 below) 452	J3 Eligible expenditures for the tax year (column J1 plus column J2) 450	K Eligible expenditures multiplied by specified percentage (see note 4 below) 460
1.	2,244	63,592	65,836	22,818
2.	5,551	18,502	24,053	7,864
3.	16,117	53,725	69,842	22,833
4.	15,587	51,958	67,545	22,082
5.	11,396	37,988	49,384	16,145
	L ATTC on eligible expenditures (lesser of columns I and K) 470	M ATTC on repayment of government assistance (see note 5 below) 480	N ATTC for each apprentice (column L or column M, whichever applies) 490	
1.	7,808		7,808	
2.	4,109		4,109	
3.	8,835		8,835	
4.	8,835		8,835	
5.	8,835		8,835	
Ontario apprenticeship training tax credit (total of amounts in column N) 500			38,422 O	

or, if the corporation answered **yes** at line 150 in Part 1, determine the partner's share of amount O:

Amount O _____ x percentage on line 170 in Part 1 _____ % = _____ **P**

Enter amount O or P, whichever applies, on line 454 of Schedule 5, *Tax Calculation Supplementary – Corporations*. If you are filing more than one Schedule 552, add the amounts from line O or P, whichever applies, on all the schedules, and enter the total amount on line 454 of Schedule 5.

Note 1: When there are multiple employment periods as an apprentice in the tax year with the corporation, do not include days in which the individual was not employed as an apprentice.

For H1: The days employed as an apprentice must be within 36 months of the registration date provided in column E.

For H2: The days employed as an apprentice must be within 48 months of the registration date provided in column E.

Note 2: Maximum credit = (\$5,000 x H1/365*) + (\$10,000 x H2/365*)
 * 366 days, if the tax year includes February 29

Note 3: Reduce eligible expenditures by all government assistance, as defined under subsection 89(19) of the *Taxation Act, 2007* (Ontario), that the corporation has received, is entitled to receive, or may reasonably expect to receive, in respect of the eligible expenditures, on or before the filing due date of the *T2 Corporation Income Tax Return* for the tax year.

For J1: Eligible expenditures before March 27, 2009, must be for services provided by the apprentice during the first 36 months of the apprenticeship program.

For J2: Eligible expenditures after March 26, 2009, must be for services provided by the apprentice during the first 48 months of the apprenticeship program.

Note 4: Calculate the amount in column K as follows:

Column K = (J1 x line 310) + (J2 x line 312)

Note 5: Include the amount of government assistance repaid in the tax year multiplied by the specified percentage for the tax year in which the government assistance was received, to the extent that the government assistance reduced the ATTC in that tax year.

Complete a **separate entry** for each repayment of government assistance.

Corporate information

Summary of federal information

Summary of federal carryforward/carryback information

Page 1 of 5

Summary of federal carryforward/carryback information (continued)

Gifts of certified cultural property	
Gifts of certified ecologically sensitive land	
Gifts of medicine	
Investment tax credits	
Non-capital losses that can be carried forward over 7 years	
Non-capital losses that can be carried forward over 10 years	
Non-capital losses that can be carried forward over 20 years	
Capital losses/L.P.P.	
Farm losses that can be carried forward over 10 years	
Farm losses that can be carried forward over 20 years	
Restricted farm losses that can be carried forward over 10 years	
Restricted farm losses that can be carried forward over 20 years	
Current year's balance of SR&ED expenditures (T661)	
Foreign business tax credit	
Unused surtax credit (Schedule 37)	
Capital dividend amount	
Part I tax credit (Schedule 42)	
Cumulative eligible capital	
Capital gains reserves	
Financial statement reserve	4,012,433
Other reserves	
Balance of patronage dividends	
Continuity of exemption of accumulated income	

Summary of provincial information – provincial income tax payable

	Ontario	Québec (CO-17)	Alberta (AT1)
Net income	5,984,688		
Taxable income	5,984,688		
% Allocation	100.00		
Attributed taxable income	5,984,688		
Surtax	42,500	N/A	N/A
Tax payable before deduction*	837,856		
Deductions and credits	42,500		
Net tax payable	837,856		
Attributed taxable capital	107,183,663		N/A
Capital tax payable**	208,472		N/A
Total tax payable***	1,046,328		
Instalments and refundable credits	61,453		
Balance due/Refund (-)	984,875		

* For Québec, this includes special taxes and logging operations.

** For Québec, this includes compensation tax and registration fee.

*** For Ontario, this includes the corporate minimum tax, the Crown royalties' additional tax, the transitional tax debit, the recaptured research and development tax credit and the special additional tax debit on life insurance corporations. The Balance due/Refund is included in the federal Balance due/refund.

Summary of provincial information – provincial income tax payable (continued)

	British Columbia	Saskatchewan	Manitoba
% Allocation			
Attributed taxable income			
Tax payable before deduction*			
Deductions and credits			
Tax payable or refundable credit			
Attributed taxable capital			
Capital tax payable**			
Instalments and refundable credits			
Balance due/Refund (-)			
* For British Columbia, this includes the Logging Tax Payable.			
** For Manitoba, this includes the Outstanding Balance Excluding Instalments.			
	Newfoundland and Labrador	Prince Edward Island	Nova Scotia
% Allocation			
Attributed taxable income			
Tax payable before deduction			
Deductions and credits			
Tax payable or refundable credit			
Attributed taxable capital			
Capital tax payable			
Instalments and refundable credits			
Balance due/Refund (-)*			
* Only applies in the case of bank, a loan corporation or a trust corporation.			
	Yukon	Northwest Territories	Nunavut
% Allocation			
Attributed taxable income			
Tax payable before deduction			
Deductions and credits			
Tax payable or refundable credit			

Summary of provincial carryforward amounts

	Québec	Alberta
Non-capital losses that can be carried forward over 7 years		
Non-capital losses that can be carried forward over 10 years		
Non-capital losses that can be carried forward over 20 years		
Net capital losses/Listed personal property losses		
Farm losses that can be carried forward over 10 years		
Farm losses that can be carried forward over 20 years		
Restricted farm losses that can be carried forward over 10 years		
Restricted farm losses that can be carried forward over 20 years		
Donations		
Capital gains reserves		
Financial statement reserves		
Other reserves		
Eligible capital		
Other carryforward amounts		
Ontario		
Transitional tax credit – Schedule 506		
Ontario research and development tax credit – Schedule 508		
Corporate minimum tax credit that can be carried forward over 20 years – Schedule 510		
Corporate minimum tax credit that can be carried forward over 10 years – Schedule 510		
Corporate minimum tax loss that can be carried forward over 20 years – Schedule 510		
Corporate minimum tax loss that can be carried forward over 10 years – Schedule 510		
Ontario political contributions tax credit that can be carried forward over 20 years – Schedule 525		
Québec		
R&D expenditures not deducted at the end of the year – RD-222		
Tax credit for fees and dues paid to a research consortium – RD-1029.8.9.03		
Foreign non-business income tax credits – CO-17S.39		
Non-refundable tax credit for resources – 1029.8.36.EM		
Investment Tax Credit – CO-1029.8.36.IN		
Development work expenses – FM220.3		
Excess development work expenses – FM220.3		
Balance of patronage dividends – CO-786		
Alberta		
Unclaimed SR&ED expenditure pool deduction balance – A16		
British Columbia		
Scientific research and experimental development – Schedule 425		
Manufacturing and processing – Schedule 426		
Manitoba		
Research and development – Schedule 380		
Manufacturing investment – Schedule 381		
Co-op education and apprenticeship – Schedule 384		
Odour control – Schedule 385		
Community enterprise investment – Schedule 387		
Saskatchewan		
Royalty tax rebate – Schedule 400		
Manufacturing and processing investment – Schedule 402		
Research and development – Schedule 403		

Summary of provincial carryforward amounts (continued)

Newfoundland and Labrador		
Direct equity tax – Schedule 303		
Prince Edward Island		
Investment – Schedule 321		
Nova Scotia		
Energy efficiency tax credit – Schedule 342		
Manufacturing and processing investment – Schedule 344		
New Brunswick		
Research and development – Schedule 360		
Nunavut		
Investment – Schedule 480		

Five-Year Comparative Summary

	Current year	1st prior year	2nd prior year	3rd prior year	4th prior year
Federal information (T2)					
Taxation year end	2009-12-31	2008-12-31	2007-12-31	2006-12-31	2005-12-31
Net income	5,984,688	7,055,181	7,163,065	7,360,301	8,622,313
Taxable income	5,984,688	7,055,181	7,163,065	7,360,301	8,622,313
Active business income	5,984,688	7,055,181	7,163,065	7,360,301	8,622,313
Dividends paid					
LRIP – end of the previous year					
LRIP – end of the year					
GRIP – end of the previous year	19,901,469	15,103,946	10,233,062		
GRIP – end of the year	23,971,057	19,901,469	15,103,946	10,233,062	
Donations					
Balance due/refund (-)	-26,229	1,366,369	1,584,469	1,601,098	1,907,256

Federal taxes					
Part I before surtax	1,133,096	1,366,369	1,504,243	2,796,914	1,810,686
Surtax			80,226	82,435	96,570
Part I.3					
Part IV					
Part I & Surtax	1,133,096	1,366,369	1,584,469	1,601,098	1,907,256
Part III.1					
Other*					

* The amounts displayed on lines "Other" are all listed in the help. Press F1 to consult the context-sensitive help.

Credits against part I tax					
Small business deduction				48,000	
M&P deduction					
Foreign tax credit					
Political contribution					
Investment tax credit	3,994	9,392			
Abatement/other*	1,137,091	1,305,208	1,217,722	1,230,251	1,465,793

* The amounts displayed on lines "Other" are all listed in the help. Press F1 to consult the context-sensitive help.

Refunds/credits					
ITC refund					
Dividend refund					
Instalments	2,144,200				
Surtax credit					85,379
Other*					

* The amounts displayed on lines "Other" are all listed in the help. Press F1 to consult the context-sensitive help.

Ontario

Taxation year end	2009-12-31	2008-12-31	2007-12-31	2006-12-31	2005-12-31
Net income	5,984,688	7,055,181	7,163,065		
Taxable income	5,984,688	7,055,181	7,163,065		
% Allocation	100.00	100.00	100.00		
Attributed taxable income	5,984,688	7,055,181	7,163,065	7,360,301	8,622,313
Surtax	42,500	42,500	34,000	34,000	
Income tax payable before deduction	837,856	987,725	1,002,829	1,030,442	1,207,124
Income tax deductions /credits	42,500	73,920	34,000	34,000	20,562
Net income tax payable	837,856	956,305	1,002,829	1,030,442	1,186,562
Taxable capital	107,183,663	128,863,644	121,000,547	120,929,404	115,795,959
Capital tax payable	208,472	256,193	309,227	332,791	324,890
Total tax payable*	1,046,328	1,212,498	1,312,056	1,363,233	1,511,452
Instalments and refundable credits	61,453	1,043,744	1,581,338	3,414,163	2,126,970
Balance due/refund**	984,875	168,754	-269,282	-2,050,930	-615,518

* For taxation years ending before January 1, 2009, this includes the corporate minimum tax and the premium tax. For taxation years ending after December 31, 2008, this includes the corporate minimum tax, the Crown royalties' additional tax, the transitional tax debit, the recaptured research and development tax credit and the special additional tax debit on life insurance corporations.

** For taxation years ending after December 31, 2008, the Balance due/Refund is included in the federal Balance due/refund.

Appendix D

2009

Actuarial Report

February 17, 2010

Albert P. Singh MBA, CGA
VP Finance & CFO
Waterloo North Hydro Inc.
300 Northfield Dr E .
Waterloo , ON N2J3H4

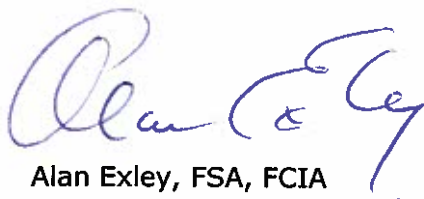
Dear Albert:

Re: Waterloo North Hydro

Enclosed is one signed copy of the revised Actuarial Report for 2009 Disclosure Purposes Regarding Post Employment Non-Pension and Sick Leave Benefits for the Waterloo North Hydro.

Should you have any questions, please contact me at 1-866-912-6926, ext. 51200.

Yours truly,



Alan Exley, FSA, FCIA

Encl (1)

**Actuarial Report
For 2009 Disclosure Purposes
Regarding Post Employment
Non-Pension and Sick Leave Benefits
For the**

WATERLOO NORTH HYDRO

**Prepared by
Alan F. Exley
Fellow, Society of Actuaries
Fellow, Canadian Institute of Actuaries**

Completed February 12, 2010

Further to your request, I have completed an extrapolation of the post-employment benefits plan and disclosure requirements for the fiscal period ending December 31, 2009 for Waterloo North Hydro. The extrapolation updates the valuation results from December 31, 2007 to December 31, 2009, using current year actual contributions, benefit payments and interest.

Note that this is a revised report, taking into account discussions with Waterloo North Hydro in which it was disclosed that the balance sheet amounts held by the company in fiscal years prior to the current year differed from those that were indicated in our prior reports. The current report exhibits have been modified to align with actual previous disclosure amounts.

Data (Valuation at December 31, 2007)

Current annual premium rates have been provided as shown in the following table. These rates do not include provincial sales tax.

	Single	Family
Health	806.76	2,495.76
Dental	550.80	1,574.88

Individual employee and retiree data was provided for all covered individuals. The following table summarizes the data provided by the employer.

Age Group	Active Employees			Retired & Disabled	
	Number	Average Service	Average Salary	Number	Average Insurance
<20	3	1.5	47,174		
21-25	3	3.3	55,397		
26-30	6	5.4	57,869		
31-35	7	10.3	63,173		
36-40	19	12.8	62,395		
41-45	25	18.2	60,052		
46-50	24	18.7	69,741	2	55,500
51-55	17	17.7	66,308	7	23,093
56-60	2	24.5	51,293	11	25,809
61-65				11	32,001
66-70				8	39,974
71-75				10	42,181
76-80				3	28,744
Totals	106	15.2	63,090	52	33,392
Males	76			46	
Females	30			6	

Benefit Programs

Life insurance, extended health, and dental benefits are provided to retired employees. Health and dental coverage ceases when the retiree reaches age 65; life insurance coverage continues for life, except for employees hired after March 17, 2004 for whom no coverage is provided. The amount of life insurance provided is as follows:

- Currently active employees:
 - Active insurance factor of 1.50 are provided with 50% of final annual earnings.
 - Active insurance factor of 1.75 are provided with 50% of final annual earnings, with the percentage reducing to 25% over 10 years following retirement.
 - Hired after March 17, 2004 receive no benefit.
- Retirees:
 - Class A have \$2,000 of insurance (retirement with less than 10 years of service).
 - Class B receive 50% of final earnings initially, reducing to 25% after 10 years following retirement.
 - Class C2 receive 50% of final earnings.
 - Class C3 receive 105% of final earnings.

The sick leave program pays 50% of unused sick days on termination, death, or retirement. The maximum benefit payable is 50% of the individual's salary. Sick leave credits of 18 days per year are earned. Only one active employee is eligible to receive benefits under this program and is expected to be fully paid during 2010; all other employees previously eligible have opted out of the program or have been fully paid out.

Attestation

I am pleased to provide the following certifications:

- a) I am aware that your auditor intends to use my work for audit evidence;
- b) I am a member in good standing with the Canadian Institute of Actuaries;
- c) I have been engaged by the Company's management to perform the valuation;
- d) My calculations have been performed in accordance with the standards of the Canadian Institute of Actuaries;
- e) My calculations include all employee future benefit plans of the Company required to be included in the calculations for which I have been retained;
- f) I have included the effect of all known commitments in my calculations;
- g) No settlements or curtailments have occurred in the fiscal period covered by this report;
- h) The calculations have been prepared using best estimate assumptions, as proposed by me for management use;

- i) I have used a materiality level of \$25,000 in dealing with errors or changes in principle and the application thereof;
- j) This report includes the following:
- i) A description of the participant groups covered.
 - ii) A description of the plan benefits.
 - iii) A description of the actuarial valuation method used to determine the accrued benefit obligation.
 - iv) The significant actuarial assumptions used in the calculations are as follows:
 - All liabilities were extrapolated to December 31, 2008.
 - A discount rate of 6.00% was used to establish liabilities at December 31, 2009. The rate of 7.00% used at the end of 2008 was used in the extrapolation.
 - No assets have or are expected to be accumulated for the plan.
 - A salary growth rate of 4% has been used to determine future benefits payable under the sick leave program.
 - Mortality based on the 1994 UP Mortality Table projected to 2015 using Projection Scale AA.
 - Termination of employment is based on the Ontario Medium Scale.
 - The following table shows rates of mortality and employee termination at certain ages:

Age	Mortality Rate		Termination Rate
	Male	Female	
20	0.04%	0.02%	20.00%
25	0.06%	0.02%	20.00%
30	0.08%	0.03%	11.20%
35	0.08%	0.04%	6.30%
40	0.10%	0.06%	3.40%
45	0.13%	0.07%	1.80%
50	0.19%	0.11%	1.20%
55	0.32%	0.21%	
60	0.61%	0.43%	
65	1.16%	0.84%	
70	1.86%	1.33%	
75	2.98%	2.06%	
80	5.40%	3.66%	
85	9.02%	6.42%	
90	15.12%	11.74%	
95	24.08%	19.20%	

- Retirement at later of current age plus one year and age 57 is presumed
- Health care trend rates of 10% in the first year following the full valuation, reducing to 5% after 10 years are assumed.

- A Dental care trend rate of 4% is assumed.
 - Each employee's attribution period is from his/her date of hire until the employee reaches age 55.
 - The value of projected benefits is prorated over the attribution period to determine the amount of expense to charge to various periods. The accrued obligation represents the present value of benefits assigned to periods prior to the valuation date.
- v) Amortization of gains and losses are made using a straight-line method over the average of the expected average future service period of active employees. Only unamortized amounts in excess of 10% of plan obligations are considered for amortization. In the projection for fiscal 2010, it is presumed that the full outstanding amount under the sick leave program will be expensed.
- vi) The plan is unfunded.
- vii) The valuation allowance is zero.
- viii) No settlements or curtailments have occurred in the fiscal period covered by this report.
- ix) The plan is a defined benefit plan.
- x) No significant non-routine events occurred in the fiscal period covered by this report.
- xi) No deviations from the benefit plan were made.
- xii) Obligations were calculated as at December 31, 2007 and extrapolated to December 31, 2009.
- k) I have confirmed with management that the plan provisions are up to date for use in this report.
- l) The extrapolation is accurate and properly reflects the effect of all events and changes which have occurred subsequent to the most recent actuarial valuation.
- m) No matters have come to my attention that have occurred prior to the date of the completion of this report which would have a material effect on my calculations.

Calculations

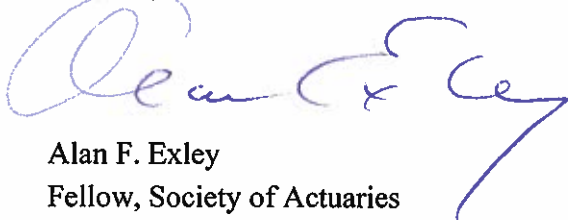
On the basis of the assumptions and methods noted above, I have determined the present value of benefit obligations related to service through 2009. The attached tables show the calculated obligation amounts at the fiscal end dates, as well as disclosure information required for reporting under CICA3461.

Page 6 of 8

Waterloo North Hydro – February 12, 2010

Please feel free to contact me should you require additional information or clarification of any of the information provided here.

Sincerely,



Alan F. Exley

Fellow, Society of Actuaries

Fellow, Canadian Institute of Actuaries

Att.

Fiscal Year	Benefits Plan		Sick Leave Plan	
		Projected		Projected
	2009	2010	2009	2010
Discount Rate				
At start of year	7.00%	6.00%	7.00%	6.00%
At end of year	6.00%	6.00%	6.00%	6.00%
Interest rate on assets				
At start of year	N/A	N/A	N/A	N/A
At end of year	N/A	N/A	N/A	N/A
Salary Growth assumption	N/A	N/A	4.00%	4.00%
Termination rates used	Yes	Yes	Yes	Yes
Mortality table	UP94 proj.	UP94 proj.	UP94 proj.	UP94 proj.
Dental Care Trend Rate	4.00%	4.00%	N/A	N/A
Health Care Initial Trend Rate	10.00%	10.00%	N/A	N/A
Ultimate Trend Rate	5.00%	5.00%	N/A	N/A
EARSL Period	12.5	12.5	2.0	2.0
Reconcile Obligation				
Obligation at start of year	3,262,482	3,777,964	60,974	21,064
Change in obligation on revaluation	0	0	0	0
Plan improvements in year	0	0	0	0
Current service accrual cost	110,215	142,899	1,540	849
Member contributions	0	0	0	0
Benefit payments	(152,040)	(175,000)	(56,129)	(22,477)
Interest on obligation	<u>226,910</u>	<u>225,715</u>	<u>2,358</u>	<u>615</u>
Expected obligation at end of year	3,447,567	3,971,578	8,743	51
Actual obligation at end of year	<u>3,777,964</u>	<u>3,971,578</u>	<u>21,064</u>	<u>0</u>
Total (Gains) & Losses	330,397	0	12,321	(51)
Reconcile Plan Funds				
Fund at start of year	0	0	0	0
Company contributions	152,040	175,000	56,129	22,477
Benefit payments	(152,040)	(175,000)	(56,129)	(22,477)
Interest on obligation	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Expected fund at end of year	0	0	0	0
Actual fund at end of year	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
(Gains) & Losses	0	0	0	0

Fiscal Year	Benefits Plan		Sick Leave Plan	
	2009	Projected 2010	2009	Projected 2010
Pension Expense				
Current service cost	110,215	142,899	1,540	849
Interest on obligation	226,910	225,715	2,358	615
Interest on assets	0	0	0	0
Amortize plan improvements	0	0	0	0
Amortize (gains) and losses	<u>(24,618)</u>	<u>1,312</u>	<u>(7,140)</u>	<u>(916)</u>
Pension expense	312,507	369,926	(3,242)	548
Unamortized (Gains) & Losses				
10% Window	326,248	377,796	6,097	2,106
Unamortized (gain)/loss at start of year	39,182	394,197	(20,377)	(916)
(Gain)/Loss in year	330,397	0	12,321	(51)
Amortization in year	<u>(24,618)</u>	<u>1,312</u>	<u>(7,140)</u>	<u>(916)</u>
Unamortized (gain)/loss at end of year	394,197	392,885	(916)	(51)
Prepaid Benefit Asset (Liability)				
Asset/(Liability) at start of year	(3,223,300)	(3,383,767)	(81,351)	(21,980)
Income/(Expense) in year	(312,507)	(369,926)	3,242	(548)
Company contributions	<u>152,040</u>	<u>175,000</u>	<u>56,129</u>	<u>22,477</u>
Asset/(Liability) at end of year	(3,383,767)	(3,578,693)	(21,980)	(51)
Reconcile Asset to Funded Status				
Funded status	(3,777,964)	(3,971,578)	(21,064)	0
Unamortized transition amount	0	0	0	0
Unamortized prior service costs	0	0	0	0
Unamortized gains & (losses)	<u>(394,197)</u>	<u>(392,885)</u>	<u>916</u>	<u>51</u>
Prepaid Asset/(Liability)	(3,383,767)	(3,578,693)	(21,980)	(51)
Sensitivity Testing (Impact on Obligation)				
1% Increase in Trend Rate	239,939			
1% Decrease in Trend Rate	(214,918)			

Waterloo North Hydro Inc.
Application for Approval of 2011 Electricity Distribution Rates

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1 OVERVIEW

2
3 Waterloo North Hydro Inc. was incorporated March 1, 2000 in accordance with the requirements
4 of the *Electricity Act, 1998*, S.O. 1998, c. 15, Schedule A.

5
6 WNH is a wholly owned subsidiary of Waterloo North Hydro Holding Corporation, which is
7 owned by the Corporation of the City of Waterloo, the Corporation of the Township of Wellesley
8 and the Corporation of the Township of Woolwich.

9
10 The purpose of this evidence is to summarize the method and cost of financing capital
11 requirements for the 2011 test year.

12 CAPITAL STRUCTURE

13
14
15 WNH has a current deemed capital structure of 60% debt with a return of 6%, and 40% equity
16 with a return of 9% as approved in the 2010 IRM rate decision EB-2009-0210.

17
18 WNH has prepared this rate application with a deemed capital structure of 56% Long Term
19 Debt, 4% Short Term Debt, and 40% Equity to comply with the Report of the Board on the Cost
20 of Capital for Ontario Regulated Utilities, December 11, 2009.

21
22 Table 5-1 details WNH's proposed deemed capital structure for 2011 in the Board's Appendix 2-
23 N format, as well as the 2006 Board Approved, 2006 Actual, 2007 Actual, 2008 Actual, 2009
24 Actual and 2010 Bridge Year . Table 5-2 details the 2006 Board Approved capital structure and
25 the actual results for the fiscal years 2006 through 2009.

26
27 WNH's historic Debt to Equity ratios (43% in 2007, 41% in 2008 and 35% in 2009) are lower
28 than the OEB deemed rate of 60% Debt and 40% Equity. WNH, however, commenced using a
29 line of credit commencing in 2010 and as detailed below, a mortgage will be established in
30 December 2011 as long-term financing for WNH's new building/service centre.

WNH does not have a schedule for retirement of debt and buy-back of common shares. The changes in actual capital structure until 2009 are mainly due to the growing rate base, rather than increases to debt.

Table 5-1
2006 Board Approved Capitalization / Cost of Capital

Line No.	Particulars	Capitalization Ratio		Cost Rate	Return
		(%)	(\$)	(%)	(\$)
	2006 Board Approved				
	Debt				
1	Long-term Debt	50.0%	\$48,829,934	6.28%	\$3,065,008
2	Short-term Debt	(1)	\$ -		\$ -
3	Total Debt	50.0%	\$48,829,934	6.28%	\$3,065,008
	Equity				
4	Common Equity	50.0%	\$48,829,934	9.00%	\$4,394,694
5	Preferred Shares		\$ -		\$ -
6	Total Equity	50.0%	\$48,829,934	9.00%	\$4,394,694
7	Total	100.0%	\$97,659,868	7.64%	\$7,459,702

2006 Actual Capitalization / Cost of Capital

Line No.	Particulars	Capitalization Ratio		Cost Rate	Return
		(%)	(\$)	(%)	(\$)
	2006 Actual				
	Debt				
1	Long-term Debt	50.0%	\$50,546,431	6.67%	\$3,371,765
2	Short-term Debt	(1)	\$ -		\$ -
3	Total Debt	50.0%	\$50,546,431	6.67%	\$3,371,765
	Equity				
4	Common Equity	50.0%	\$50,546,431	9.00%	\$4,549,179
5	Preferred Shares		\$ -		\$ -
6	Total Equity	50.0%	\$50,546,431	9.00%	\$4,549,179
7	Total	100.0%	\$101,092,863	7.84%	\$7,920,944

2007 Actual Capitalization / Cost of Capital

Line No.	Particulars	Capitalization Ratio		Cost Rate	Return
		(%)	(\$)	(%)	(\$)
	2007				
	Debt				
1	Long-term Debt	50.0%	\$52,695,377	6.17%	\$3,253,636
2	Short-term Debt	(1)	\$ -		\$ -
3	Total Debt	50.0%	\$52,695,377	6.17%	\$3,253,636
	Equity				
4	Common Equity	50.0%	\$52,695,377	9.00%	\$4,742,584
5	Preferred Shares		\$ -		\$ -
6	Total Equity	50.0%	\$52,695,377	9.00%	\$4,742,584
7	Total	100.0%	\$105,390,754	7.59%	\$7,996,220

2008 Actual Capitalization / Cost of Capital

Line No.	Particulars	Capitalization Ratio		Cost Rate	Return
		(%)	(\$)	(%)	(\$)
	2008				
	Debt				
1	Long-term Debt	53.3%	\$58,981,537	6.96%	\$4,103,383
2	Short-term Debt	(1)	\$ -		\$ -
3	Total Debt	53.3%	\$58,981,537	6.96%	\$4,103,383
	Equity				
4	Common Equity	46.7%	\$51,678,007	9.00%	\$4,651,021
5	Preferred Shares		\$ -		\$ -
6	Total Equity	46.7%	\$51,678,007	9.00%	\$4,651,021
7	Total	100.0%	\$110,659,544	7.91%	\$8,754,404

2009 Actual Capitalization / Cost of Capital

Line No.	Particulars	Capitalization Ratio		Cost Rate	Return
		(%)	(\$)	(%)	(\$)
	2009				
	Debt				
1	Long-term Debt	56.7%	\$64,687,312	7.15%	\$4,627,604
2	Short-term Debt	(1)	\$ -		\$ -
3	Total Debt	56.7%	\$64,687,312	7.15%	\$4,627,604
	Equity				
4	Common Equity	43.3%	\$49,399,658	9.00%	\$4,445,969
5	Preferred Shares		\$ -		\$ -
6	Total Equity	43.3%	\$49,399,658	9.00%	\$4,445,969
7	Total	100.0%	\$114,086,970	7.95%	\$9,073,573

2010 Bridge Capitalization / Cost of Capital

		2010 Bridge Year			
		(%)	(\$)	(%)	(\$)
	Debt				
1	Long-term Debt	60.0%	\$78,093,331	7.15%	\$5,586,645
2	Short-term Debt	(1)	\$ -		\$ -
3	Total Debt	60.0%	\$78,093,331	7.15%	\$5,586,645
	Equity				
4	Common Equity	40.0%	\$52,062,221	9.00%	\$4,685,600
5	Preferred Shares		\$ -		\$ -
6	Total Equity	40.0%	\$52,062,221	9.00%	\$4,685,600
7	Total	100.0%	\$130,155,551	7.89%	\$10,272,245

2011 Test Capitalization / Cost of Capital

2011 Test Year - Application				
	(%)	(\$)	(%)	(\$)
Debt				
1 Long-term Debt	56.0%	\$85,572,658	5.47%	\$4,676,951
2 Short-term Debt	4.0% (1)	\$6,112,333	2.07%	\$126,525
3 Total Debt	60.0%	\$91,684,990	5.24%	\$4,803,477
Equity				
4 Common Equity	40.0%	\$61,123,327	9.85%	\$6,020,648
5 Preferred Shares		\$ -		\$ -
6 Total Equity	40.0%	\$61,123,327	9.85%	\$6,020,648
7 Total	100.0%	\$152,808,317	7.08%	\$10,824,124

Notes

- (1) 4.0% unless an applicant utility has proposed or been approved for a different amount.
- (2) Long-Term and Short Term Debt Rates include Board Deemed rates for 2010 Applications for affiliated debt, to be updated when 2011 rates released
- (3) Short Term Debt Rates include Board Deemed rates for 2010 Applications, to be updated when 2011 rates released

Table 5-2
Capital Structure Deemed vs. Actual

	2006 Board Approved	2006 Actual	2007 Actual	2008 Actual	2009 Actual
Long Term Debt	48,829,934	49,369,099	40,402,432	40,402,432	33,513,211
Common Equity	48,829,934	48,686,757	53,489,220	58,786,856	63,073,225
Actual Debt/Equity					
Long Term Debt Ratio		50%	43%	41%	35%
Equity Ratio		50%	57%	59%	65%
Deemed Debt / Equity	50% / 50%	50% / 50%	50% / 50%	53.3% / 46.7%	56.7% / 43.3%

COST OF CAPITAL

Cost of Debt: Long Term

WNH is requesting a return on long term debt for the 2011 Test Year of 5.87% on the existing long term loans totaling \$33,513,211 (loans of \$17,266,271 and \$16,246,940) owing to its shareholder, Waterloo North Hydro Holding Corporation (affiliated debt) and 4.95% on its \$26,300,000 loan with Infrastructure Ontario. The 5.87% is in accordance with the Board-issued Cost of Capital Parameter Updates for 2010 Cost of Service Applications for affiliated debt. WNH understands that the OEB will be finalizing the return on long term debt for 2011 rates based on January 2011 market interest rate information. WNH's use of a Return on Long Term Debt of 5.87% is without prejudice to any revised return on debt that may be adopted by the OEB in early 2011.

The shareholder holds unsecured promissory notes from WNH for \$17,266,271 and \$16,246,940, totaling \$33,513,211 (see details below in Table 5-3) bearing interest of 6% and 8.38% ($1\frac{1}{8}\%$ above the 2006 EDR Board 7.25% rate) per annum, recommencing on January 1, 2009 and commencing May 1, 2000 respectively (see below in Table 5-4). Both Promissory Notes are payable on demand with 270 days written notice, are open with no maturity dates, and may be repaid by WNH at any time without notice or bonus. A copy of each Promissory Note is attached as Appendix A to this Exhibit.

WNH has negotiated a \$26,300,000 mortgage with Infrastructure Ontario at 4.95%, with a 25 year term, which is to commence at the end of December 2011 in order to provide long-term financing for WNH's new Administration Building and Service Centre. WNH issued a Request for Proposal (RFP) to twelve financial lenders and selected Infrastructure Ontario as it was the most cost efficient for the construction financing at 1.2% and the long term rate of 4.95%. Details are shown in Table 5-4 below.

Share capital consists of 1,000 common shares and 251,668 Class A Special Shares issued to Waterloo North Hydro Holding Corporation.

Table 5-3
Waterloo North Hydro Inc.
Promissory Notes

Shareholder	Principal Amount
Waterloo North Hydro Holding Corporation	17,266,271.00
Waterloo North Hydro Holding Corporation	16,246,940.00
Total	33,513,211.00

Table 5-4
Long-Term Debt Cost

Debtholder	Is the Debt Holder Affiliated with the LDC? (Y/N)	Date of Issuance of Debt	Principal (\$)	Term (Years)	Actual Rate in 2009 (%)	Projected Rate in 2011 (%)	
						Actual	Rate Filing ²
Waterloo North Hydro Holding Company	Y	July 1, 2009	\$ 17,266,271	N/A	6.00%	6.00%	5.87%
Waterloo North Hydro Holding Company	Y	May 1, 2000	\$ 16,246,940	N/A	8.38%	8.38%	5.87%
Infrastructure Ontario	N	December 31, 2011	\$ 26,300,000	25	N/A	4.95%	4.95%
Total			\$ 59,813,211				
Weighted Average Long-Term Debt Cost					7.15%	6.18%	5.47%

² Long-Term Debt Affiliated Board Deemed Rates for 2010 Applications, to be updated when 2011 rates are released

Cost of Debt: Short Term

WNH is requesting a return on Short Term Debt for the 2011 Test year of 2.07% in accordance with the Cost of Capital Parameter Updates for 2010 Cost of Service Applications issued by the OEB on February 24, 2010. WNH understands that the OEB will be finalizing the return on short term debt for 2011 rates based on January 2011 market interest rate information. WNH's use of a Return on Short Term Debt of 2.07% is without prejudice to any revised return on short term debt that may be adopted by the OEB in early 2011.

Return on Equity

WNH is requesting a return on equity ("ROE") for the 2011 Test year of 9.85% in accordance with the Cost of Capital Parameter Updates for 2011 Cost of Service Applications issued by the OEB on February 24, 2010. WNH understands that the OEB will be finalizing the ROE for 2011 rates based on January 2011 market interest rate information. WNH's use of an ROE of 9.85% is without prejudice to any revised ROE that may be adopted by the OEB in early 2011.

WNH's ROE in 2006 (8.24%), 2007 (8.83%), 2008 (9.28%) and 2009 (7.78%) were all below the allowed deemed ROE at 9%, except 2008. The major item affecting returns during this time period was a growing rate base. Details of WNH's Cost of Capital and Return on Equity are presented below in Table 5-5.

The ROE using current rates is projected at 2010 (5.80%) and 2011 (**4.69%**) are well below the allowed deemed ROE.

Table 5-5
Cost of Capital Deemed vs. Actual

	2006 Board Approved	2006 Actual	2007 Actual	2008 Actual	2009 Actual
Long Term Debt	48,829,934	49,369,099	40,402,432	40,402,432	33,513,211
Common Equity	48,829,934	48,686,757	53,489,220	58,786,856	63,073,225
Actual Debt/Equity					
Long Term Debt Ratio		50%	43%	41%	35%
Equity to Long Term Debt Ratio		50%	57%	59%	65%
Deemed Debt/Equity	50% / 50%	50% / 50%	50% / 50%	53.3% / 46.7%	56.7% / 43.3%
Interest on Long Term Debt		3,360,164	3,048,985	2,817,712	2,601,639
Net Income		4,010,620	4,723,319	5,455,168	4,904,900
Actual Long Term Debt Rate		6.81%	7.55%	6.97%	7.76%
Actual Return on Equity		8.24%	8.83%	9.28%	7.78%
Deemed Long Term Debt Rate	6.28%	6.28%	6.28%	6.28%	6.28%
Deemed Return on Equity	9.00%	9.00%	9.00%	9.00%	9.00%
Actual Cost of Capital		7.52%	8.28%	8.34%	7.77%
Deemed Cost of Capital	7.64%	7.64%	7.64%	7.64%	7.64%

APPENDIX A

PROMISSORY NOTES

WATERLOO NORTH HYDRO INC. – SENIOR PROMISSORY NOTE

This Promissory Note replaces the Promissory Note between Waterloo North Hydro Inc. and Waterloo North Hydro Holding Corporation, dated May 1, 2000.

FOR VALUE RECEIVED, Waterloo North Hydro Inc. (the “Corporation”) hereby promises to pay to or to the order of Waterloo North Hydro Holding Corporation (“HoldCo”) the principal sum of \$17,266,271.00 with interest at the rate specified herein, 270 days following demand by HoldCo.

The outstanding Principal shall bear interest at the Established Rate, such interest to be calculated and paid quarterly not in advance on the last day of March, June, September and December in each year.

Interest on the Established Rate shall accrue from July 1, 2009 until the Principal is paid in full, with interest on overdue interest at the Established Rate. The Established Rate is 6.0% per annum.

This Promissory Note may, at the option of HoldCo, be converted, as to some or all of the principal sum outstanding, into common shares of the Corporation at a conversion price per common share, subject to adjustment, equal to the stated capital per common share of the common shares of the Corporation issued as at May 1, 2000 (the “Conversion Price”). The foregoing conversion right may be exercised by HoldCo on 90 days’ prior written notice to the Corporation at any time before or after demand, but before payment.

- 2 -

If and whenever at any time prior to demand by HoldCo the Corporation shall:

- (a) subdivide, redivide or change its then outstanding common shares into a greater number of shares;
- (b) reduce, combine or consolidate its then outstanding common shares into a lesser number of shares; or
- (c) issue common shares to the holders of all or substantially all of its then outstanding common shares by way of a stock dividend or other form of distribution (other than a stock dividend which the holder of the common shares has elected to receive in lieu of a cash dividend paid in the ordinary course),

(any of such events being called a "Share Reorganization"), the Conversion Price then in effect shall be adjusted effective immediately on the effective date or record date for the happening of the Share Reorganization, as the case may be, at which the holders of common shares are determined for the purpose of the Share Reorganization by multiplying the Conversion Price in effect immediately prior to such effective date or record date by a fraction, the numerator of which is the number of Common Shares outstanding on such effective date or record date before giving effect to such Share Reorganization and the denominator of which is the number of Common Shares outstanding immediately after giving effect to such Share Reorganization.

If and whenever at any time prior to demand by HoldCo there is a capital reorganization (other than a Share Reorganization) or a consolidation, merger or amalgamation of the Corporation with or into any other body corporate including by way of a sale whereby all or substantially all of the Corporation's undertaking and assets would become the property of any other body corporate, HoldCo, to the extent that it has not exercised its right of conversion prior to the

- 3 -

effective date of such capital reorganization, consolidation, merger, amalgamation, or sale shall be entitled to receive and shall accept, upon the exercise of such right at any time on such date or thereafter, in lieu of the number of common shares to which it was theretofore entitled upon conversion, the aggregate number of shares or other securities or property of the Corporation or of the body corporate resulting from the capital reorganization consolidation, merger, or amalgamation or to which such sale may be made that HoldCo would have been entitled to receive as a result of such capital reorganization, consolidation, merger, amalgamation or sale on the effective date thereof, if it had been the registered holder of the number of common shares to which it was theretofore entitled upon conversion.

If the Corporation, after the date of this Agreement, shall take any action affecting the common shares, other than an action to which the foregoing provisions are specifically applicable, which in the opinion of the directors of the Corporation would materially affect the conversion rights attached to this Promissory Note, the number of common shares which may be acquired upon exercise of the right of conversion under this Promissory Note shall be adjusted in such manner and at such time, by action of the directors, in their discretion, acting reasonably, as they may determine to be equitable in the circumstances.

In any case where a fraction of a common share would otherwise be issuable on conversion of this Promissory Note in whole or in part, the Corporation shall adjust such fractional interest by the payment by cheque of an amount equal to the amount of such fractional interest.

The Corporation covenants and agrees that, so long as this Promissory Note is outstanding and entitled to the right of conversion herein provided, it shall at all times reserve and hold out of its authorized and unissued Common Shares a sufficient number of unissued Common Shares to enable the outstanding principal amount of this Promissory Note to be converted upon the basis and upon the terms and conditions herein provided.

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At the option of HoldCo on 270 days' prior written notice to the Corporation, the terms of this Promissory Note may be revised, changed or restated by HoldCo in consultation with the Corporation.

This Promissory Note and all rights of HoldCo hereunder to demand payment, amend, revise, change, restate, convert, exchange, transfer or enforce this Promissory Note are subject to the Shareholders' Agreement dated as of May 1, 2000 among The Corporation of the City of Waterloo, The Corporation of the Township of Wellesley, The Corporation of the Township of Woolwich (collectively, the "Municipalities") and HoldCo.

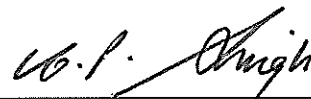
This Promissory Note is not assignable by HoldCo without the consent of the Corporation.

DATED as of the 1st day of July, 2009

WATERLOO NORTH HYDRO INC.

per: 

Rene W. Gaten
President & CEO

per: 

Albert P. Singh
VP Finance & CFO

COPY

WATERLOO NORTH HYDRO INC. - AGGREGATE JUNIOR PROMISSORY NOTE

FOR VALUE RECEIVED, Waterloo North Hydro Inc. (the "Corporation") hereby promises to pay to or to the order of Waterloo North Hydro Holding Corporation ("HoldCo") the principal sum of \$16,246,940 with interest at the rate specified herein, 270 days following demand by HoldCo.

Interest on the principal sum shall accrue from first day of the month which immediately follows the month in which the Ontario Energy Board approves the distribution rates for the Corporation in response to the initial rate application filed by the Corporation and shall be payable at a rate per annum equal to a rate which is one and one-eighth percent (1 1/8%) per annum above the interest rate on debt (the "Debt Rate") which the Ontario Energy Board or its successor may permit the Corporation to pay for rate making purposes in the establishment of distribution rates, and the interest rate as aforesaid shall change from time to time with changes in the Debt Rate approved by the Ontario Energy Board.

Interest at the aforesaid rate shall be calculated and be payable semi-annually, with the first of such payments commencing on the 30th day after the end of the first fiscal year of the Corporation and the second payment on the 180th day of the second fiscal year of the Corporation and thereafter on the last day of March, June, September and December in each year.

The Corporation may, in its sole discretion, choose to pay any amount of interest accrued and unpaid in respect of this Promissory Note by issuing to HoldCo as fully paid and non-assessable Class A Special Shares with an issue price of \$10 of accrued and unpaid interest for each Class A Special Share.

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This Promissory Note may, at the option of HoldCo, be converted, as to some or all of the principal sum outstanding, common shares of the Corporation at a conversion price per common share, subject to adjustment, equal to the stated capital per common share of the common shares of the Corporation issued as at May 1, 2000 (the "Conversion Price"). The foregoing conversion right may be exercised by HoldCo at any time on 90 days' prior written notice to the Corporation at any time before or after demand, but before payment.

If and whenever at any time prior to demand by HoldCo the Corporation shall:

- (a) subdivide, redivide or change its then outstanding common shares into a greater number of shares;
- (b) reduce, combine or consolidate its then outstanding common shares into a lesser number of shares; or
- (c) issue common shares to the holders of all or substantially all of its then outstanding common shares by way of a stock dividend or other form of distribution (other than a stock dividend which the holder of the common shares has elected to receive in lieu of a cash dividend paid in the ordinary course),

(any of such events being called a "Share Reorganization"), the Conversion Price then in effect shall be adjusted effective immediately on the effective date or record date for the happening of the Share Reorganization, as the case may be, at which the holders of common shares are determined for the purpose of the Share Reorganization by multiplying the Conversion Price in effect immediately prior to such effective date or record date by a fraction, the numerator of which is the number of Common Shares outstanding on such effective date or record date before giving effect to such Share Reorganization and the denominator of which is the number of Common Shares outstanding immediately after giving effect to such Share Reorganization.

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If and whenever at any time prior to demand by HoldCo there is a capital reorganization (other than a Share Reorganization) or a consolidation, merger or amalgamation of the Corporation with or into any other body corporate including by way of a sale whereby all or substantially all of the Corporation's undertaking and assets would become the property of any other body corporate, HoldCo, to the extent that it has not exercised its right of conversion prior to the effective date of such capital reorganization, consolidation, merger, amalgamation or sale shall be entitled to receive and shall accept, upon the exercise of such right at any time on such date or thereafter, in lieu of the number of common shares to which it was theretofore entitled upon conversion, the aggregate number of shares or other securities or property of the Corporation or of the body corporate resulting from the capital reorganization consolidation, merger, or amalgamation or to which such sale may be made that HoldCo would have been entitled to receive as a result of such capital reorganization, consolidation, merger, amalgamation or sale on the effective date thereof, if it had been the registered holder of the number of common shares to which it was theretofore entitled upon conversion.

If the Corporation, after the date of this Agreement, shall take any action affecting the common shares, other than an action to which the foregoing provisions are specifically applicable, which in the opinion of the directors of the Corporation would materially affect the conversion rights attached to this Promissory Note, the number of common shares which may be acquired upon exercise of the right of conversion under this Promissory Note shall be adjusted in such manner and at such time, by action of the directors, in their discretion, acting reasonably, as they may determine to be equitable in the circumstances.

In any case where a fraction of a common share would otherwise be issuable on conversion of this Promissory Note in whole or in part, the Corporation shall adjust such fractional interest by the payment by cheque of an amount equal to the amount of such fractional interest.

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This Promissory Note replaces a series of junior promissory notes in the aggregate amount of \$16,598.499.00 dated May 1, 2000 issued by the Corporation in favour of the Municipalities and assigned by the Municipalities to HoldCo.

DATED as of the 1st day of May, 2000.

WATERLOO NORTH HYDRO INC.

per: _____

David Uffelman, Chair of the Board

per: _____

Eugene Moser, President

Waterloo North Hydro Inc.
Application for Approval of 2011 Electricity Distribution Rates

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RATE BASE AND REVENUE REQUIREMENT

To continue to provide safe and reliable service to its customers and earn its permitted return on equity (ROE), WNH requests to increase its Base Revenue Requirement to \$28.98M. WNH's 2006 Board Approved Revenue Requirement was based on 2004 Actual results and there have been significant changes to Distribution Expenses and Rate Base for the past five years. Actual Distribution Expenses have increased to \$15.68M in 2009 from the 2006 Board Approved amount of \$14.22M, representing 2.0% annual growth. The Rate Base increased to \$114.09M in 2009 from the 2006 Board Approved amount of \$97.66M, adding almost 3.4% every year. These increases to both Rate Base and Distribution Expenses will continue into the Bridge Year 2010 and the Test Year 2011.

WNH proposes for 2011:

1. A Rate Base of \$152.81M, which is an 8.1% annualized increase from \$97.66M of 2006 Board Approved.
2. A Base Revenue Requirement of \$29.8M, which is a 3.2% annualized increase from \$23.72M of 2006 Board Approved.

Table 6-1 provides the calculated 2011 Revenue Requirement.

Table 6-2 demonstrates the steps used to calculate the Revenue Requirement and the details of year over year comparison in the event that WNH was allowed to rebase every year.

Cost of Capital and PILs in Table 6-2 are the deemed Cost of Capital and PILs in that year.

Table 6-1
2011 Revenue Requirement Calculation

	2011 Test Year (\$)	Comments
Average Fixed Assets	133,968,589	From Exhibit 2
+		
Working Capital Allowance	18,839,728	From Exhibit 2
=		
Rate Base	152,808,317	
x		
Cost of Capital	7.08%	From Exhibit 5
=		
Return on Ratebase	10,824,124	
+		
Distribution Expenses (including Amortization)	18,000,168	From Exhibit 4
=		
Revenue Requirement before PILs	28,824,293	
+		
PILs	1,212,310	From Exhibit 4
=		
Service Revenue Requirement	30,036,603	
-		
Other Revenue	1,055,963	From Exhibit 3
=		
Base Revenue Requirement	28,980,640	
+		
Transformer Ownership Allowance	672,628	From Exhibit 3
+		
Other Distribution Charges	165,000	From Exhibit 3
=		
Throughput Revenue	29,818,268	

Table 6-2
Revenue Requirement (\$) (if Rebased Every Year)

	2006 Board Approved	2006 Actual	2006 Actual vs. 2006 Board Approved	2007 Actual	2007 Actual vs. 2006 Actual	2008 Actual	2008 Actual vs. 2007 Actual	2009 Actual	2009 Actual vs. 2008 Actual	2010 Bridge	2010 Bridge vs. 2009 Actual	2011 Test	2011 Test vs. 2010 Bridge
Average Fixed Assets	83,075,300	85,689,030	2,613,730	90,012,807	4,323,777	95,369,094	5,356,287	100,769,641	5,400,547	111,129,202	10,359,561	133,968,589	22,839,387
+													
Working Capital Allowance	14,584,568	15,403,832	819,265	15,377,947	(25,885)	15,290,450	(87,497)	13,317,328	(1,973,122)	19,026,349	5,709,021	18,839,728	(186,622)
=													
Rate Base	97,659,868	101,092,863	3,432,995	105,390,754	4,297,891	110,659,544	5,268,790	114,086,970	3,427,426	130,155,551	16,068,582	152,808,317	22,652,766
x													
Cost of Capital (Deemed)	0	0	-	0	-	0	-	0	-	0	0	0	(0)
=													
Return on Ratebase	7,459,702	7,721,929	262,228	8,050,222	328,292	8,452,676	402,454	8,714,478	261,802	10,272,245	1,557,767	10,824,124	551,880
+													
Distribution Expenses (including Amortization)	14,228,719	14,383,258	154,539	14,692,570	309,312	15,299,831	607,261	15,680,250	380,419	17,272,796	1,592,546	18,000,168	727,372
=													
Revenue Requirement before PILs	21,688,421	22,105,187	416,766	22,742,792	637,604	23,752,506	1,009,715	24,394,728	642,221	27,545,041	3,150,313	28,824,293	1,279,252
+													
PILs (Deemed)	3,030,475	3,030,475	-	3,021,753	(8,722)	2,724,370	(297,383)	2,585,163	(139,207)	198,809	(2,386,354)	1,212,310	1,013,501
=													
Service Revenue Requirement	24,718,896	25,135,662	416,766	25,764,545	628,882	26,476,876	712,332	26,979,891	503,014	27,743,850	763,959	30,036,603	2,292,752
-													
Other Revenue	1,001,897	1,571,265	569,368	1,926,288	355,023	1,643,574	(282,714)	1,094,317	(549,258)	1,144,155	49,838	1,055,963	(88,192)
=													
Base Revenue Requirement	23,716,999	23,564,398	(152,601)	23,838,257	273,859	24,833,302	995,046	25,885,574	1,052,272	26,599,696	714,121	28,980,640	2,380,944
+													
Transformer Ownership Allowance	744,464	759,210	14,746	776,514	17,304	776,374	(140)	776,628	254	776,628	(0)	672,628	(104,000)
+													
Other Distribution Charges	95,727	75,115	(20,612)	111,721	36,606	117,199	5,478	114,317	(2,882)	153,000	38,683	165,000	12,000
=													
Throughput Revenue	24,557,190	24,398,723	(158,468)	24,726,492	327,769	25,726,875	1,000,384	26,776,519	1,049,644	27,529,324	752,804	29,818,268	2,288,945

NET UTILITY INCOME AND RETURN ON RATE BASE

This evidence is to demonstrate the actual return on Rate Base using actual Operating Revenue, Distribution Expenses, including Interest Expense and PILs, to compare the actual return expected on Rate Base to the deemed return on Rate Base in support of WNH's Revenue Deficiency calculation.

The 2006 Board Approved return on Rate Base is 7.64%. The actual earned return on actual Rate Base by 2009 was 7.11% due to a growing rate base and increased Distribution Expenses (see Table 6-3 for details). Based on most the recent Board Approved Cost of Capital (2010 Applications), the deemed return on Rate Base should be 7.08% ($40\% * 9.85\% + 4\% * 2.07\% + 56\% * 5.47\%$). The estimated return on Rate Base for 2011, using WNH's existing rates, is only 5.80%, as shown in Table 6-3. This return is far below the requested return on Rate Base of 7.08%.

WNH has determined its 2011 Net Income after Interest Expense to be \$6.02M. Table 6-3 provides the detailed Net Income and return on Rate Base calculation.

PILs and Interest Expenses presented in Table 6-3 are the actual expense incurred in the year and will be different from deemed PILs and Interest Expenses, with the exception of 2006 Board Approved, the 2010 Bridge Year and the 2011 Test Year. PILs and Interest Expenses for the 2010 Bridge Year and the 2011 Test Year are based on deemed PILs and Interest Expense amounts.

WNH also notes that as presented in Table 6-3 there was an Extraordinary Item in 2006. As described in Exhibit 3, WNH was required to correct a Hydro One Networks Inc. (HONI) billing error in which incorrect meters were being attributed to, and purchases were being charged to WNH, by the IESO. The error covered the period February 2001 through April 2006. The error was discovered in 2006 and interest was charged to HONI on the correction and this interest income is shown as an Extraordinary Item in 2006.

Table 6-3
Return on Rate Base

	2006 Board Approved	2006 Actual	2006 Actual vs. 2006 Board Approved	2007 Actual	2007 Actual vs. 2006 Actual	2008 Actual	2008 Actual vs. 2007 Actual	2009 Actual	2009 Actual vs. 2008 Actual	2010 Bridge	2010 Bridge vs. 2009 Actual	2011 Test	2011 Test vs. 2010 Bridge
Total Operating Revenue	24,718,896	25,112,913	394,017	26,551,790	1,438,877	26,483,635	(68,154)	26,111,943	(371,692)	25,109,283	(1,002,660)	30,036,603	4,927,320
-													
Distribution Expenses	14,228,719	14,383,258	154,539	14,692,570	309,312	15,299,831	607,261	15,680,250	380,419	17,445,530	1,765,280	18,000,168	554,639
=													
Net Income Before PILs and Interest	10,490,177	10,729,655	239,478	11,859,220	1,129,565	11,183,805	(675,415)	10,431,693	(752,112)	7,663,753	(2,767,940)	12,036,434	4,372,681
-													
PILs	3,030,475	3,121,702	91,227	3,327,778	206,076	2,116,796	(1,210,982)	2,323,039	206,243	112,443	(2,210,596)	1,212,310	1,099,867
=													
Net Income Before Interest	7,459,702	7,607,953	148,251	8,531,442	923,489	9,067,009	535,567	8,108,654	(958,355)	7,551,311	(557,343)	10,824,124	3,272,814
-													
Interest Expense	3,065,008	3,950,810	885,802	3,808,123	(142,686)	3,611,841	(196,283)	3,203,754	(408,087)	5,586,645	2,382,891	4,803,477	(783,168)
+													
Extraordinary Item	-	353,477	353,477	-	(353,477)	-	-	-	-	-	-	-	-
=													
Net Income After Interest	4,394,694	4,010,620	(384,074)	4,723,318	712,698	5,455,168	731,850	4,904,900	(550,268)	1,964,666	(2,940,234)	6,020,648	4,055,982
Rate Base	97,659,868	101,092,863	3,432,995	105,390,754	4,297,891	110,659,544	5,268,790	114,086,970	3,427,426	130,155,551	16,068,582	152,808,317	22,652,766
Return on Rate Base	7.64%	7.53%	-0.11%	8.10%	0.57%	8.19%	0.10%	7.11%	-1.09%	5.80%	-1.31%	7.08%	1.28%

REVENUE DEFICIENCY

WNH has provided detailed calculations supporting its 2011 Revenue Deficiency. WNH's net Revenue Deficiency is \$3.664M and, when grossed up for PILs, the Revenue Deficiency is \$5.012M. Tables 6-4 and 6-5 below provide the Revenue Deficiency calculations for the 2011 Test Year at existing 2010 Board-Approved rates and the resulting 2011 Test Year Revenue Requirement.

WNH notes Table 6-5 below includes 6005 and 6035 Interest Expense and Capital Tax amounts not included in Exhibit 4 – Operating Costs, Table 4-1.

The Revenue Deficiency arises from the following major factors:

- An increase to net Average Fixed Assets of \$50.89M from \$83.08M of 2006 Board Approved to \$133.97M in 2011.
- An increase in the Working Capital Allowance of \$4.26M from \$14.58M of 2006 Board Approved to \$18.84M in 2011.
- An decrease in the Cost of Capital of 0.56% from 7.64% of 2006 Board Approved to 7.08% in 2011.
- An increase in Distribution Expenses of \$3.77M from \$14.23M of 2006 Board Approved to \$18.0M in 2011.

Table 6-4
2011 Throughput Revenue at Existing 2010 Rates

[illegible]

Table 6-5
Revenue Deficiency Determination

Description	2010 Bridge Actual	2011 Test Existing Rates	2011 Test - Required Revenue
Revenue			
Revenue Deficiency			5,012,440
Distribution Revenue	24,432,409	23,968,200	23,968,200
Other Operating Revenue (Net)	676,874	1,055,963	1,055,963
Total Revenue	25,109,283	25,024,163	30,036,603
Costs and Expenses			
Administrative & General, Billing & Collecting	4,763,756	4,747,123	4,747,123
Operation & Maintenance	5,044,327	5,436,715	5,436,715
Depreciation & Amortization	7,464,713	7,816,331	7,816,331
Property Taxes	-	-	-
Capital Taxes	86,367	-	-
Deemed Interest	5,586,645	4,803,477	4,803,477
Total Costs and Expenses	22,945,808	22,803,645	22,803,645
Less OCT Included Above	86,367	0	0
Total Costs and Expenses Net of OCT	23,032,174	22,803,645	22,803,645
Utility Income Before Income Taxes	2,077,109	2,220,518	7,232,958
Income Taxes			
Corporate Income Taxes	112,443	(135,388)	1,212,310
Total Income Taxes	112,443	(135,388)	1,212,310
Utility Net Income	1,964,666	2,355,906	6,020,648
Capital Tax Expense Calculation			
Total Rate Base	130,155,551	152,808,317	152,808,317
Exemption	0	0	0
Deemed Taxable Capital	130,155,551	152,808,317	152,808,317
Ontario Capital Tax	86,367	0	0
Income Tax Expense Calculation			
Accounting Income	2,077,109	2,220,518	7,232,958
Tax Adjustments to Accounting Income	(1,516,155)	(2,724,063)	(2,724,063)
Taxable Income	560,953	(503,545)	4,508,895
Income Tax Expense	112,443	(135,388)	1,212,310
Tax Rate Reflecting Tax Credits	20.04%	26.89%	26.89%
Actual Return on Rate Base			
Rate Base	130,155,551	152,808,317	152,808,317
Interest Expense	5,586,645	4,803,477	4,803,477
Net Income	1,964,666	2,355,906	6,020,648
Total Actual Return on Rate Base	7,551,311	7,159,383	10,824,124
Actual Return on Rate Base	5.80%	4.69%	7.08%
Required Return on Rate Base			
Rate Base	130,155,551	152,808,317	152,808,317
Return Rates			
Return on Debt (Weighted)	7.15%	5.24%	5.24%
Return on Equity	9.00%	9.00%	9.00%
Deemed Interest Expense	5,586,645	4,803,477	4,803,477
Return On Equity	4,685,600	6,020,648	6,020,648
Total Return	10,272,245	10,824,124	10,824,124
Expected Return on Rate Base	7.89%	7.08%	7.08%
Revenue Deficiency After Tax	2,720,934	3,664,741	0
Revenue Deficiency Before Tax	3,403,077	5,012,440	0

Waterloo North Hydro Inc.
Application for Approval of 2011 Electricity Distribution Rates

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COST ALLOCATION OVERVIEW:

Introduction

On September 15, 2006, the OEB issued its directions on Cost Allocation Methodology for Electricity Distributors (the "Directions"). On November 15, 2006, the Board issued the Cost Allocation Information Filing Guidelines for Electricity Distributors (the "Guidelines"), the Cost Allocation Model (the "Model") and User Instructions (the "Instructions") for the Model. WNH prepared a cost allocation information filing consistent with WNH's understanding of the Directions, the Guidelines, the Model and the Instructions. WNH submitted this filing to the OEB on February 28, 2007.

The results of a cost allocation study are typically presented in the form of revenue-to-cost ratios. The ratio is shown by rate classification and is the percentage of Distribution Revenue collected by rate classification compared to the costs allocated to the rate classification. The percentage identifies the rate classifications that are being subsidized and those that are over-contributing. A percentage of less than 100% means the rate classification is under-contributing and is being subsidized by other classes of customers.

One of the main objectives of the filing was to provide information on any apparent cross-subsidization among a distributor's rate classifications. It was felt that this would give an indication of cross- subsidization from one class to another and this information would be useful as a tool in future rate applications. A percentage of greater than 100% indicates that the rate classification is over- contributing and is subsidizing other classes of customers.

SUMMARY OF RESULTS AND PROPOSED CHANGES

Cost Allocation Study Results

WNH has completed its Cost Allocation Study according to the Board's Minimum Filing Requirements issued June 28, 2010 for LDC's filing Cost of Service rate applications and includes the revenue- to-cost ratios requested by the Board.

Tables 7-1 through 7-4 are in the format of the Board's Appendix 2-O Cost Allocation tables as found in the Minimum Filing Requirements.

Table 7-1, Allocated Cost, outlines:

- Costs Previously Allocated from Run 2 of the Cost Allocation Informational Filing submitted by WNH on February 28, 2007 (EB-2006-0247 and EB-2007-0002) with the Transformer Allowance removed, and the percentage by rate class
- Costs Allocated in the 2011 Cost Allocation Filing and the percentage by rate class

WNH chose to present Run 2 as Run 1 of the original 2007 Cost Allocation Informational Filing did not include the Unmetered Scattered Load rate class.

On May 1, 2006 WNH became a host distributor, and in accordance with the Board's filing guidelines, it has included the Embedded Distributor rate class in its 2011 Cost Allocation model. WNH notes that the Embedded Distributor rate class was not included in its original Cost Allocation Informational Filing. WNH has not billed the Embedded Distributor any distribution charges since it became the host distributor.

Table 7-2, Calculated Class Revenues, outlines by rate class:

- Load Forecast for 2011 multiplied by the Current Approved Rates
- Load Forecast for 2011 multiplied by the Existing Rates multiplied by $(1/d)$, where $d = \text{Revenue Deficiency} / \text{Base Revenue Requirement}$
- Load Forecast for 2011 multiplied by the Proposed Rates
- Miscellaneous Revenue

Table 7-3, Re-balancing Revenue-to-Cost Ratios, outlines by rate class:

- Revenue-to-Cost Ratios as calculated by the 2007 Cost Allocation Informational Filing, adjusted to remove the transformer allowance
- Status Quo Revenue-to-Cost Ratios
- Proposed 2011 Revenue-to-Cost Ratios

Table 7-4, Proposed Revenue to Cost Ratios, outlines by rate class:

- Proposed 2011 Revenue-to-Cost Ratios, WNH has proposed to increase the Street Lighting rate class, to the lower percentage of the Board recommended range of 70% over three years, namely 2011, 2012 and 2013. WNH has increased the revenue-to-cost ratio percentage of Street Lighting to 60.6% in 2012 and decreased the Residential and USL rate classes as they were subsidizing the other rate classes
- Proposed 2012 Revenue-to-Cost Ratios, WNH has proposed to decrease the Residential and USL rate classes and increase the Street Lighting rate class, for its second incremental increase, to a revenue-to-cost ratio of 65%. WNH proposed to decrease the residential and USL rate classes as they are subsidizing the other rate classes
- Proposed 2013 Revenue-to-Cost Ratios, WNH has proposed to decrease the Residential and USL rate classes and increase the Street Lighting rate class, for its final increase, to reach the Board recommended lower percentage of its range, to 70%. WNH proposed to decrease the residential and USL rate classes as they are subsidizing the other rate classes

**Table 7-1
Allocated Cost**

Classes	Cost Allocated in Previous Study 2007 Informational Filing ¹	%	Cost Allocated in Test Year Study (Column 7A)	%
Residential	12,978,862	52.7%	15,097,498	50.3%
GS<50kW	4,223,115	17.2%	4,985,944	16.6%
GS >50kW	6,373,165	25.9%	8,742,266	29.1%
Large User	723,608	2.9%	657,778	2.2%
Streetlights	204,443	0.8%	437,953	1.5%
USL	119,976	0.5%	114,291	0.4%
Embedded Distributor		0.0%	873	0.0%
Total	24,623,169	100%	30,036,603	100.0%

**Table 7-2
Calculated Class Revenues**

Classes	Column 7B	Column 7C	Column 7D	Column 7E
	L.F x Current Approved Rates ²	L.F x Existing rates x (1+d)	L.F x Proposed Rates	Miscellaneous Revenue
Residential	12,998,073	15,716,344	15,705,203	625,839
GS<50kW	3,727,692	4,507,259	4,507,259	179,218
GS >50kW	6,446,293	7,794,398	7,794,397	232,488
Large User	480,829	581,384	581,384	9,678
Streetlights	197,834	239,207	259,710	5,690
USL	117,480	142,049	131,840	3,023
Embedded Distributor	-	-	846	27
Total	23,968,200	28,980,640	28,980,640	1,055,963

d = Revenue Deficiency / Base Revenue Requirement

5,012,440
23,968,200
20.91%

² Excludes Transformer Allowance

Table 7-3
Re-balancing Revenue-to-Cost Ratios

Classes	Previously Approved Ratios	Status Quo Ratios	Proposed Ratios
	2007 Filing ¹	= Columns 7C+7E / 7A)	= Columns 7D + 7E / 7A
Residential	98.58%	108.24%	108.17%
GS<50kW	93.15%	93.99%	93.99%
GS >50kW	108.02%	91.82%	91.82%
Large User	95.47%	89.86%	89.86%
Streetlights	89.02%	55.92%	60.60%
USL	114.72%	126.93%	118.00%
Embedded Distributor	0.00%	3.09%	100.00%

¹ Adjusted to remove Transformer Allowance

Table 7-4
Proposed Revenue-to-Cost Ratios

Classes	Proposed Revenue-to-Cost Ratios			Policy Range
	2011	2012	2013	
	%	%	%	
Residential	108.17%	108.07%	107.96%	85 - 115
GS<50kW	93.99%			80 - 120
GS >50kW	91.82%			80 - 180
Large User	89.86%			85 - 115
Streetlights	60.60%	65.00%	70.00%	70 - 120
USL	118.00%	115.00%	110.00%	80 - 120
Embedded Distributor	100.00%			

INITIAL COST ALLOCATION STUDY

The data used in the original Cost Allocation Model was consistent with WNH's cost data that supported its 2006 OEB-approved distribution rates. Details of the preparation and results of Run 2 of WNH's 2007 cost allocation study are as follows:

- The preparation of the Cost Allocation study followed the guidelines released by the Ontario Energy Board ("OEB") on September 29, 2006 (RP-2005-0317).
- Having filed its 2006 electricity distribution rate application (EB-2005-0448) on a historical test year, WNH's cost allocation model used WNH's actual Board-approved 2004 trial balance and results from the 2006 EDR process.
- WNH purchased the use of the provincial generic load shape using data generated by the Joint Load Data Research Study.
- The Hydro One Load Research team conducted the analysis on WNH's behalf to develop a utility specific load shape, which was input into the Board's cost allocation model.
- WNH, together with two other local utilities, outsourced an appliance saturation survey after successfully passing the Chi Square Test.
- WNH did not perform any direct allocation of costs to rate classifications.
- Standard weighting factors calculated by the model for meter capital and meter reading costs were used without revision, however, where standard weighting factors were not available, WNH calculated the relative weighting.
- Fixed assets were broken out into primary and secondary distribution functions, as well as >50kV and <50kV.
- The breakout of assets, capital contributions, depreciation, accumulated depreciation, customer data and load data by primary, line transformer and secondary categories were developed from the best data available to WNH, its engineering records, and its customer and financial information systems.
- WNH does not have any bulk transmission.
- Street Light Connections used in the model were based on the number of relay-controlled street lights physically connected to the system.
- As WNH does not have any Street Light Customers on its secondary, it was necessary to adjust Sheet E3 PLCC, cell I23 to 0 as the formula in E3 assumed that all street light connections were on secondary.

INITIAL COST ALLOCATION STUDY WITH TRANSFORMER ALLOWANCE REMOVED

WNH's approved transformer allowance calculated through the 2006 EDR was \$744,464 and this amount was removed from Sheet I3, cell F15. Although the transformer allowance was only to be paid on the GS > 50 kW and the Large User rate classes, the model in Sheet 7-1 allocated the transformer allowance to all rate classes. Table 7-5 reflects the adjustment made to the initial Informational Cost Allocation Filing in Sheet I6, Row 29 as follows:

Table 7-5
2007 Removal of Transformer Allowance by Rate Class

Rate Class	2006 EDR Sheet 7-1			Base Rev Req Net of Tx Allow
	Column Y Class Allocn %	Cell AK121 Tx Allow	Column AK Base Rev Req	
Tx Allowance		744,464		
Res	51.6%	384,505	12,584,541	12,200,036
<50	15.9%	118,533	3,879,492	3,760,959
>50	28.2%	210,205	6,879,858	6,669,653
LU	2.9%	21,371	699,447	678,076
USL	0.6%	4,221	138,158	133,937
St Lt	0.8%	5,629	184,240	178,611
Total	100.0%	744,464	24,365,736	23,621,272

Table 7-6 demonstrates that the removal of the transformer allowance in the 2007 Informational Cost Allocation Filing only resulted in slight changes.

Table 7-6
2007 Comparison of Revenue-to-Cost Ratios with Transformer Allowance
Removed and Included

Classes	2007 Filing with Transformer Allowance Removed	2007 Filing with Transformer Allowance Included
Residential	98.58%	98.23%
GS<50kW	93.15%	92.82%
GS >50kW	108.02%	108.70%
Large User	95.47%	99.14%
Streetlights	89.02%	86.90%
USL	114.72%	114.50%
Embedded Distributor	0.00%	0.00%

Results

A summary of the Revenue-to-Cost Ratio results, by rate classification, for Run # 2 in this initial Cost Allocation Study is as shown in Table 7-3. All rate classifications fell with the Board's Policy Range as per the Board's report of November 28, 2007, *Application of Cost Allocation for Electricity Distributors* (EB-2007-0667).

The results of the 2nd run demonstrated the following for each rate classification:

- The revenue generated by the Residential rate class falls slightly below the costs of servicing them.
- The revenue generated by the GS <50kW rate class falls slightly below the costs of servicing them.
- The revenue generated from the GS>50kW rate class exceeded the cost of servicing them.
- The revenue generated by the Large User rate class falls slightly below the costs of servicing them.
- The revenue generated by the Street Lighting class falls somewhat below the costs of servicing them.
- The revenue generated from the USL rate class exceeded the cost of servicing them.

PROPOSED 2011 COST ALLOCATION MODEL

WNH ran the Cost Allocation model based on the Board's Minimum Filing Requirements issued June 28, 2010 and followed the cost allocation policies reflected in the Board's report of November 28, 2007, *Application of Cost Allocation for Electricity Distributors*, (EB-2007-0667).

Details of the preparation of the Cost Allocation study are as follows:

- The preparation of the Cost Allocation study followed the guidelines released by the Ontario Energy Board ("OEB") on September 29, 2006 (RP-2005-0317).
- As part of WNH's 2011 electricity distribution rate application, this Cost Allocation Study has been prepared on a future test year basis, using the forecasted 2011 Trial Balance.
- WNH purchased the use of the provincial generic load shape using data generated by the Joint Load Data Research Study in 2006.
- The Hydro One Load Research team conducted the analysis on WNH's behalf to develop a utility specific load shape for the 2007 Cost Allocation Study.
- This load shape was maintained, except as detailed below, however, the data was repopulated with forecast 2011 consumption data. One adjustment was required to be made to the load shape. In the 2007 Filing WNH had 2 large users, however, in 2009, WNH had one of its large users move to the GS>50kW rate class. WNH adjusted the GS>50kW and Large User load shapes to reflect this transfer.
- WNH, together with two other local utilities, outsourced an appliance saturation survey after successfully passing the Chi Square Test for the 2007 Cost Allocation Study.
- For the 2011 Cost Allocation Study, WNH did not perform another appliance saturation study as it has been assumed that the appliance saturation study results have not changed materially since the original study was performed.

- 1 • As required by the Board's Filing Requirements, WNH modeled the Embedded
2 Distributor rate class as part of the study. WNH became a Host Distributor in May 2006,
3 however, WNH's costs are extremely minimal. WNH does not have any capital costs as
4 the Embedded Distributor owns its own circuits. WNH, thus, did not include load data in
5 I-8 for this customer, as no plant capital costs or O&M costs were to be assigned to this
6 class. The Embedded Distributor's wires are attached to WNH poles and the Embedded
7 Distributor pays pole rental revenue to WNH. WNH reads and bills this one account
8 monthly.
- 9 • The total amount of distribution revenue from the 2011 trial balance was included in the
10 Cost Allocation Study, with the exception of Low Voltage and Transformer Allowance
11 (revenue and cost).
- 12 • Standard weighting factors calculated by the model for meter capital and meter reading
13 costs were used without revision, however, where standard weighting factors were not
14 available, WNH calculated the relative weighting.
- 15 • The number of customers was obtained from the 2011 Load Forecast. The default
16 weighting factors were used for services and billings.
- 17 • Fixed assets were broken out into primary and secondary distribution functions, as well
18 as >50kV and <50kV.
- 19 • The breakout of assets, capital contributions, depreciation, accumulated depreciation,
20 customer data and load data by primary, line transformer and secondary categories
21 were developed from the best data available to WNH, its engineering records, and its
22 customer and financial information systems.
- 23 • WNH does not have any bulk transmission.
- 24 • The number of street light connections was revised. In the 2007 Filing, all street light
25 connections were reflected as relay controlled streetlights. Thus, the number of physical
26 street light connections was 1,032 (12,091 street light connections divided by the ratio of
27 11.7 of street light connections per relay controlled streetlight). In the intervening period,
28 WNH has shifted its focus from solely installing relay controlled streetlights, to installing
29 one photo-eye per street light connection (thus, individually connected), depending on
30 the area in which it is being installed. In 2011, the street light connections reflect a
31 mixture a relay controlled street lights and individually installed photo-eye street light
32 connections. Data was sourced from WNH's GIS and mapping systems. Directly
33 connected individual connections of 1,357 and 1,287 Relay Controlled Connections total
34 the 2,644 Street Light Connections used in this study

- As WNH does not have any Street Light Customers on its secondary, it was necessary to adjust Sheet E3 PLCC, cell I23 to 0 as the formula in E3 assumed that all street light connections were on secondary.
- In the calculation of Sheet O2 Scenario 3 Minimum System Cost Adjusted for PLCC – High Limit Fixed Customer Charge, WNH discovered, in regards to account 1820-3 Distribution Station Equipment – Normally Primary Below 50 kV (Wholesale Meters), that in Sheet O2 the Capital Cost of this account was not being included in the Distribution Plant section of the calculation (Rows 143 to 162), however, the Accumulated Depreciation for this account was being included in Sheet O7 Row 175. WNH discovered this when its Large Use rate class with one customer, had a lower Customer Unit Charge per month – Minimum System with PLCC adjustment (ceiling) than the Customer Unit Charge per month – Avoided Cost (floor). WNH adjusted Sheet O2 Row 167 by changing the formula to subtract Sheet O7 Row 175 for each applicable rate class.

INPUT AND OUTPUT SHEETS

In accordance with the Minimum Filing Guidelines, WNH has provided the Cost Allocation Model Sheets I-6, I-8, O-1, O-2 and E-4 below.

Sheet I-6



2011 COST ALLOCATION STUDY

Saturday, January 00, 1900

Sheet I6 Customer Data Worksheet - Second Run PUBLIC

Total kWhs	1,373,685,721
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Total kW	1,808,031
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Total Approved Distribution Revenue (\$)	\$28,980,640
--	--------------

			1	2	3	6	7	9	10
	ID	Total	Residential	GS <50	GS>50-Regular	Large Use >5MW	Street Light	Unmetered Scattered Load	Embedded Distributor
Billing Data									
kWh from load forecasting model	CEN	1,373,685,721	382,563,062	175,321,434	699,105,747	78,636,807	7,792,006	1,648,666	28,618,000
kW from load forecasting model	CDEM	1,808,031			1,566,291	148,593	21,547		71,600
kW, included in CDEM, from customers with line transformer allowance from approved EDR model, Sheet 6-3, Col P		1,121,047	797	124,353	995,897				
Optional - kWh, included in CEN, from customers that receive a line transformation allowance on a kWh basis. In most cases this will not be applicable and will be left blank.		-							
KWh excluding KWh from Wholesale Market Participants	CEN EWMP	1,345,067,721	382,563,062	175,321,434	699,105,747	78,636,807	7,792,006	1,648,666	-
kWh - weather normalized amount from load forecast		1,345,067,721	382,563,062	175,321,434	699,105,747	78,636,807	7,792,006	1,648,666	-
Proposed Distribution Rev	CREV	\$28,980,640	15,716,343.99	4,507,258.98	7,794,397.61	581,384.02	239,206.60	142,048.70	\$0
Bad Debt	BDHA	\$100,000	\$48,712	\$12,646	\$38,643	\$0	\$0	\$0	\$0
Late Payment 3 Year Historical Average	LPHA	\$181,238	\$102,868	\$32,479	\$45,289		\$2	\$601	
Weighting Factor - Services			1.0	2.0	10.0	30.0	1.0	1.0	1.0
Weighting Factor - Billings			1.0	2.0	7.0	15.0	1.0	5.0	1.0
Number of Bills	CNB	317,274	275,478	33,516	8,028	12	72	156	12
Number of Connections (Unmetered)	CCON	3,196					2,644	551	
Total Number of Customer from Approved EDR, Sheet 7-1, Col H excluding connections	CCA	52,013	45,913	5,412	668	1	6	13	
Bulk Customer Base	CCB	-							
Primary Customer Base	CCP	52,013	45,913	5,412	668	1	6	13	
Line Transformer Customer Base	CCLT	50,950	45,328	5,075	528		6	13	
Secondary Customer Base	CCS	48,565	43,252	4,689	611			13	
Weighted - Services	CWCS	61,938	43,252	9,379	6,112	-	2,644	551	-
Weighted Meter -Capital	CWMC	6,528,690	3,831,980	1,056,910	1,619,800	20,000	-	-	-
Weighted Meter Reading	CWMR	706,547	403,546	125,265	177,621	58	-	-	58
Weighted Bills	CWNB	399,750	275,478	67,032	56,196	180	72	780	12
Data Mismatch Analysis									
Revenue with 30 year weather normalized kWh		28,980,640	15,716,344	4,507,259	7,794,398	581,384	239,207	142,049	-

Sheet I-8



2011 COST ALLOCATION STUDY

Saturday, January 00, 1900

Sheet I8 Demand Data Worksheet - Second Run PUBLIC

This is an input sheet for demand allocators.

CP TEST RESULTS	12 CP
NCP TEST RESULTS	4 NCP

Co-incident Peak	Indicator
1 CP	CP 1
4 CP	CP 4
12 CP	CP 12

Non-co-incident Peak	Indicator
1 NCP	NCP 1
4 NCP	NCP 4
12 NCP	NCP 12

		1	2	3	6	7	9	10
Customer Classes	Total	Residential	GS <50	GS>50-Regular	Large Use >5MW	Street Light	Unmetered Scattered Load	Embedded Distributor
CO-INCIDENT PEAK								
1 CP								
Transformation CP TCP1	191,626	53,256	40,479	88,594	8,990	-	307	
Bulk Delivery CP BCP1	-							
Total Sytem CP DCP1	233,462	64,883	49,316	107,936	10,953	-	374	
4 CP								
Transformation CP TCP4	741,448	240,792	134,660	327,315	34,522	2,833	1,326	
Bulk Delivery CP BCP4	-							
Total Sytem CP DCP4	888,068	288,408	161,289	392,041	41,349	3,393	1,588	
12 CP								
Transformation CP TCP12	2,116,178	670,441	395,931	939,436	97,156	9,254	3,960	
Bulk Delivery CP BCP12	-							
Total Sytem CP DCP12	2,492,847	789,776	466,405	1,106,651	114,449	10,901	4,665	
NON CO-INCIDENT PEAK								
1 NCP								
Classification NCP from								
Load Data Provider DNCP1	265,291	88,135	50,580	111,033	13,384	1,741	418	
Primary NCP PNCP1	265,291	88,135	50,580	111,033	13,384	1,741	418	-
Line Transformer NCP LTNCP1	224,372	87,012	47,431	87,770		1,741	418	
Secondary NCP SNCP1	230,571	83,027	43,824	101,561		1,741	418	
4 NCP								
Classification NCP from								
Load Data Provider DNCP4	1,019,646	341,892	190,666	428,189	50,326	6,922	1,650	
Primary NCP PNCP4	1,019,646	341,892	190,666	428,189	50,326	6,922	1,650	
Line Transformer NCP LTNCP4	863,378	337,536	178,794	338,476		6,922	1,650	
Secondary NCP SNCP4	887,508	322,077	165,196	391,663		6,922	1,650	
12 NCP								
Classification NCP from								
Load Data Provider DNCP12	2,805,027	919,667	509,034	1,216,556	134,840	20,174	4,757	
Primary NCP PNCP12	2,805,027	919,667	509,034	1,216,556	134,840	20,174	4,757	
Line Transformer NCP LTNCP12	2,371,883	907,949	477,338	961,665		20,174	4,757	
Secondary NCP SNCP12	2,445,109	866,365	441,034	1,112,779		20,174	4,757	

Sheet O-1



2011 COST ALLOCATION STUDY

Saturday, January 00, 1900

Sheet O1 Revenue to Cost Summary Worksheet - Second Run PUBLIC

Class Revenue, Cost Analysis, and Return on Rate Base

Rate Base Assets	Total	1	2	3	6	7	9	10
		Residential	GS <50	GS>50-Regular	Large Use >5MW	Street Light	Unmetered Scattered Load	Embedded Distributor
crev Distribution Revenue (sale)	\$28,980,640	\$15,716,344	\$4,507,259	\$7,794,398	\$581,384	\$239,207	\$142,049	\$0
mi Miscellaneous Revenue (mi)	\$1,055,963	\$625,839	\$179,218	\$232,488	\$9,678	\$5,690	\$3,023	\$27
Total Revenue	\$30,036,603	\$16,342,183	\$4,686,477	\$8,026,885	\$591,062	\$244,896	\$145,072	\$27
Expenses								
di Distribution Costs (di)	\$5,020,748	\$2,395,154	\$830,268	\$1,549,189	\$140,118	\$85,042	\$20,882	\$96
cu Customer Related Costs (cu)	\$2,604,906	\$1,701,692	\$432,769	\$464,352	\$2,119	\$329	\$3,568	\$76
ad General and Administration (ad)	\$2,558,184	\$1,372,500	\$423,742	\$676,983	\$47,880	\$28,791	\$8,231	\$58
dep Depreciation and Amortization (dep)	\$7,816,331	\$3,975,795	\$1,278,351	\$2,233,067	\$155,515	\$138,905	\$34,439	\$259
INPUT PILs (INPUT)	\$1,212,310	\$569,306	\$203,536	\$384,617	\$31,439	\$18,622	\$4,751	\$39
INT Interest	\$4,803,477	\$2,255,732	\$806,462	\$1,523,949	\$124,571	\$73,784	\$18,825	\$153
Total Expenses	\$24,015,955	\$12,270,178	\$3,975,129	\$6,832,158	\$501,642	\$345,472	\$90,696	\$681
Direct Allocation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
NI Allocated Net Income (NI)	\$6,020,648	\$2,827,320	\$1,010,815	\$1,910,108	\$156,136	\$92,481	\$23,595	\$192
Revenue Requirement (includes NI)	\$30,036,603	\$15,097,498	\$4,985,944	\$8,742,266	\$657,778	\$437,953	\$114,291	\$873
Revenue Requirement Input equals Output								
Rate Base Calculation								
Net Assets								
dp Distribution Plant - Gross	\$245,115,843	\$120,926,060	\$40,474,089	\$73,315,321	\$5,343,943	\$4,013,541	\$1,029,673	\$13,216
gp General Plant - Gross	\$23,329,876	\$11,214,709	\$3,884,876	\$7,216,361	\$550,258	\$367,611	\$95,441	\$620
accum dep Accumulated Depreciation	(\$109,118,578)	(\$55,551,954)	(\$17,827,911)	(\$31,248,858)	(\$2,136,316)	(\$1,870,622)	(\$473,316)	(\$9,600)
co Capital Contribution	(\$25,358,551)	(\$13,604,315)	(\$4,047,820)	(\$6,831,746)	(\$298,910)	(\$450,104)	(\$125,657)	\$0
Total Net Plant	\$133,968,590	\$62,984,500	\$22,483,235	\$42,451,078	\$3,458,975	\$2,060,425	\$526,141	\$4,236
Directly Allocated Net Fixed Assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
COP Cost of Power (COP)	\$115,414,347	\$32,768,484	\$15,017,178	\$59,881,986	\$6,735,645	\$667,425	\$141,217	\$202,412
OM&A Expenses	\$10,183,838	\$5,469,345	\$1,686,779	\$2,690,524	\$190,116	\$114,161	\$32,681	\$230
Directly Allocated Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$125,598,185	\$38,237,830	\$16,703,957	\$62,572,510	\$6,925,761	\$781,587	\$173,898	\$202,642
Working Capital	\$18,839,728	\$5,735,674	\$2,505,594	\$9,385,877	\$1,038,864	\$117,238	\$26,085	\$30,396
Total Rate Base	\$152,808,318	\$68,720,174	\$24,988,828	\$51,836,954	\$4,497,839	\$2,177,663	\$552,226	\$34,633
Rate Base Input equals Output								
Equity Component of Rate Base	\$61,123,327	\$27,488,070	\$9,995,531	\$20,734,782	\$1,799,136	\$871,065	\$220,890	\$13,853
Net Income on Allocated Assets	\$6,020,648	\$4,072,005	\$711,348	\$1,194,728	\$89,421	(\$100,576)	\$54,376	(\$654)
Net Income on Direct Allocation Assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Income	\$6,020,648	\$4,072,005	\$711,348	\$1,194,728	\$89,421	(\$100,576)	\$54,376	(\$654)
RATIOS ANALYSIS								
REVENUE TO EXPENSES %	100.00%	108.24%	93.99%	91.82%	89.86%	55.92%	126.93%	3.09%
EXISTING REVENUE MINUS ALLOCATED COSTS	\$0	\$1,244,685	(\$299,467)	(\$715,381)	(\$66,716)	(\$193,057)	\$30,781	(\$846)
RETURN ON EQUITY COMPONENT OF RATE BASE	9.85%	14.81%	7.12%	5.76%	4.97%	-11.55%	24.62%	-4.72%

Sheet O-2



2011 COST ALLOCATION STUDY

Saturday, January 00, 1900

Sheet O2 Monthly Fixed Charge Min. & Max. Worksheet - Second Run PUBLIC

Output sheet showing minimum and maximum level for
Monthly Fixed Charge

Summary

	1	2	3	6	7	9	10
	Residential	GS <50	GS>50-Regular	Large Use >5MW	Street Light	Unmetered Scattered Load	Embedded Distributor
Customer Unit Cost per month - Avoided Cost	\$3.34	\$7.24	\$65.24	\$322.22	\$0.01	\$0.40	\$0.00
Customer Unit Cost per month - Directly Related	\$4.34	\$9.41	\$83.58	\$389.31	\$0.01	\$0.57	\$0.00
Customer Unit Cost per month - Minimum System with PLCC Adjustment	\$15.47	\$22.49	\$120.95	\$466.32	\$10.19	\$11.78	\$0.00
Fixed Charge per approved 2010 Rates	\$14.56	\$30.63	\$187.01	\$6,686.47	\$0.33	\$15.31	\$0.00

Information to be Used to Allocate PILs, ROD, ROE and A&G

		1	2	3	6	7	9	10
	Total	Residential	GS <50	GS>50-Regular	Large Use >5MW	Street Light	Unmetered Scattered Load	Embedded Distributor
General Plant - Gross Assets	\$23,329,876	\$11,214,709	\$3,884,876	\$7,216,361	\$550,258	\$367,611	\$95,441	\$620
General Plant - Accumulated Depreciation	(\$16,814,116)	(\$8,082,573)	(\$2,799,876)	(\$5,200,916)	(\$396,577)	(\$264,941)	(\$68,786)	(\$447)
General Plant - Net Fixed Assets	\$6,515,760	\$3,132,136	\$1,085,000	\$2,015,445	\$153,680	\$102,669	\$26,656	\$173
General Plant - Depreciation	\$757,223	\$363,999	\$126,092	\$234,223	\$17,860	\$11,932	\$3,098	\$20
Total Net Fixed Assets Excluding General Plant	\$127,452,830	\$59,852,364	\$21,398,234	\$40,435,633	\$3,305,294	\$1,957,756	\$499,485	\$4,063
Total Administration and General Expense	\$2,558,184	\$1,372,500	\$423,742	\$676,983	\$47,880	\$28,791	\$8,231	\$58
Total O&M	\$7,625,654	\$4,096,846	\$1,263,037	\$2,013,541	\$142,237	\$85,371	\$24,450	\$172

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Scenario 1

Accounts included in Avoided Costs Plus General Administration Allocation

USoA Account #	Accounts	Total	1 Residential	2 GS <50	3 GS>50-Regular	6 Large Use >5MW	7 Street Light	9 Unmetered Scattered Load	10 Embedded Distributor	
1860	Distribution Plant									
	Meters	\$9,646,131	\$5,661,746	\$1,561,583	\$2,393,252	\$29,550	\$0	\$0	\$0	CWMC
	Accumulated Amortization									
	Accum. Amortization of Electric Utility Plant - Meters only	(\$5,917,991)	(\$3,473,533)	(\$958,046)	(\$1,468,282)	(\$18,129)	\$0	\$0	\$0	
	Meter Net Fixed Assets	\$3,728,141	\$2,188,212	\$603,537	\$924,970	\$11,421	\$0	\$0	\$0	
	Misc Revenue									
4082	Retail Services Revenues	(\$26,000)	(\$17,917)	(\$4,360)	(\$3,655)	(\$12)	(\$5)	(\$51)	(\$1)	CWNB
4084	Service Transaction Requests (STR) Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	CWNB
4090	Electric Services Incidental to Energy Sales	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	CWNB
4220	Other Electric Revenues	(\$9,000)	(\$4,226)	(\$1,511)	(\$2,855)	(\$233)	(\$138)	(\$35)	(\$0)	NFA
4225	Late Payment Charges	(\$180,000)	(\$102,165)	(\$32,257)	(\$44,980)	\$0	(\$1)	(\$597)	\$0	LPHA
	Sub-total	(\$215,000)	(\$124,309)	(\$38,128)	(\$51,490)	(\$245)	(\$144)	(\$683)	(\$1)	
	Operation									
5065	Meter Expense	\$405,255	\$237,862	\$65,606	\$100,546	\$1,241	\$0	\$0	\$0	CWMC
5070	Customer Premises - Operation Labour	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	CCA
5075	Customer Premises - Materials and Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	CCA
	Sub-total	\$405,255	\$237,862	\$65,606	\$100,546	\$1,241	\$0	\$0	\$0	
	Maintenance									
5175	Maintenance of Meters	\$10,711	\$6,287	\$1,734	\$2,658	\$33	\$0	\$0	\$0	1860
	Billing and Collection									
5310	Meter Reading Expense	\$260,318	\$148,681	\$46,152	\$65,442	\$21	\$0	\$0	\$21	CWMB
5315	Customer Billing	\$1,207,472	\$832,100	\$202,475	\$169,744	\$544	\$217	\$2,356	\$36	CWNB
5320	Collecting	\$581,187	\$400,511	\$97,456	\$81,702	\$262	\$105	\$1,134	\$17	CWNB
5325	Collecting- Cash Over and Short	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	CWNB
5330	Collection Charges	(\$77,500)	(\$53,407)	(\$12,996)	(\$10,895)	(\$35)	(\$14)	(\$151)	(\$2)	CWNB
	Sub-total	\$1,971,477	\$1,327,885	\$333,088	\$305,993	\$792	\$308	\$3,339	\$73	
	Total Operation, Maintenance and Billing	\$2,387,444	\$1,572,034	\$400,427	\$409,196	\$2,066	\$308	\$3,339	\$73	
	Amortization Expense - Meters	\$331,317	\$194,465	\$53,636	\$82,201	\$1,015	\$0	\$0	\$0	
	Allocated PILs	\$33,727	\$19,779	\$5,464	\$8,380	\$104	\$0	\$0	\$0	
	Allocated Debt Return	\$133,634	\$78,369	\$21,649	\$33,205	\$411	\$0	\$0	\$0	
	Allocated Equity Return	\$167,496	\$98,227	\$27,134	\$41,620	\$516	\$0	\$0	\$0	
	Total	\$2,838,618	\$1,838,565	\$470,182	\$523,113	\$3,867	\$164	\$2,656	\$72	

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Scenario 2

Accounts included in Directly Related Customer Costs Plus General Administration Allocation

USoA Account #	Accounts	Total	1 Residential	2 GS <50	3 GS>50-Regular	6 Large Use >5MW	7 Street Light	9 Unmetered Scattered Load	10 Embedded Distributor	
1860	<u>Distribution Plant</u>									
	Meters	\$9,646,131	\$5,661,746	\$1,561,583	\$2,393,252	\$29,550	\$0	\$0	\$0	CWMC
	<u>Accumulated Amortization</u>									
	Accum. Amortization of Electric Utility Plant - Meters only	(\$5,917,991)	(\$3,473,533)	(\$958,046)	(\$1,468,282)	(\$18,129)	\$0	\$0	\$0	
	Meter Net Fixed Assets	\$3,728,141	\$2,188,212	\$603,537	\$924,970	\$11,421	\$0	\$0	\$0	
	Allocated General Plant Net Fixed Assets	\$191,748	\$114,511	\$30,602	\$46,104	\$531	\$0	\$0	\$0	
	Meter Net Fixed Assets Including General Plant	\$3,919,889	\$2,302,724	\$634,140	\$971,073	\$11,952	\$0	\$0	\$0	
	<u>Misc Revenue</u>									
4082	Retail Services Revenues	(\$26,000)	(\$17,917)	(\$4,360)	(\$3,655)	(\$12)	(\$5)	(\$51)	(\$1)	CWNB
4084	Service Transaction Requests (STR) Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	CWNB
4090	Electric Services Incidental to Energy Sales	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	CWNB
4220	Other Electric Revenues	(\$9,000)	(\$4,226)	(\$1,511)	(\$2,855)	(\$233)	(\$138)	(\$35)	(\$0)	NFA
4225	Late Payment Charges	(\$180,000)	(\$102,165)	(\$32,257)	(\$44,980)	\$0	(\$1)	(\$597)	\$0	LPHA
	Sub-total	(\$215,000)	(\$124,309)	(\$38,128)	(\$51,490)	(\$245)	(\$144)	(\$683)	(\$1)	
	<u>Operation</u>									
5065	Meter Expense	\$405,255	\$237,862	\$65,606	\$100,546	\$1,241	\$0	\$0	\$0	CWMC
5070	Customer Premises - Operation Labour	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	CCA
5075	Customer Premises - Materials and Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	CCA
	Sub-total	\$405,255	\$237,862	\$65,606	\$100,546	\$1,241	\$0	\$0	\$0	
	<u>Maintenance</u>									
5175	Maintenance of Meters	\$10,711	\$6,287	\$1,734	\$2,658	\$33	\$0	\$0	\$0	1860
	<u>Billing and Collection</u>									
5310	Meter Reading Expense	\$260,318	\$148,681	\$46,152	\$65,442	\$21	\$0	\$0	\$21	CWMR
5315	Customer Billing	\$1,207,472	\$832,100	\$202,475	\$169,744	\$544	\$217	\$2,356	\$36	CWNB
5320	Collecting	\$581,187	\$400,511	\$97,456	\$81,702	\$262	\$105	\$1,134	\$17	CWNB
5325	Collecting- Cash Over and Short	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	CWNB
5330	Collection Charges	(\$77,500)	(\$53,407)	(\$12,996)	(\$10,895)	(\$35)	(\$14)	(\$151)	(\$2)	CWNB
	Sub-total	\$1,971,477	\$1,327,885	\$333,088	\$305,993	\$792	\$308	\$3,339	\$73	
	Total Operation, Maintenance and Billing	\$2,387,444	\$1,572,034	\$400,427	\$409,196	\$2,066	\$308	\$3,339	\$73	
	Amortization Expense - Meters	\$331,317	\$194,465	\$53,636	\$82,201	\$1,015	\$0	\$0	\$0	
	Amortization Expense - General Plant assigned to Meters	\$22,284	\$13,308	\$3,556	\$5,358	\$62	\$0	\$0	\$0	
	Admin and General	\$800,520	\$526,653	\$134,341	\$137,578	\$696	\$104	\$1,124	\$24	
	Allocated PILs	\$35,461	\$20,814	\$5,741	\$8,798	\$109	\$0	\$0	\$0	
	Allocated Debt Return	\$140,507	\$82,470	\$22,746	\$34,861	\$430	\$0	\$0	\$0	
	Allocated Equity Return	\$176,111	\$103,367	\$28,510	\$43,694	\$539	\$0	\$0	\$0	
	Total	\$3,678,644	\$2,388,802	\$610,829	\$670,196	\$4,672	\$268	\$3,780	\$96	

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Scenario 3

Minimum System Customer Costs Adjusted for PLCC - High Limit Fixed Customer Charge

USoA Account #	Accounts	Total	1	2	3	6	7	9	10	
			Residential	GS <50	GS>50-Regular	Large Use >5MW	Street Light	Unmetered Scattered Load	Embedded Distributor	
Distribution Plant										
1565	Conservation and Demand Management									CDMPP
	Expenditures and Recoveries	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
1830	Poles, Towers and Fixtures	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	#N/A
	Poles, Towers and Fixtures - Subtransmission Bulk									BCP
1830-3	Delivery	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
1830-4	Poles, Towers and Fixtures - Primary	\$17,623,296	\$14,660,949	\$1,728,244	\$213,370	\$319	\$844,338	\$176,076	\$0	PNCP
1830-5	Poles, Towers and Fixtures - Secondary	\$1,501,104	\$1,322,213	\$143,351	\$18,684	\$0	\$0	\$16,857	\$0	SNCP
1835	Overhead Conductors and Devices	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	#N/A
	Overhead Conductors and Devices -									BCP
1835-3	Subtransmission Bulk Delivery	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
1835-4	Overhead Conductors and Devices - Primary	\$8,189,646	\$6,813,026	\$803,125	\$99,154	\$148	\$392,369	\$81,824	\$0	PNCP
1835-5	Overhead Conductors and Devices - Secondary	\$762,521	\$671,649	\$72,818	\$9,491	\$0	\$0	\$8,563	\$0	SNCP
1840	Underground Conduit	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	#N/A
1840-3	Underground Conduit - Bulk Delivery	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	BCP
1840-4	Underground Conduit - Primary	\$2,238,563	\$1,862,277	\$219,527	\$27,103	\$41	\$107,250	\$22,366	\$0	PNCP
1840-5	Underground Conduit - Secondary	\$3,173,403	\$2,795,219	\$303,050	\$39,500	\$0	\$0	\$35,636	\$0	SNCP
1845	Underground Conductors and Devices	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	#N/A
										BCP
1845-3	Underground Conductors and Devices - Bulk Delivery	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
1845-4	Underground Conductors and Devices - Primary	\$6,088,106	\$5,064,740	\$597,035	\$73,710	\$110	\$291,683	\$60,827	\$0	PNCP
										SNCP
1845-5	Underground Conductors and Devices - Secondary	\$7,152,717	\$6,300,304	\$683,061	\$89,030	\$0	\$0	\$80,321	\$0	
1850	Line Transformers	\$17,064,473	\$14,290,425	\$1,600,062	\$166,524	\$0	\$833,621	\$173,841	\$0	LTNCP
1855	Services	\$21,366,409	\$14,920,380	\$3,235,251	\$2,108,417	\$0	\$912,145	\$190,216	\$0	CWCS
1860	Meters	\$9,646,131	\$5,661,746	\$1,561,583	\$2,393,252	\$29,550	\$0	\$0	\$0	CWMC
Sub-total										
		\$94,806,369	\$74,362,926	\$10,947,106	\$5,238,235	\$30,169	\$3,381,406	\$846,526	\$0	
Accumulated Amortization										
	Accum. Amortization of Electric Utility Plant -Line									
	Transformers, Services and Meters	(\$52,145,782)	(\$40,840,505)	(\$6,045,376)	(\$3,007,976)	(\$18,436)	(\$1,772,200)	(\$461,289)	\$0	
	Customer Related Net Fixed Assets	\$42,660,587	\$33,522,421	\$4,901,730	\$2,230,259	\$11,732	\$1,609,206	\$385,238	\$0	
	Allocated General Plant Net Fixed Assets	\$2,219,464	\$1,754,263	\$248,543	\$111,163	\$545	\$84,391	\$20,559	\$0	
	Customer Related NFA Including General Plant	\$44,880,051	\$35,276,684	\$5,150,273	\$2,341,423	\$12,278	\$1,693,597	\$405,796	\$0	
Misc Revenue										
4082	Retail Services Revenues	(\$26,000)	(\$17,917)	(\$4,360)	(\$3,655)	(\$12)	(\$5)	(\$51)	(\$1)	CWNB
4084	Service Transaction Requests (STR) Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	CWNB
4090	Electric Services Incidental to Energy Sales	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	CWNB
4220	Other Electric Revenues	(\$9,000)	(\$4,226)	(\$1,511)	(\$2,855)	(\$233)	(\$138)	(\$35)	(\$0)	NFA
4225	Late Payment Charges	(\$180,000)	(\$102,165)	(\$32,257)	(\$44,980)	\$0	(\$1)	(\$597)	\$0	LPHA
4235	Miscellaneous Service Revenues	(\$485,652)	(\$334,675)	(\$81,436)	(\$68,272)	(\$219)	(\$87)	(\$948)	(\$15)	CWNB
Sub-total										
		(\$700,652)	(\$458,984)	(\$119,565)	(\$119,762)	(\$464)	(\$232)	(\$1,630)	(\$16)	

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Operating and Maintenance									
5005	Operation Supervision and Engineering	\$0	\$0	\$0	\$0	\$0	\$0	\$0	1815-1855
5010	Load Dispatching	\$500,982	\$402,200	\$55,278	\$18,498	\$216	\$19,766	\$4,948	\$77
5020	Overhead Distribution Lines and Feeders - Operation Labour	\$229,837	\$192,109	\$22,492	\$2,789	\$4	\$10,124	\$2,319	\$0
5025	Overhead Distribution Lines & Feeders - Operation Supplies and Expenses	\$156,954	\$131,190	\$15,359	\$1,905	\$3	\$6,913	\$1,584	\$0
5035	Overhead Distribution Transformers- Operation	\$2,006	\$1,679	\$188	\$20	\$0	\$98	\$20	\$0
5040	Underground Distribution Lines and Feeders - Operation Labour	\$26,037	\$22,365	\$2,516	\$320	\$0	\$557	\$278	\$0
5045	Underground Distribution Lines & Feeders - Operation Supplies & Expenses	\$10,002	\$8,591	\$967	\$123	\$0	\$214	\$107	\$0
5055	Underground Distribution Transformers - Operation	\$4,318	\$3,616	\$405	\$42	\$0	\$211	\$44	\$0
5065	Meter Expense	\$405,255	\$237,862	\$65,606	\$100,546	\$1,241	\$0	\$0	\$0
5070	Customer Premises - Operation Labour	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5075	Customer Premises - Materials and Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5085	Miscellaneous Distribution Expense	\$122,693	\$98,501	\$13,538	\$4,530	\$53	\$4,841	\$1,212	\$19
5090	Underground Distribution Lines and Feeders - Rental Paid	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5095	Overhead Distribution Lines and Feeders - Rental Paid	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5096	Other Rent	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5105	Maintenance Supervision and Engineering	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5120	Maintenance of Poles, Towers and Fixtures	\$90,394	\$75,547	\$8,846	\$1,097	\$2	\$3,991	\$912	\$0
5125	Maintenance of Overhead Conductors and Devices	\$129,193	\$108,015	\$12,641	\$1,568	\$2	\$5,662	\$1,304	\$0
5130	Maintenance of Overhead Services	\$35,204	\$24,583	\$5,330	\$3,474	\$0	\$1,503	\$313	\$0
5135	Overhead Distribution Lines and Feeders - Right of Way	\$178,286	\$149,021	\$17,447	\$2,163	\$3	\$7,853	\$1,799	\$0
5145	Maintenance of Underground Conduit	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5150	Maintenance of Underground Conductors and Devices	\$5,605	\$4,811	\$542	\$69	\$0	\$123	\$60	\$0
5155	Maintenance of Underground Services	\$174,972	\$122,185	\$26,494	\$17,266	\$0	\$7,470	\$1,558	\$0
5160	Maintenance of Line Transformers	\$64,158	\$53,728	\$6,016	\$626	\$0	\$3,134	\$654	\$0
5175	Maintenance of Meters	\$10,711	\$6,287	\$1,734	\$2,658	\$33	\$0	\$0	\$0
Sub-total									
		\$2,146,608	\$1,642,292	\$255,398	\$157,693	\$1,556	\$72,461	\$17,111	\$96

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Billing and Collection										
5305	Supervision	\$117,462	\$80,946	\$19,697	\$16,513	\$53	\$21	\$229	\$4	CWNB
5310	Meter Reading Expense	\$260,318	\$148,681	\$46,152	\$65,442	\$21	\$0	\$0	\$21	CWMB
5315	Customer Billing	\$1,207,472	\$832,100	\$202,475	\$169,744	\$544	\$217	\$2,356	\$36	CWNB
5320	Collecting	\$581,187	\$400,511	\$97,456	\$81,702	\$262	\$105	\$1,134	\$17	CWNB
5325	Collecting- Cash Over and Short	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	CWNB
5330	Collection Charges	(\$77,500)	(\$53,407)	(\$12,996)	(\$10,895)	(\$35)	(\$14)	(\$151)	(\$2)	CWNB
5335	Bad Debt Expense	\$100,000	\$48,712	\$12,646	\$38,643	\$0	\$0	\$0	\$0	BDHA
5340	Miscellaneous Customer Accounts Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	CWNB
Sub-total		\$2,188,939	\$1,457,543	\$365,430	\$361,148	\$845	\$329	\$3,568	\$76	
Sub Total Operating, Maintenance and Biling		\$4,335,546	\$3,099,834	\$620,828	\$518,841	\$2,401	\$72,790	\$20,679	\$172	
Amortization Expense - Customer Related		\$3,053,045	\$2,372,156	\$357,379	\$184,160	\$1,689	\$110,619	\$26,803	\$238	
Amortization Expense - General Plant assigned to Meters		\$257,933	\$203,870	\$28,884	\$12,919	\$63	\$9,807	\$2,389	\$0	
Admin and General		\$1,453,590	\$1,038,487	\$208,284	\$174,442	\$808	\$24,548	\$6,962	\$58	
Allocated PILs		\$405,780	\$318,860	\$46,624	\$21,214	\$112	\$15,306	\$3,664	\$0	
Allocated Debt Return		\$1,607,804	\$1,263,402	\$184,738	\$84,055	\$442	\$60,648	\$14,519	\$0	
Allocated Equity Return		\$2,015,211	\$1,583,540	\$231,549	\$105,354	\$554	\$76,016	\$18,198	\$0	
PLCC Adjustment for Line Transformer		\$256,616	\$214,917	\$24,042	\$2,501	\$0	\$12,539	\$2,616	\$0	
PLCC Adjustment for Primary Costs		\$545,814	\$454,871	\$53,737	\$6,620	\$10	\$25,120	\$5,455	\$0	
PLCC Adjustment for Secondary Costs		\$267,362	\$230,637	\$20,205	\$2,315	\$0	\$8,664	\$5,541	\$0	
Total		\$11,358,465	\$8,520,741	\$1,460,738	\$969,786	\$5,596	\$323,179	\$77,972	\$453	



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Scenario 1

Accounts included in Avoided Costs Plus General Administration Allocation

Accounts	Total	Residential	GS <50	GS>50-Regular	Large Use >5MW	Street Light	Unmetered Scattered Load	Embedded Distributor
<u>Distribution Plant</u>								
CWMC	\$ 9,646,131	\$ 5,661,746	\$ 1,561,583	\$ 2,393,252	\$ 29,550	\$ -	\$ -	\$ -
<u>Accumulated Amortization</u>								
Accum. Amortization of Electric Utility Plant - Meters only	\$ (5,917,991)	\$ (3,473,533)	\$ (958,046)	\$ (1,468,282)	\$ (18,129)	\$ -	\$ -	\$ -
Meter Net Fixed Assets	\$ 3,728,141	\$ 2,188,212	\$ 603,537	\$ 924,970	\$ 11,421	\$ -	\$ -	\$ -
<u>Misc Revenue</u>								
CWNB	\$ (26,000)	\$ (17,917)	\$ (4,360)	\$ (3,655)	\$ (12)	\$ (5)	\$ (51)	\$ (1)
NFA	\$ (9,000)	\$ (4,226)	\$ (1,511)	\$ (2,855)	\$ (233)	\$ (138)	\$ (35)	\$ (0)
LPHA	\$ (180,000)	\$ (102,165)	\$ (32,257)	\$ (44,980)	\$ -	\$ (1)	\$ (597)	\$ -
Sub-total	\$ (215,000)	\$ (124,309)	\$ (38,128)	\$ (51,490)	\$ (245)	\$ (144)	\$ (683)	\$ (1)
<u>Operation</u>								
CWMC	\$ 405,255	\$ 237,862	\$ 65,606	\$ 100,546	\$ 1,241	\$ -	\$ -	\$ -
CCA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ 405,255	\$ 237,862	\$ 65,606	\$ 100,546	\$ 1,241	\$ -	\$ -	\$ -
<u>Maintenance</u>								
1860	\$ 10,711	\$ 6,287	\$ 1,734	\$ 2,658	\$ 33	\$ -	\$ -	\$ -
<u>Billing and Collection</u>								
CWMR	\$ 260,318	\$ 148,681	\$ 46,152	\$ 65,442	\$ 21	\$ -	\$ -	\$ 21
CWNB	\$ 1,711,159	\$ 1,179,204	\$ 286,935	\$ 240,551	\$ 771	\$ 308	\$ 3,339	\$ 51
Sub-total	\$ 1,971,477	\$ 1,327,885	\$ 333,088	\$ 305,993	\$ 792	\$ 308	\$ 3,339	\$ 73
Total Operation, Maintenance and Billing	\$ 2,387,444	\$ 1,572,034	\$ 400,427	\$ 409,196	\$ 2,066	\$ 308	\$ 3,339	\$ 73
Amortization Expense - Meters	\$ 331,317	\$ 194,465	\$ 53,636	\$ 82,201	\$ 1,015	\$ -	\$ -	\$ -
Allocated PILs	\$ 33,727	\$ 19,779	\$ 5,464	\$ 8,380	\$ 104	\$ -	\$ -	\$ -
Allocated Debt Return	\$ 133,634	\$ 78,369	\$ 21,649	\$ 33,205	\$ 411	\$ -	\$ -	\$ -
Allocated Equity Return	\$ 167,496	\$ 98,227	\$ 27,134	\$ 41,620	\$ 516	\$ -	\$ -	\$ -
Total	\$ 2,838,618	\$ 1,838,565	\$ 470,182	\$ 523,113	\$ 3,867	\$ 164	\$ 2,656	\$ 72

Sheet O-2

Scenario 2

Accounts included in Directly Related Customer Costs Plus General Administration Allocation

Accounts	Total	Residential	GS <50	GS>50-Regular	Large Use >5MW	Street Light	Unmetered Scattered Load	Embedded Distributor
<u>Distribution Plant</u>								
CWMC	\$ 9,646,131	\$ 5,661,746	\$ 1,561,583	\$ 2,393,252	\$ 29,550	\$ -	\$ -	\$ -
<u>Accumulated Amortization</u>								
Accum. Amortization of Electric Utility Plant - Meters only	\$ (5,917,991)	\$ (3,473,533)	\$ (958,046)	\$ (1,468,282)	\$ (18,129)	\$ -	\$ -	\$ -
Meter Net Fixed Assets	\$ 3,728,141	\$ 2,188,212	\$ 603,537	\$ 924,970	\$ 11,421	\$ -	\$ -	\$ -
Allocated General Plant Net Fixed Assets	\$ 191,748	\$ 114,511	\$ 30,602	\$ 46,104	\$ 531	\$ -	\$ -	\$ -
Meter Net Fixed Assets Including General Plant	\$ 3,919,889	\$ 2,302,724	\$ 634,140	\$ 971,073	\$ 11,952	\$ -	\$ -	\$ -
<u>Misc Revenue</u>								
CWNB	\$ (26,000)	\$ (17,917)	\$ (4,360)	\$ (3,655)	\$ (12)	\$ (5)	\$ (51)	\$ (1)
NFA	\$ (9,000)	\$ (4,226)	\$ (1,511)	\$ (2,855)	\$ (233)	\$ (138)	\$ (35)	\$ (0)
LPHA	\$ (180,000)	\$ (102,165)	\$ (32,257)	\$ (44,980)	\$ -	\$ (1)	\$ (597)	\$ -
Sub-total	\$ (215,000)	\$ (124,309)	\$ (38,128)	\$ (51,490)	\$ (245)	\$ (144)	\$ (683)	\$ (1)
<u>Operation</u>								
CWMC	\$ 405,255	\$ 237,862	\$ 65,606	\$ 100,546	\$ 1,241	\$ -	\$ -	\$ -
CCA	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-total	\$ 405,255	\$ 237,862	\$ 65,606	\$ 100,546	\$ 1,241	\$ -	\$ -	\$ -
<u>Maintenance</u>								
1860	\$ 10,711	\$ 6,287	\$ 1,734	\$ 2,658	\$ 33	\$ -	\$ -	\$ -
<u>Billing and Collection</u>								
CWMR	\$ 260,318	\$ 148,681	\$ 46,152	\$ 65,442	\$ 21	\$ -	\$ -	\$ 21
CWNB	\$ 1,711,159	\$ 1,179,204	\$ 286,935	\$ 240,551	\$ 771	\$ 308	\$ 3,339	\$ 51
Sub-total	\$ 1,971,477	\$ 1,327,885	\$ 333,088	\$ 305,993	\$ 792	\$ 308	\$ 3,339	\$ 73
Total Operation, Maintenance and Billing	\$ 2,387,444	\$ 1,572,034	\$ 400,427	\$ 409,196	\$ 2,066	\$ 308	\$ 3,339	\$ 73
Amortization Expense - Meters	\$ 331,317	\$ 194,465	\$ 53,636	\$ 82,201	\$ 1,015	\$ -	\$ -	\$ -
Amortization Expense - General Plant assigned to Meters	\$ 22,284	\$ 13,308	\$ 3,556	\$ 5,358	\$ 62	\$ -	\$ -	\$ -
Admin and General	\$ 800,520	\$ 526,653	\$ 134,341	\$ 137,578	\$ 696	\$ 104	\$ 1,124	\$ 24
Allocated PILs	\$ 35,461	\$ 20,814	\$ 5,741	\$ 8,798	\$ 109	\$ -	\$ -	\$ -
Allocated Debt Return	\$ 140,507	\$ 82,470	\$ 22,746	\$ 34,861	\$ 430	\$ -	\$ -	\$ -
Allocated Equity Return	\$ 176,111	\$ 103,367	\$ 28,510	\$ 43,694	\$ 539	\$ -	\$ -	\$ -
Total	\$ 3,678,644	\$ 2,388,802	\$ 610,829	\$ 670,196	\$ 4,672	\$ 268	\$ 3,780	\$ 96

Sheet O-2

Minimum System Customer Costs Adjusted for PLCC - High Limit Fixed Customer Charge

USoA Account #	Accounts	Total	Residential	GS <50	GS>50-Regular	Large Use >5MW	Street Light	Unmetered Scattered Load	Embedded Distributor
<u>Distribution Plant</u>									
	CDMPP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Poles, Towers and Fixtures	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	BCP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	PNCP	\$ 34,139,610	\$ 28,400,991	\$ 3,347,931	\$ 413,337	\$ 619	\$ 1,635,641	\$ 341,093	\$ -
	SNCP	\$ 12,589,746	\$ 11,089,385	\$ 1,202,280	\$ 156,705	\$ -	\$ -	\$ 141,376	\$ -
	Overhead Conductors and Devices	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	LTNCP	\$ 17,064,473	\$ 14,290,425	\$ 1,600,062	\$ 166,524	\$ -	\$ 833,621	\$ 173,841	\$ -
	CWCS	\$ 21,366,409	\$ 14,920,380	\$ 3,235,251	\$ 2,108,417	\$ -	\$ 912,145	\$ 190,216	\$ -
	CWMC	\$ 9,646,131	\$ 5,661,746	\$ 1,561,583	\$ 2,393,252	\$ 29,550	\$ -	\$ -	\$ -
	Sub-total	\$ 94,806,369	\$ 74,362,926	\$ 10,947,106	\$ 5,238,235	\$ 30,169	\$ 3,381,406	\$ 846,526	\$ -
<u>Accumulated Amortization</u>									
	Accum. Amortization of Electric Utility Plant -Line Transformers, Services and Meters	\$ (52,145,782)	\$ (40,840,505)	\$ (6,045,376)	\$ (3,007,976)	\$ (18,436)	\$ (1,772,200)	\$ (461,289)	\$ -
	Customer Related Net Fixed Assets	\$ 42,660,587	\$ 33,522,421	\$ 4,901,730	\$ 2,230,259	\$ 11,732	\$ 1,609,206	\$ 385,238	\$ -
	Allocated General Plant Net Fixed Assets	\$ 2,219,464	\$ 1,754,263	\$ 248,543	\$ 111,163	\$ 545	\$ 84,391	\$ 20,559	\$ -
	Customer Related NFA Including General Plant	\$ 44,880,051	\$ 35,276,684	\$ 5,150,273	\$ 2,341,423	\$ 12,278	\$ 1,693,597	\$ 405,796	\$ -

Sheet O-2

Misc Revenue

CWNB	\$	(511,652)	\$	(352,593)	\$	(85,796)	\$	(71,927)	\$	(230)	\$	(92)	\$	(998)	\$	(15)
NFA	\$	(9,000)	\$	(4,226)	\$	(1,511)	\$	(2,855)	\$	(233)	\$	(138)	\$	(35)	\$	(0)
LPHA	\$	(180,000)	\$	(102,165)	\$	(32,257)	\$	(44,980)	\$	-	\$	(1)	\$	(597)	\$	-
Sub-total	\$	(700,652)	\$	(458,984)	\$	(119,565)	\$	(119,762)	\$	(464)	\$	(232)	\$	(1,630)	\$	(16)

Operating and Maintenance

1815-1855	\$	623,675	\$	500,701	\$	68,816	\$	23,028	\$	268	\$	24,607	\$	6,159	\$	96
1830 & 1835	\$	565,077	\$	472,320	\$	55,298	\$	6,857	\$	9	\$	24,890	\$	5,702	\$	-
1850	\$	70,482	\$	59,024	\$	6,609	\$	688	\$	-	\$	3,443	\$	718	\$	-
1840 & 1845	\$	36,039	\$	30,957	\$	3,483	\$	443	\$	0	\$	771	\$	385	\$	-
CWMC	\$	405,255	\$	237,862	\$	65,606	\$	100,546	\$	1,241	\$	-	\$	-	\$	-
CCA	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
O&M	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
1830	\$	90,394	\$	75,547	\$	8,846	\$	1,097	\$	2	\$	3,991	\$	912	\$	-
1835	\$	129,193	\$	108,015	\$	12,641	\$	1,568	\$	2	\$	5,662	\$	1,304	\$	-
1855	\$	210,176	\$	146,768	\$	31,824	\$	20,740	\$	-	\$	8,973	\$	1,871	\$	-
1840	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
1845	\$	5,605	\$	4,811	\$	542	\$	69	\$	0	\$	123	\$	60	\$	-
1860	\$	10,711	\$	6,287	\$	1,734	\$	2,658	\$	33	\$	-	\$	-	\$	-
Sub-total	\$	2,146,608	\$	1,642,292	\$	255,398	\$	157,693	\$	1,556	\$	72,461	\$	17,111	\$	96

Billing and Collection

CWNB	\$	1,828,621	\$	1,260,150	\$	306,632	\$	257,064	\$	823	\$	329	\$	3,568	\$	55
CWMR	\$	260,318	\$	148,681	\$	46,152	\$	65,442	\$	21	\$	-	\$	-	\$	21
BDHA	\$	100,000	\$	48,712	\$	12,646	\$	38,643	\$	-	\$	-	\$	-	\$	-
Sub-total	\$	2,188,939	\$	1,457,543	\$	365,430	\$	361,148	\$	845	\$	329	\$	3,568	\$	76

Sub Total Operating, Maintenance and Billing	\$	4,335,546	\$	3,099,834	\$	620,828	\$	518,841	\$	2,401	\$	72,790	\$	20,679	\$	172
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Amortization Expense - Customer Related	\$	3,053,045	\$	2,372,156	\$	357,379	\$	184,160	\$	1,689	\$	110,619	\$	26,803	\$	238
Amortization Expense - General Plant assigned to Meters	\$	257,933	\$	203,870	\$	28,884	\$	12,919	\$	63	\$	9,807	\$	2,389	\$	-
Admin and General	\$	1,453,590	\$	1,038,487	\$	208,284	\$	174,442	\$	808	\$	24,548	\$	6,962	\$	58
Allocated PILs	\$	405,780	\$	318,860	\$	46,624	\$	21,214	\$	112	\$	15,306	\$	3,664	\$	-
Allocated Debt Return	\$	1,607,804	\$	1,263,402	\$	184,738	\$	84,055	\$	442	\$	60,648	\$	14,519	\$	-
Allocated Equity Return	\$	2,015,211	\$	1,583,540	\$	231,549	\$	105,354	\$	554	\$	76,016	\$	18,198	\$	-
PLCC Adjustment for Line Transformer	\$	256,616	\$	214,917	\$	24,042	\$	2,501	\$	-	\$	12,539	\$	2,616	\$	-
PLCC Adjustment for Primary Costs	\$	545,814	\$	454,871	\$	53,737	\$	6,620	\$	10	\$	25,120	\$	5,455	\$	-
PLCC Adjustment for Secondary Costs	\$	267,362	\$	230,637	\$	20,205	\$	2,315	\$	-	\$	8,664	\$	5,541	\$	-

Total	\$	11,358,465	\$	8,520,741	\$	1,460,738	\$	969,786	\$	5,596	\$	323,179	\$	77,972	\$	453
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Sheet E-4

 2011 COST ALLOCATION STUDY Saturday, January 00, 1900 Sheet E4 Trial Balance Allocation Detail Worksheet - Second Run PUBLIC											
Details: The worksheet below details how costs are treated, categorized, and grouped.											
This sheet shows what accounts are included in the COSS, and how they are grouped into working capital and rate base. It shows how accounts are categorized in the customer and demand related costs. It will then show how the categorized costs are allocated											
Uniform System of Accounts - Detail Accounts:					Classification and Allocation			Allocation Demand Related	Allocation Customer Related	Allocation A&G Related	Allocation Misc Related
USoA Account #	Accounts	Explanations	Grouping for Sheet O1 Revenue to Cost	Demand Grouping Indicator	Demand	Customer	Joint	Demand ID	Customer ID	A & G ID	Misc ID
1565	Conservation and Demand Management Expenditures and Recoveries	CDM Expenditures and Recoveries	dp			O&M			O&M		
1608	Franchises and Consents	Other Distribution Assets	gp							NFA ECC	
1805	Land		dp	DDCP							
1805-1	Land Station >50 kV		dp	TCP	TCP12			TCP12			
1805-2	Land Station <50 kV		dp	DCP	DCP12			DCP12			
1806	Land Rights		dp	DDCP							
1806-1	Land Rights Station >50 kV		dp	TCP	TCP12			TCP12			
1806-2	Land Rights Station <50 kV		dp	DCP	DCP12			DCP12			
1808	Buildings and Fixtures		dp	DDCP							
1808-1	Buildings and Fixtures > 50 kV		dp	TCP	TCP12			TCP12			
1808-2	Buildings and Fixtures < 50 kV		dp	DCP	DCP12			DCP12			
1810	Leasehold Improvements		dp	DDCP							
1810-1	Leasehold Improvements >50 kV		dp	TCP	TCP12			TCP12			
1810-2	Leasehold Improvements <50 kV		dp	DCP	DCP12			DCP12			
1815	Transformer Station Equipment - Normally Primary above 50 kV		dp	TCP	TCP12			TCP12			
1820	Distribution Station Equipment - Normally Primary below 50 kV		dp	DCP	DCP12			DCP12			
1820-1	Distribution Station Equipment - Normally Primary below 50 kV (Bulk)		dp	DCP	DCP12			DCP12			
1820-2	Distribution Station Equipment - Normally Primary below 50 kV (Primary)		dp	PNCP	PNCP4			PNCP4			
1820-3	Distribution Station Equipment - Normally Primary below 50 kV (Wholesale Meters)		dp			CEN			CEN		
1825	Storage Battery Equipment		dp	DDCP							
1825-1	Storage Battery Equipment > 50 kV		dp	TCP	TCP12			TCP12			
1825-2	Storage Battery Equipment <50 kV		dp	DCP	DCP12			DCP12			

cp	nep	non-demand	FINAL
TCP12			TCP12
DCP12			DCP12
TCP12			TCP12
DCP12			DCP12
TCP12			TCP12
DCP12			DCP12
TCP12			TCP12
DCP12			DCP12
TCP12			TCP12
DCP12			DCP12
	PNCP4		PNCP4
TCP12			TCP12
DCP12			DCP12

Sheet E-4[illegible]

Sheet E-4[illegible]

Sheet E-4[illegible]

Sheet E-4[illegible]

Sheet E-4

6110	Income Taxes	Income Tax Expense - Unclassified	Input						NFA							
6205	Donations	Charitable Contributions	ad						O&M							
6210	Life Insurance	Insurance Expense (Working Capital)	ad						O&M							
6215	Penalties	Other Distribution Expenses	ad						O&M							
6225	Other Deductions	Other Distribution Expenses	ad						O&M							

CONCLUSION

The results from the initial cost allocation study Table 7-3 and Table 7-6 showed that all rate classes were within the acceptable range mandated by the Board.

In Table 7-3 WNH has proposed ranges for 2011 for all rate classes that are within the Board target, except for the Street Light rate class for which it has proposed to move to the Board target over a 3 year period.

The difference between the results of the 2007 Informational Filing and the 2011 Study reflects the re-allocation of one previous large user to the GS>50kW rate class, as well an increase in the number of Street Light Connections resulted in a lower Revenue-to Cost Ratio in the Street Light rate class and a higher Revenue-to Cost Ratio in the Residential rate class.

Waterloo North Hydro Inc.
Application for Approval of 2011 Electricity Distribution Rates

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RATE DESIGN OVERVIEW

The purpose of this Exhibit is to document the calculation of Waterloo North Hydro's proposed distribution rates, by rate class, for the 2011 test year, based on the rate design as proposed in this Exhibit.

WNH has determined its total 2011 service revenue requirement to be \$30,036,603. The total revenue offsets in the amount of \$1,055,963 reduce WNH's total service revenue requirement to a base revenue requirement of \$28,980,640 which is used to determine the proposed distribution rates. The base revenue requirement is derived from WNH's 2011 capital and operating forecasts, weather normalized usage, forecasted customer counts, and regulated return on rate base. The revenue requirement is summarized in Table 8-1 below.

Table 8-1
Calculation of Base Revenue Requirement

Description	Amount
OM&A Expenses	10,183,838
Amortization Expenses	7,816,331
Regulated Return On Rate Base	10,824,124
PILs	1,212,310
Service Revenue Requirement	30,036,603
Less: Revenue Offsets	(1,055,963)
Base Revenue Requirement	28,980,640

The outstanding base revenue requirement is allocated to the various rate classes using the proposed revenue to cost ratios outlined in Exhibit 7 – Cost Allocation. Table 8-2 shows how the base revenue requirement has been allocated to the rate classes.

Table 8-2

Proposed Apportionment of Base Revenue to Rate Classes

Rate Classification	Total Revenue Requirement 2011 Cost Allocation	2011 Proposed Revenue to Cost Ratio	2011 Proposed Service Revenue Requirement	2011 Proposed Misc. Revenue Allocated as per Cost Allocation Model	2011 Proposed Base Revenue Requirement
Residential	15,097,498	108.17%	16,331,042	625,839	15,705,203
GS < 50kW	4,985,944	93.99%	4,686,477	179,218	4,507,259
GS > 50kW	8,742,266	91.82%	8,026,885	232,488	7,794,397
Large User	657,778	89.86%	591,062	9,678	581,384
Street Light	437,953	60.60%	265,400	5,690	259,710
USL	114,291	118.00%	134,863	3,023	131,840
Embedded Distributor	873	100.00%	873	27	846
Total	30,036,603		30,036,603	1,055,963	28,980,640

Fixed/Variable Proportion

Table 8-3 provides a summary of the proposed fixed rate and resulting fixed revenue proportion, based on forecasted customers/connections for the 2011 Test Year.

Table 8-3

Proposed Fixed Rate and Fixed Revenue Portion

Class	2011 Total Base Revenue	Proposed Fixed Distribution Charge	Annualized (Average) 2011 Customers / Connections	2011 Fixed Base Revenue with 2011 Proposed Rates
Residential	15,705,203	14.56	45,713	7,986,975
GS < 50kW	4,507,259	30.63	5,384	1,978,961
GS > 50kW	7,794,397	187.01	667	1,496,027
Large User	581,384	6,686.47	1	80,238
Street Light	259,710	0.33	13,259	52,506
USL	131,840	15.31	547	100,499
Embedded Distributor	846	-	1	-
Total	28,980,640			11,695,206

WNH is not proposing to change the fixed/variable proportions for the 2011 Test year for all customer classifications. Table 8-4 outlines the proposed fixed/variable proportions.

Table 8-4

Proposed Fixed / Variable Proportions

Class	2011 Base Revenue with 2011 Proposed Rates	2011 Fixed Base Revenue with 2011 Proposed Rates	2011 Variable Base Revenue with 2011 Proposed Rates	Proposed Fixed Revenue Proportion	Proposed Variable Revenue Proportion
Residential	15,705,203	7,986,975	7,718,228	50.9%	49.1%
GS < 50kW	4,507,259	1,978,961	2,528,299	43.9%	56.1%
GS > 50kW	7,794,397	1,496,027	6,298,370	19.2%	80.8%
Large User	581,384	80,238	501,147	13.8%	86.2%
Street Light	259,710	52,506	207,203	20.2%	79.8%
USL	131,840	100,499	31,341	76.2%	23.8%
Embedded Distributor	846	-	846	0.0%	100.0%
Total	28,980,640	11,695,206	17,285,434	40.4%	59.6%

Based on applying the existing approved monthly service charges, excluding the smart meter adder, to the forecasted average number of customers for 2011, and applying the existing approved distribution volumetric charge, excluding the adjustment transformation allowance, to 2011 forecasted volumes, Table 8-5 outlines WNH's current split between fixed and variable distribution revenue.

Table 8-5

Existing Fixed / Variable Proportions

Class	2011 Base Revenue with 2010 Approved Rates	2011 Fixed Base Revenue with 2010 Approved Rates	2011 Variable Base Revenue with 2010 Approved Rates	Fixed Revenue Proportion	Variable Revenue Proportion
Residential	12,998,073	7,986,975	5,011,098	61.4%	38.6%
GS < 50kW	3,727,692	1,978,961	1,748,731	53.1%	46.9%
GS > 50kW	6,446,293	1,496,027	4,950,265	23.2%	76.8%
Large User	480,829	80,238	400,591	16.7%	83.3%
Street Light	197,834	52,506	145,327	26.5%	73.5%
USL	117,480	100,499	16,981	85.5%	14.5%
Embedded Distributor	-	-	-	0.0%	0.0%
Total	23,968,200	11,695,206	12,272,994	48.8%	51.2%

Proposed Volumetric Charges

The variable distribution charge is calculated by dividing the variable distribution portion of the base revenue requirement by the appropriate 2011 Test Year usage, kWh or kW, as the class charge determinant.

Table 8-6 provides WNH's calculations of its proposed variable distribution charges for the 2011 Test Year which utilizes the proposed fixed/variable distribution revenue split as described above.

Table 8-6

Proposed Variable Distribution Charges Before Adjustment for Transformer Allowance

Class	2011 Total Base Revenue	Fixed Revenue	Variable Revenue	Annualized kWh or kW as required	Unit of Measure	Proposed Charge before Transformer Allowance
Residential	15,705,203	7,986,975	7,718,228	382,563,062	kWh	0.0202
GS < 50kW	4,507,259	1,978,961	2,528,299	175,321,434	kWh	0.0144
GS > 50kW	7,794,397	1,496,027	6,298,370	1,566,291	kW	4.0212
Large User	581,384	80,238	501,147	148,593	kW	3.3726
Street Light	259,710	52,506	207,203	21,547	kW	9.6165
USL	131,840	100,499	31,341	1,648,666	kWh	0.0190
Embedded Distributor	846	-	846	71,600	kW	0.0118
Total	28,980,640	11,695,206	17,285,434			

Proposed Adjustment for Transformer Allowance

Currently, WNH provides a Transformer Allowance to those customers that own their transformation facilities. WNH proposes to maintain the current approved transformer ownership allowance of \$0.60 per kW. The Transformer Allowance is intended to reflect the costs to a distributor of providing step down transformation facilities to the customer's utilization voltage level. Since the distributor provides electricity at utilization voltage, the cost of this transformation is captured in and recovered through the distribution rates. Therefore, when a customer provides its own step down transformation from primary to secondary, it should receive a credit of these costs already included in the distribution rates.

The amount of Transformer Allowance expected to be provided to those customers that own their transformers has been included in the volumetric charge for this class. The resulting rates after inclusion of the Transformer Allowance are detailed on Table 8-7. WNH notes that as the only customer in the Large User rate class owns their transformers, no transformation costs have been allocated to this rate class in the Cost Allocation Model (Exhibit 7), thus, no Transformer Allowance will be paid to this rate class.

Table 8-7

Proposed Variable Distribution Charges After Adjustment for Transformer Allowance

Class	2011 Total Gross Revenue	Fixed Revenue	Variable Revenue	Transformer Allowance	Annualized kWh or kW as required	Unit of Measure	Proposed Charge after Transformer Allowance
Residential	15,705,681	7,986,975	7,718,228	478	382,563,062	kWh	0.0202
GS < 50kW	4,581,871	1,978,961	2,528,299	74,612	175,321,434	kWh	0.0148
GS > 50kW	8,391,936	1,496,027	6,298,370	597,538	1,566,291	kW	4.4027
Large User	581,384	80,238	501,147	-	148,593	kW	3.3726
Street Light	259,710	52,506	207,203	-	21,547	kW	9.6165
USL	131,840	100,499	31,341	-	1,648,666	kWh	0.0190
Embedded Distributor	846	-	846	-	71,600	kW	0.0118
Total	29,653,268	11,695,206	17,285,434	672,628			

Proposed Monthly Service Charges (MSC)

WNH is not proposing to adjust the current monthly service charge of any of its rate classes. Table 8-8 details WNH's existing and proposed monthly service charges, as well as the floor and ceiling service charges as calculated in Sheet O2 of the Cost Allocation Model in Exhibit 7. All classes except the Residential rate class exceed the ceiling. WNH had not adjusted the MSC of the rate classes that exceeded the ceiling, which is in accordance with the Board's Application of Cost Allocation for Electricity Distributors, November 28, 2007. Section 4.4.2 of this report states: *"In the interim, the Board does not expect distributors to make changes to the MSC that result in a charge that is greater than the ceiling as defined in the Methodology for the MSC. Distributors that are currently above this value are not required to make changes to their current MSC to bring it to or below this level at this time."*

WNH also notes that as demonstrated above, WNH's Fixed Revenue Proportion has lowered to 40.4% as proposed in this application, from the existing 48.8% based on current approved rates. All rate classes as proposed will have a decrease in their fixed revenue proportion under the proposed application. WNH submits that lowering the MSC further is not necessary.

Table 8-8
Current and Proposed Monthly Service Charges and Floor and Ceiling Service Charges

Class	Existing Fixed Rates	Proposed Fixed Rates	Floor of Fixed Rates	Ceiling of Fixed Rates
Residential	\$ 14.56	\$ 14.56	\$ 3.34	\$ 15.47
GS < 50 kW	\$ 30.63	\$ 30.63	\$ 7.24	\$ 22.49
GS > 50 kW	\$ 187.01	\$ 187.01	\$ 65.24	\$ 120.95
Large User	\$ 6,686.47	\$ 6,686.47	\$ 322.22	\$ 466.32
Street Lighting	\$ 0.33	\$ 0.33	\$ 0.01	\$ 10.19
USL	\$ 15.31	\$ 15.31	\$ 0.40	\$ 11.78
Embedded Distributor	\$ -	\$ -	\$ -	\$ -

RETAIL TRANSMISSION SERVICE RATES

On July 8, 2010, the Board issued its *Revision 2.0 to Guideline G-2008-0001 – Electricity Distribution Retail Transmission Service Rates*. This revision outlined the information that the Board requires an electricity distributor to file for approval to adjust its retail transmission service rates and directed that the revised guideline should be used for 2011 rate applications.

For 2011, distributors shall adjust their RTSRs based on a comparison of historical transmission costs adjusted for new UTR levels and revenues generated from existing RTSRs. This approach is expected to minimize variances in USoA Accounts 1584 and 1586.

The Board released a model on August 20, 2010 for 2011 Rate Filings. The timing of the release is such that WNH was unable to incorporate the model into this application. WNH had, however, previously prepared a spreadsheet calculating the proposed changes in Retail Transmission Service Rates, this spreadsheet is presented as Table 8-9 below. WNH proposes that it will complete the Board's model subsequent to this rate filing and if any material differences arise from the calculations presented in Table 8-9, it will revise its filing.

WNH proposes to reduce its approved Retail Transmission Service rates due to an estimated excess of revenues over costs. WNH proposes to reduce its Network Transmission rates by 2.36% for all rate classes and reduce its Network Connection rates by 11.33%.

1 WNH's existing and proposed Retail Transmission rates are presented in Table 8-9. WNH
2 estimated its kW Purchased from the IESO for 2011 (based on its 2009 purchases) and applied
3 the current rate (EB-2008-0272) to obtain estimated purchases of each rate class of
4 Transmission Network and Transmission Connection in 2011. WNH then applied the 2011
5 weather normalized billings to its current rates (EB-2009-0210) to obtain estimated billings for
6 2011. The resultant over collection variance of 2.36% for Transmission Network and 11.33% for
7 Transmission Connection was applied to reduce the current rates to obtain proposed 2011
8 Transmission Network and Transmission Connection rates.

9 WNH had historically had an excess of revenue over its costs for Retail Transmission
10 Connection. As a result of the 2006 EDR (EB-2005-0448) process, WNH reduced its Retail
11 Transmission Connection rates based on the historical cost to revenue ratio.

12 As part of its 2008 electricity distribution rate application (EB-2007-0829), WNH decreased its
13 Retail Transmission rates, by 21% for Network and 6% for Connection.

14 As part of its 2009 electricity distribution rate application (EB-2008-0216), WNH increased its
15 Retail Transmission rates in response to EB-2008-0113 when the Board approved an increase
16 to the UTRs. The rates increased by 11.3% for Network and 5.5% for Connection.

17 As part of its 2010 electricity distribution rate application (EB-2009-0210), WNH increased its
18 Retail Transmission rates in response to a Board approved increase to the UTRs. The rates
19 increased by 15.6% for Network and 5.2% for Connection.

20 WNH is not carrying significant liabilities on its balance sheet in accounts 1584 and 1586, and
21 has applied to clear these accounts (see Exhibit 9).

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Table 8-9
2011 Proposed Transmission Network and Connection Rates

	2011												Estimated Variance
	Purchase Cost Estimated				Total Billings	Billings Estimated							
	kW - estimate 2011					Res	<50	>50 ²	LU	St Lt	USL		
	NW	CN	CN	Total CN		kWh	kWh	kW	kW	kW	kWh		
Estimated kW Purchases	2,453,087	2,524,591	343,456										
EB-2008-0272 Transmission Rates	\$ 2.97	\$ 0.73	\$ 1.71										
Estimated Purchase Cost	\$ 7,285,670	\$ 1,842,951	\$ 587,310	\$ 2,430,261									
Weather Normalized Billing Units						382,563,062	175,321,434	1,637,891	148,593	21,547	1,648,666		
Apply Loss Factor						1.0404	1.0404				1.0404		
Billing Units Network and Connection						398,018,609	182,404,420	1,637,891	148,593	21,547	1,715,272		
Transmission Network													
Current Rates (EB-2009-0210) Network						\$ 0.0058	\$ 0.0053	\$ 2.2906	\$ 2.5361	\$ 1.6266	\$ 0.0053		
Estimated Billings Network						\$ 2,308,508	\$ 966,743	\$ 3,751,754	\$ 376,846	\$ 35,048	\$ 9,091		
Estimated Purchase Cost / Billings Network	\$ 7,285,670				\$ 7,447,990							(162,320)	
Variance Overcollection Network %												-2.18%	
Apply Variance % to Existing Rates to Reduce to Cost						\$ 0.0057	\$ 0.0052	\$ 2.2407	\$ 2.4808	\$ 1.5912	\$ 0.0052		
Apply Proposed Rates to Billing Quantities					\$ 7,285,670	\$ 2,258,197	\$ 945,674	\$ 3,669,989	\$ 368,633	\$ 34,284	\$ 8,893	\$ 7,285,670	
Transmission Connection													
Current Rates (EB-2009-0210) Transmission						\$ 0.0020	\$ 0.0018	\$ 0.8934	\$ 0.8964	\$ 0.5528	\$ 0.0018		
Estimated Billings Connection						\$ 796,037	\$ 328,328	\$ 1,463,292	\$ 133,199	\$ 11,911	\$ 3,087		
Estimated Purchase Cost / Billings Connection				\$ 2,430,261	\$ 2,735,854							(305,593)	
Variance Overcollection Connection%												-11.17%	
Apply Variance % to Existing Rates to Reduce to Cost						\$ 0.0018	\$ 0.0016	\$ 0.7936	\$ 0.7963	\$ 0.4911	\$ 0.0016		
Apply Proposed Rates to Billing Quantities					\$ 2,430,261	\$ 707,120	\$ 291,654	\$ 1,299,843	\$ 118,320	\$ 10,581	\$ 2,743		
2 Includes Embedded Distributor													
Proposed Rates													
						Res	<50	>50	LU	St Lt	USL		
Per						kWh	kWh	kW	kW	kW	kWh		
Transmission Network						\$ 0.0057	\$ 0.0052		\$ 2.4808	\$ 1.5912	\$ 0.0052		
Less than 1,000 kW Interval Metered (less than 1,000 kW) Interval Metered (1,000 to 4,999 kW)								\$ 2.1096					
								\$ 2.2407					
								\$ 2.2378					
Transmission Connection						\$ 0.0018	\$ 0.0016		\$ 0.7963	\$ 0.4911	\$ 0.0016		
Less than 1,000 kW Interval Metered (less than 1,000 kW) Interval Metered (1,000 to 4,999 kW)								\$ 0.6353					
								\$ 0.7936					
								\$ 0.7926					

² Includes Embedded Distributor

LOW VOLTAGE CHARGES

WNH is embedded to three distributors and pays Low Voltage Charges to each distributor. The costs paid to these distributors are recorded in USoA 4075 and Low Voltage Charge Revenues charged to WNH's customers are recorded in USoA 4750. WNH follows the APH in the recording of costs, revenues and variance account (USoA 1550).

WNH proposes to include \$165,000 in its 2011 rates and the details of its calculations are shown in Table 8-10. WNH considered the 2009 kW as a reasonable basis upon which to calculate the Low Voltage Charges. Allocation to the rate classes is based on the Proposed Retail Transmission Connection rate applied to the Forecasted kWh or kW as appropriate, to determine Retail Transmission Connection Revenue. The percentage of each rate class' portion of the revenue is determined and this percentage is then applied to the Low Voltage Charges of \$165,000. Table 8-11 details the allocation to the rate classes.

Table 8-10

2011 Proposed Low Voltage Charges

Distributor	2009 kW	Current LV Charge / kW	Low Voltage Charge \$	Decision Reference
Cambridge & North Dumfries Hydro Inc.	78,014	\$ 0.9630	\$ 75,127	EB-2009-0260
K-W Hydro Inc.	49,918	\$ 1.1300	\$ 56,408	EB-2009-0267
K-W Hydro Inc.	49,918	\$ 0.1400	\$ 6,989	EB-2009-0267
Hydro One Networks Inc.	60,806	\$ 0.4420	\$ 26,876	EB-2009-0096
Total	238,656		\$ 165,399	

Rounded Estimate

165,000

Table 8-11

2011 Proposed Low Voltage Charges by Rate Class

Class	2011 Proposed RTRS Connection Revenue %	Low Voltage \$ Allocated	Annualized kWh or kW as required	Unit of Measure	Proposed Charge before Transformer Allowance
Residential	29.1%	48,037	382,563,062	kWh	0.0001
GS < 50kW	12.0%	19,813	175,321,434	kWh	0.0001
GS > 50kW	53.2%	87,854	1,566,291	kW	0.0561
Large User	5.1%	8,363	148,593	kW	0.0563
Street Light	0.5%	748	21,547	kW	0.0347
USL	0.1%	186	1,648,666	kWh	0.0001
Embedded Distributor	0.0%	-	71,600	kW	-
Total	1	165,000			

LOSS ADJUSTMENT FACTORS

To determine the total weather normalized energy purchases, the total weather normalized billed kWh is adjusted by a historical loss factor. Table 8-12 outlines WNH's proposed loss factors. Table 8-13 demonstrates that WNH's loss factor on average for the past five years has been 4.04%.

The Total Loss Factor (TLF) is calculated as the Supply Facility Loss Factor (SFLF) multiplied by the Distribution Loss Factor (DLF). WNH proposes to use the five year calculated average SFLF of 1.0050. The DLF calculation is based on the past five year average. WNH is embedded to three distributors, Cambridge & North Dumfries Hydro, Kitchener-Wilmot Hydro and Hydro One Networks Inc. WNH has had one embedded distributor (Hydro One Networks Inc.) since May 1, 2006.

WNH's loss factor is below the Board's threshold of 5%, and lower than WNH's 2006 Board Approved loss factor of 5.05%. There are two drivers for this decrease. As detailed in Exhibit 3, there is a correction of a Hydro One Networks Inc. (HONI) billing error in which incorrect meters were being attributed to, and purchases were being charged to WNH, by the IESO. The error covered the period February 2001 through April 2006. The error was discovered in 2006. These purchases were included in the calculation of the loss factor in the 2006 EDR filing. In addition, WNH has invested in capital expenditures to convert low voltage distribution lines to higher voltages (see Exhibit 2), which results in reduced line losses.

WNH notes that the billing error and adjustments described above has resulted in the 2006 and 2007 SFLF factor being reflected in their results. However, when these two results are factored into a five year average, the SFLF that results is 1.0050. The actual SFLF for 2008, 2009 and January to May 2010 are 1.0051, 1.0050 and 1.0050 respectively. Thus, WNH had determined that the five year average SFLF of 1.050 is representative of its two most recent actual years and the first five months of 2010 and has applied this factor in its loss factor calculation.

Table 8-12
2011 Proposed Loss Factors

2011 Proposed Total Loss Factor	
Supply Facilities Loss Factor	1.0050
Distribution Loss Factor - Secondary Metered Customer < 5,000 kW	1.0352
Distribution Loss Factor - Secondary Metered Customer > 5,000 kW	1.0100
Distribution Loss Factor - Primary Metered Customer < 5,000 kW	1.0249
Distribution Loss Factor - Primary Metered Customer > 5,000 kW	1.0000
Total Loss Factor - Secondary Metered Customer < 5,000 kW	1.0404
Total Loss Factor - Secondary Metered Customer > 5,000 kW	1.0151
Total Loss Factor - Primary Metered Customer < 5,000 kW	1.0300
Total Loss Factor - Primary Metered Customer > 5,000 kW	1.0050

Table 8-13
Loss Factors

		2005	2006	2007	2008	2009	5 Year Average
	Losses in Distributor's System						
A1	"Wholesale" kWh delivered to distributor (higher value)	1,358,556,813	1,372,533,120	1,423,569,039	1,421,429,683	1,411,764,680	6,987,853,336
A2	"Wholesale" kWh delivered to distributor (lower value)	1,352,413,310	1,362,248,052	1,419,275,864	1,414,186,356	1,404,786,368	6,952,909,951
B	Portion of "Wholesale" kWh delivered to distributor for Large Use Customer(s)	70,871,453	74,000,428	77,462,480	77,078,909	76,852,237	376,265,507
C	Net "Wholesale" kWh delivered to distributor (A2)-(B)	1,281,541,857	1,288,247,625	1,341,813,384	1,337,107,447	1,327,934,131	6,576,644,444
D	"Retail" kWh delivered by distributor	1,304,206,908	1,325,699,776	1,367,149,466	1,370,239,488	1,360,024,644	6,727,320,283
E	Portion of "Retail" kWh delivered by distributor for Large Use Customer(s)	70,553,960	73,668,918	77,115,461	76,733,608	76,507,951	374,579,897
F	Net "Retail" kWh delivered by distributor (D)-(E)	1,233,652,948	1,252,030,859	1,290,034,006	1,293,505,880	1,283,516,692	6,352,740,385
G	Loss Factor in distributor's system [(C)/(F)]	1.0388	1.0289	1.0401	1.0337	1.0346	1.0352
	Losses Upstream of Distributor's System						
H	Supply Facility Loss Factor	1.0045	1.0076	1.0030	1.0051	1.0050	1.0050
	Total Losses						
I	Total Loss Factor [(G)x(H)]	1.0435	1.0367	1.0433	1.0390	1.0397	1.0404

RATE SCHEDULES AND BILL IMPACTS

The following table sets out WNH's proposed 2011 electricity distribution rates based on the foregoing calculations, including adjustments for the recovery of transformer allowance and low voltage charges. The 2011 Proposed Distribution Charges are presented in Table 8-14 and a proposed rate schedule is included in Table 8-15.

Table 8-14

2011 Proposed Distribution Charges

Class	Proposed Monthly Service Charge ¹ (\$)	Unit of Measure	Proposed Volumetric Distribution Charge Incl. Transformer Allowance Adjustment (\$)
Residential	\$ 14.56	kWh	\$ 0.0202
GS < 50 kW	\$ 30.63	kWh	\$ 0.0148
GS > 50 kW	\$ 187.01	kW	\$ 4.4027
Large User	\$ 6,686.47	kW	\$ 3.3726
Street Lighting	\$ 0.33	kW	\$ 9.6165
USL	\$ 15.31	kWh	\$ 0.0190
Embedded Distributor	\$ -	kW	\$ 0.0118
Transformer Discount		kW	\$ (0.60)

¹ Excluding Smart Meter Adder

Table 8-15
2011 Proposed Rate Schedule

RESIDENTIAL SERVICE CLASSIFICATION		
MONTHLY RATES AND CHARGES – Delivery Component		
Service Charge	\$	14.56
Smart Meter Funding Adder	\$	1.00
Distribution Volumetric Rate	\$/kWh	0.0202
Low Voltage Service Rate	\$/kWh	0.0001
Rate Rider for Global Adjustment Sub-Account Disposition – effective until April 30, 2014	\$/kWh	0.0003
Applicable only for Non-RPP Customers		
Rate Rider for Deferral/Variance Account Disposition (2010) – effective until April 30, 2014	\$/kWh	(0.0027)
Rate Rider for Global Adjustment Sub-Account Disposition – effective until April 30, 2015	\$/kWh	0.0001
Applicable only for Non-RPP Customers		
LRAM and SSM Rate Rider	\$/kWh	0.0002
Retail Transmission Rate – Network Service Rate	\$/kWh	0.0057
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0018
MONTHLY RATES AND CHARGES – Regulatory Component		
Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

GENERAL SERVICE LESS THAN 50 kW SERVICE CLASSIFICATION		
MONTHLY RATES AND CHARGES – Delivery Component		
Service Charge	\$	30.63
Smart Meter Funding Adder	\$	1.00
Distribution Volumetric Rate	\$/kWh	0.0148
Low Voltage Service Rate	\$/kWh	0.0001
Rate Rider for Global Adjustment Sub-Account Disposition – effective until April 30, 2014		
Applicable only for Non-RPP Customers	\$/kWh	0.0003
Rate Rider for Deferral/Variance Account Disposition (2010) – effective until April 30, 2014	\$/kWh	(0.0027)
LRAM and SSM Rate Rider	\$/kWh	0.0001
Retail Transmission Rate – Network Service Rate	\$/kWh	0.0052
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0016
MONTHLY RATES AND CHARGES – Regulatory Component		
Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

GENERAL SERVICE 50 to 4,999 kW SERVICE CLASSIFICATION		
MONTHLY RATES AND CHARGES – Delivery Component		
Service Charge	\$	187.01
Smart Meter Funding Adder	\$	1.00
Distribution Volumetric Rate	\$/kW	4.4027
Low Voltage Service Rate	\$/kW	0.0561
Rate Rider for Global Adjustment Sub-Account Disposition – effective until April 30, 2014	\$/kW	0.1297
Rate Rider for Deferral/Variance Account Disposition (2010) – effective until April 30, 2014	\$/kW	(1.1063)
Rate Rider for Global Adjustment Sub-Account Disposition – effective until April 30, 2015	\$/kW	0.0005
Rate Rider for Deferral/Variance Account Disposition (2010) – effective until April 30, 2015	\$/kW	(0.0458)
LRAM and SSM Rate Rider	\$/kW	0.1402
Retail Transmission Rate – Network Service Rate – (less than 1,000 kW)	\$/kW	2.1058
Retail Transmission Rate – Network Service Rate – Interval Metered (less than 1,000 kW)	\$/kW	2.2366
Retail Transmission Rate – Network Service Rate – Interval Metered (1,000 to 4,999 kW)	\$/kW	2.2338
Retail Transmission Rate – Line and Transformation Connection Service Rate – (less than 1,000 kW)	\$/kW	0.6342
Retail Transmission Rate – Line and Transformation Connection Service Rate – Interval Metered (less than 1,000 kW)	\$/kW	0.7922
Retail Transmission Rate – Line and Transformation Connection Service Rate – Interval Metered (1,000 to 4,999 kW)	\$/kW	0.7912
MONTHLY RATES AND CHARGES – Regulatory Component		
Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

Table 8-15

2011 Proposed Rate Schedule

LARGE USE SERVICE CLASSIFICATION		
MONTHLY RATES AND CHARGES – Delivery Component		
Service Charge	\$	6,686.47
Smart Meter Funding Adder	\$	1.00
Distribution Volumetric Rate	\$/kW	3.3726
Low Voltage Service Rate	\$/kW	0.0563
Rate Rider for Global Adjustment Sub-Account Disposition – effective until April 30, 2014	\$/kW	0.1620
Applicable only for Non-RPP Customers		
Rate Rider for Deferral/Variance Account Disposition (2010) – effective until April 30, 2014	\$/kW	(1.3863)
Rate Rider for Global Adjustment Sub-Account Disposition – effective until April 30, 2015	\$/kW	0.0005
Applicable only for Non-RPP Customers		
Rate Rider for Deferral/Variance Account Disposition (2011) – effective until April 30, 2015	\$/kW	(0.0706)
Retail Transmission Rate – Network Service Rate – Interval Metered	\$/kW	1.5883
Retail Transmission Rate – Line and Transformation Connection Service Rate – Interval Metered	\$/kW	0.4902
MONTHLY RATES AND CHARGES – Regulatory Component		
Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

UNMETERED SCATTERED LOAD SERVICE CLASSIFICATION		
MONTHLY RATES AND CHARGES – Delivery Component		
Service Charge (per connection)	\$	15.31
Distribution Volumetric Rate	\$/kWh	0.0190
Low Voltage Service Rate	\$/kWh	0.0001
Rate Rider for Global Adjustment Sub-Account Disposition – effective until April 30, 2014	\$/kWh	0.0003
Applicable only for Non-RPP Customers		
Rate Rider for Deferral/Variance Account Disposition (2010) – effective until April 30, 2014	\$/kWh	(0.0027)
Rate Rider for Deferral/Variance Account Disposition (2011) – effective until April 30, 2015	\$/kWh	0.0006
LRAM and SSM Rate Rider	\$/kWh	0.0044
Retail Transmission Rate – Network Service Rate	\$/kWh	0.0052
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0016
MONTHLY RATES AND CHARGES – Regulatory Component		
Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

STREET LIGHTING SERVICE CLASSIFICATION		
MONTHLY RATES AND CHARGES – Delivery Component		
Service Charge (per connection)	\$	0.33
Distribution Volumetric Rate	\$/kW	9.6165
Low Voltage Service Rate	\$/kW	0.0347
Rate Rider for Deferral/Variance Account Disposition (2010) – effective until April 30, 2014	\$/kW	(0.9707)
Rate Rider for Global Adjustment Sub-Account Disposition – effective until April 30, 2015	\$/kW	0.0002
Applicable only for Non-RPP Customers		
Rate Rider for Deferral/Variance Account Disposition (2011) – effective until April 30, 2015	\$/kW	0.0408
LRAM and SSM Rate Rider	\$/kW	0.2330
Retail Transmission Rate – Network Service Rate	\$/kW	1.5883
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	0.4902
MONTHLY RATES AND CHARGES – Regulatory Component		
Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

microFIT GENERATOR SERVICE CLASSIFICATION		
MONTHLY RATES AND CHARGES – Delivery Component		
Service Charge	\$	6.25

Table 8-15

2011 Proposed Rate Schedule

EMBEDDED DISTRIBUTOR SERVICE CLASSIFICATION		
MONTHLY RATES AND CHARGES – Delivery Component		
Distribution Volumetric Rate	\$/kW	0.0118
Rate Rider for Global Adjustment Sub-Account Disposition – effective until April 30, 2014	\$/kW	0.1297
Rate Rider for Deferral/Variance Account Disposition (2010) – effective until April 30, 2014	\$/kW	(1.1063)
Rate Rider for Global Adjustment Sub-Account Disposition – effective until April 30, 2015	\$/kW	0.0005
Rate Rider for Deferral/Variance Account Disposition (2010) – effective until April 30, 2015	\$/kW	(0.0458)
MONTHLY RATES AND CHARGES – Regulatory Component		
Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25
ALLOWANCES		
Transformer Allowance for Ownership - per kW of billing demand/month	\$	(0.60)
Primary Metering Allowance for transformer losses – applied to measured demand and energy	%	(1.00)
SPECIFIC SERVICE CHARGES		
Customer Administration		
Easement Letter	\$	15.00
Notification Charge	\$	15.00
Credit reference/credit check (plus credit agency costs)	\$	15.00
Returned Cheque charge (plus bank charges)	\$	15.00
Duplicate invoices for previous billing	\$	15.00
Income tax letter	\$	15.00
Account set up charge / change of occupancy charge (plus credit agency costs if applicable)	\$	30.00
Meter dispute charge plus Measurement Canada fees (if meter found correct)	\$	30.00
Non-Payment of Account		
Late Payment - per month	%	1.50
Late Payment - per annum	%	19.56
Disconnect/Reconnect at meter – during regular hours	\$	65.00
Disconnect/Reconnect at meter – after regular hours	\$	185.00
Specific Charge for Access to the Power Poles – per pole/year	\$	22.35
RETAIL SERVICE CHARGES (if applicable)		
One-time charge, per retailer, to establish the service agreement between the distributor and the retailer	\$	100.00
Monthly Fixed Charge, per retailer	\$	20.00
Monthly Variable Charge, per customer, per retailer	\$/cust.	0.50
Distributor-consolidated billing charge, per customer, per retailer	\$/cust.	0.30
Retailer-consolidated billing credit, per customer, per retailer	\$/cust.	(0.30)
Service Transaction Requests (STR)		
Request fee, per request, applied to the requesting party	\$	0.25
Processing fee, per request, applied to the requesting party	\$	0.50
Request for customer information as outlined in Section 10.6.3 and Chapter 11 of the Retail Settlement Code directly to retailers and customers, if not delivered electronically through the Electronic Business Transaction (EBT) system, applied to the requesting party		
Up to twice a year		No charge
More than twice a year, per request (plus incremental delivery costs)	\$	2.00
LOSS FACTORS		
Total Loss Factor – Secondary Metered Customer < 5,000 kW		1.0404
Total Loss Factor – Secondary Metered Customer > 5,000 kW		1.0150
Total Loss Factor – Primary Metered Customer < 5,000 kW		1.0300
Total Loss Factor – Primary Metered Customer > 5,000 kW		1.0050

RATE AND BILL IMPACTS

WNH presents the results of the assessment of customer total bill impacts for the six major customer rate classes and by various levels of consumption for each. Impacts are shown using the applicable current approved rates and the proposed 2011 distribution rates, including a Rate Rider for the recovery of Smart Meters and LRAM/SSM.

The total bill impacts are calculated for the typical range for each of the six major rate classes in Tables 8-16 to 8-21. Table 8-22 details each rate class at various levels of consumption. The rate impacts are assessed on the basis of moving to the proposed distribution rates.

WNH notes that Tables 8-16 to 8-21 include the Special Purpose Charge and SSS Administration as points for comparison, consistent with the Board's Revenue Requirement Work Form and Appendix 2-Q. Table 8-22 excludes these charges for the balance of the rate impacts being presented as neither charge is material by its nature.

RATE MITIGATION

WNH submits that the bill impacts of its proposed 2011 electricity distribution rates are reasonable and do not require rate mitigation.

The Street Lighting rate class bill impacts are above 10% resulting from the implementation of the 2011 Cost Allocation Study. WNH has proposed to move this rate class to the OEB's target range of acceptable Revenue to Cost ratio over a three year period. WNH selected a three year period to move the Street Lighting rate class in order to lower the rate impact. As a result, it is expected this class will experience higher increases than the other rate classes.

Table 8-16
Residential Impact Table
800 kWh per month, Loss Factor Current 1.0505, Proposed 1.0404

RESIDENTIAL									
	2010 BILL			2011 BILL			IMPACT		
	Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	\$	%	% of Total Bill
Consumption									
800 kWh									
Monthly Service Charge			14.56			14.56	0.00	0.00%	12.33%
Distribution (kWh)	800	0.0131	10.48	800	0.0202	16.16	5.68	54.20%	13.68%
Low Voltage Rider (kWh)	800	0.0001	0.08	800	0.0001	0.08	0.00	0.00%	0.07%
Smart Meter Rider (per month)			1.00			1.00	0.00	0.00%	0.85%
LRAM & SSM Rider (kWh)	800		0.00	800	0.0002	0.19	0.19	100.00%	0.16%
Deferral & Variance Acct (kWh)	800	(0.0024)	(1.92)	800	(0.0023)	(1.84)	0.08	(4.17%)	(1.56%)
Distribution Sub-Total			24.20			30.15	5.95	24.57%	25.52%
Retail Transmission (kWh)	840	0.0078	6.56	832	0.0074	6.16	(0.40)	(6.04%)	5.21%
Delivery Sub-Total			30.76			36.31	5.82	18.92%	30.74%
Other Charges (kWh)	840	0.0135	11.35	832	0.0135	11.24	(0.11)	(0.96%)	9.51%
SSS Administration Charge			0.25			0.25	0.00	0.00%	0.21%
Special Purpose Charge	840	0.0003725	0.31	832	0.0003725	0.31	(0.00)	(0.96%)	0.26%
Cost of Power Commodity (kWh)	600	0.0650	39.00	600	0.0650	39.00	0.00	0.00%	33.02%
Cost of Power Commodity (kWh)	240	0.0750	18.03	232	0.0750	17.42	(0.61)	(3.36%)	14.75%
Total Bill Before Taxes			99.69			104.53	5.10	5.12%	88.50%
HST		13.00%	12.96		13.00%	13.59	0.63	4.85%	11.50%
Total Bill			112.65			118.11	5.73	5.08%	100.00%

Table 8-17

GS<50kW Impact Table

2,000 kWh per month, Loss Factor Current 1.0505, Proposed 1.0404

GENERAL SERVICE < 50 kW										
		2010 BILL			2011 BILL			IMPACT		
		Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	\$	%	% of Total Bill
Consumption	Monthly Service Charge			30.63			30.63	0.00	0.00%	10.90%
	2,000 kWh	2,000	0.0104	20.80	2,000	0.0148	29.60	8.80	42.31%	10.54%
	Low Voltage Rider (kWh)	2,000	0.0001	0.20	2,000	0.0001	0.20	0.00	0.00%	0.07%
	Smart Meter Rider (per month)			1.00			1.00	0.00	0.00%	0.36%
	LRAM & SSM Rider (kWh)	2,000		0.00	2,000	0.0001	0.15	0.15	100.00%	0.05%
	Deferrral & Variance Acct (kWh)	2,000	(0.0024)	-4.80	2,000	(0.0024)	(4.80)	0.00	0.00%	(1.71%)
	Distribution Sub-Total			47.83			56.78	8.95	18.71%	20.21%
	Retail Transmisssion (kWh)	2,101	0.0071	14.92	2,081	0.0068	14.15	(0.77)	(5.15%)	5.04%
	Delivery Sub-Total			62.75			70.93	8.33	13.28%	25.25%
	Other Charges (kWh)	2,101	0.0135	28.36	2,081	0.0135	28.09	(0.27)	(0.96%)	10.00%
	SSS Administration Charge			0.25			0.25	0.00	0.00%	0.09%
	Special Purpose Charge	2,101	0.000373	0.78	2,081	0.000373	0.78	(0.01)	(0.96%)	0.28%
	Cost of Power Commodity (kWh)	750	0.0650	48.75	750	0.0650	48.75	0.00	0.00%	17.35%
	Cost of Power Commodity (kWh)	1,351	0.0750	101.33	1,331	0.0750	99.81	(1.51)	(1.50%)	35.53%
	Total Bill Before Taxes			242.22			248.60	\$6.54	2.70%	88.50%
	HST		13.00%	31.49		13.00%	32.32	0.83	2.64%	11.50%
	Total Bill			273.71			280.92	\$7.37	2.69%	100.00%

Table 8-18

GS>50kW Impact Table

100,000 kWh & 250kW per month, Loss Factor Current 1.0505, Proposed 1.0404

GENERAL SERVICE > 50 kW									
	2010 BILL			2011 BILL			IMPACT		
	Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	Change \$	Change %	% of Total Bill
Consumption									
100,000 kWh									
250 kW									
Monthly Service Charge			187.01			187.01	0.00	0.00%	1.40%
Distribution (kW)	250	3.5420	885.50	250	4.4027	1,100.68	215.18	24.30%	8.24%
Low Voltage Rider (kW)	250	0.03	7.50	250	0.0561	14.03	6.53	87.00%	0.10%
Smart Meter Rider (per month)			1.00			1.00	0.00	0.00%	0.01%
LRAM & SSM Rider (kW)	250		0.00	250	0.1402	35.05	35.05	100.00%	0.26%
Deferral & Variance Acct (kW)	250	(0.9766)	-244.15	250	(1.0219)	(255.48)	(11.33)	4.64%	(1.91%)
Distribution Sub-Total			836.86			1,082.28	245.42	29.33%	8.10%
Retail Transmisssion (kW)	250	3.184	796.00	250	3.0288	757.20	(38.80)	(4.87%)	5.67%
Delivery Sub-Total			1,632.86			1,839.48	236.87	14.51%	13.77%
Other Charges (kWh)	105,050	0.0135	1,418.18	104,040	0.0135	1,404.54	(13.64)	(0.96%)	10.52%
SSS Administration Charge			0.25			0.25	0.00	0.00%	0.00%
Special Purpose Charge	105,050	0.000373	39.13	104,040	0.000373	38.75	(0.38)	(0.96%)	0.29%
Cost of Power Commodity (kWh)	105,050	0.0644	6,763.12	104,040	0.0644	6,698.10	(65.02)	(0.96%)	50.15%
Total Bill Before Taxes			11,486.40			11,820.61	364.46	3.17%	88.50%
HST		13.00%	1,493.23		13.00%	1,536.68	43.45	2.91%	11.50%
Total Bill			12,979.63			13,357.29	407.91	3.14%	100.00%

Table 8-19

Large User Impact Table

12,000,000 kWh & 6,500kW per month, Loss Factor Current 1.0045, Proposed 1.0050 (Primary)

LARGE USER (> 5000 kW)										
		2010 BILL			2011 BILL			IMPACT		
		Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	Change \$	Change %	% of Total Bill
Consumption	Monthly Service Charge			6,686.47			6,686.47	0.00	0.00%	0.58%
12,000,000 kWh	Distribution (kW)	6,500	2.6959	17,523.35	6,500	3.3726	21,921.90	4,398.55	25.10%	1.89%
6,500 kW	Low Voltage Rider (kW)	6,500	0.0374	243.10	6,500	0.0563	365.95	122.85	50.53%	0.03%
	Smart Meter Rider (per month)			1.00			1.00	0.00	0.00%	0.00%
	LRAM & SSM Rider (kW)	6,500		0.00	6,500	0.0000	0.00	0.00	0.00%	0.00%
	Deferrral & Variance Acct (kW)	6,500	(1.2243)	-7,957.95	6,500	(1.2944)	(8,413.60)	(455.65)	5.73%	(0.72%)
	Distribution Sub-Total			16,495.97			20,561.72	4,065.75	24.65%	1.77%
	Retail Transmisssion (kW)	6,500	3.4325	22,311.25	6,500	3.2712	21,262.80	(1,048.45)	(4.70%)	1.83%
	Delivery Sub-Total			38,807.22			41,824.52	2,684.50	6.92%	3.60%
	Other Charges (kWh)	12,054,000	0.0135	162,729.00	12,060,000	0.0135	162,810.00	81.00	0.05%	14.02%
	SSS Administration Charge			0.25			0.25	0.00	0.00%	0.00%
	Special Purpose Charge	12,054,000	0.000373	4,490.12	12,060,000	0.000373	4,492.35	2.23	0.05%	0.39%
	Cost of Power Commodity (kWh)	12,054,000	0.0644	776,036.52	12,060,000	0.0644	776,422.80	386.28	0.05%	66.88%
	Total Bill Before Taxes			1,020,870.33			1,027,374.44	6,171.31	0.60%	88.50%
	HST		13.00%	132,713.14		13.00%	133,558.68	845.53	0.64%	11.50%
	Total Bill			1,153,583.47			1,160,933.12	7,016.85	0.61%	100.00%

Table 8-20
Street Lighting Impact Table
50 kWh & .14kW per month, Loss Factor Current 1.0505, Proposed 1.404

Street Lighting									
	2010 BILL			2011 BILL			IMPACT		
	Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	Change \$	Change %	% of Total Bill
Billing Determinants									
1 Connections									
50.00 kWh									
0.14 kW									
Monthly Service Charge	1	0.3300	0.33	1	0.3300	0.33	0.00	0.00%	3.62%
Distribution (kW)	0	6.7448	0.94	0	9.6165	1.35	0.40	42.58%	14.76%
Low Voltage Rider (kW)	0	0.0228	0.00	0	0.0347	0.00	0.00	52.19%	0.05%
LRAM & SSM Rider (kW)	0		0.00	0	0.2330	0.03	0.03	100.00%	0.36%
Deferral & Variance Acct (kW)	0	(0.9707)	-0.14	0	(0.9297)	(0.13)	0.01	(4.22%)	(1.43%)
Distribution Sub-Total			1.14			1.58	0.44	38.72%	17.37%
Retail Transmission (kW)	0	2.1794	0.31	0	2.0784	0.29	(0.01)	(4.63%)	3.19%
Delivery Sub-Total			1.45			1.87	0.47	32.35%	20.56%
Other Charges (kWh)	53	0.0135	0.71	52	0.0135	0.70	(0.01)	(0.96%)	7.70%
SSS Administration Charge			0.25			0.25	0.00	0.00%	2.74%
Special Purpose Charge	53	0.000373	0.02	52	0.000373	0.02	(0.00)	(0.96%)	0.21%
Cost of Power Commodity (kWh)	53	0.0644	3.38	52	0.0644	3.35	(0.03)	(0.96%)	36.73%
Total Bill Before Taxes			7.25			8.07	0.86	11.81%	88.50%
HST		13.00%	0.94		13.00%	1.05	0.11	11.25%	11.50%
Total Bill			8.20			9.12	0.96	11.74%	100.00%

Table 8-21
USL Impact Table

50 kWh & .14kW per month, Loss Factor Current 1.0505, Proposed 1.404

Unmetered Scattered Load									
	2010 BILL			2011 BILL			IMPACT		
	Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	Change \$	Change %	% of Total Bill
Consumption									
250 kWh									
Monthly Service Charge			15.31			15.31	0.00	0.00%	32.92%
Distribution (kWh)	250	0.0103	2.58	250	0.0190	4.75	2.18	84.47%	10.21%
Low Voltage Rider (kWh)	250	0.0001	0.03	250	0.0001	0.03	0.00	0.00%	0.05%
LRAM & SSM Rider (kWh)	250		0.00	250	0.0044	1.11	1.11	100.00%	2.38%
Deferral & Variance Acct (kWh)	250	(0.0024)	-0.60	250	(0.0018)	(0.45)	0.15	(25.00%)	(0.97%)
Distribution Sub-Total			17.31			20.74	3.43	19.83%	44.60%
Retail Transmisssion (kWh)	263	0.0071	1.86	260	0.0068	1.77	(0.10)	(5.15%)	3.80%
Delivery Sub-Total			19.17			22.51	4.59	23.96%	48.40%
Other Charges (kWh)	263	0.0135	3.55	260	0.0135	3.51	(0.03)	(0.96%)	7.55%
SSS Administration Charge			0.25			0.25	0.00	0.00%	0.54%
Special Purpose Charge	263	0.000373	0.10	260	0.000373	0.10	(0.00)	(0.96%)	0.21%
Cost of Power Commodity (kWh)	263	0.0650	17.07	260	0.0650	16.91	(0.16)	(0.96%)	36.35%
Total Bill Before Taxes			37.93			41.16	3.23	8.53%	88.50%
HST		13.00%	4.93		13.00%	5.35	0.42	8.53%	11.50%
Total Bill			42.86			46.51	3.66	8.53%	100.00%

Table 8-22

RESIDENTIAL									
		2010 BILL			2011 BILL			IMPACT	
		Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	Change \$	Change %
Consumption	Monthly Service Charge			14.56			14.56	0.00	0.00%
	Distribution (kWh)	100	0.0131	1.31	100	0.0202	2.02	0.71	54.20%
100 kWh	Low Voltage Rider (kWh)	100	0.0001	0.01	100	0.0001	0.01	0.00	0.00%
	Smart Meter Rider (per month)			1.00			1.00	0.00	0.00%
	LRAM & SSM Rider (kWh)	100		0.00	100	0.0002	0.02	0.02	100.00%
	Deferral & Variance Acct (kWh)	100	(0.0024)	(0.24)	100	(0.0023)	(0.23)	0.01	(4.17%)
	Distribution Sub-Total			16.64			17.38	0.74	4.47%
	Retail Transmission (kWh)	105	0.0078	0.82	104	0.0074	0.77	(0.05)	(6.04%)
	Delivery Sub-Total			17.46			18.15	0.73	4.17%
	Other Charges (kWh)	105	0.0135	1.42	104	0.0135	1.40	(0.01)	(0.96%)
	Cost of Power Commodity (kWh)	105	0.0650	6.83	104	0.0650	6.76	(0.07)	(0.96%)
	Total Bill Before Taxes			24.89			25.55	0.66	2.67%
	HST		13.00%	3.24		13.00%	3.32	0.09	2.67%
	Total Bill			28.12			28.87	0.75	2.67%

RESIDENTIAL									
		2010 BILL			2011 BILL			IMPACT	
		Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	Change \$	Change %
Consumption	Monthly Service Charge			14.56			14.56	0.00	0.00%
	Distribution (kWh)	250	0.0131	3.28	250	0.0202	5.05	1.78	54.20%
250 kWh	Low Voltage Rider (kWh)	250	0.0001	0.03	250	0.0001	0.03	0.00	0.00%
	Smart Meter Rider (per month)			1.00			1.00	0.00	0.00%
	LRAM & SSM Rider (kWh)	250		0.00	250	0.0002	0.06	0.06	100.00%
	Deferral & Variance Acct (kWh)	250	(0.0024)	(0.60)	250	(0.0023)	(0.58)	0.03	(4.17%)
	Distribution Sub-Total			18.26			20.12	1.86	10.18%
	Retail Transmission (kWh)	263	0.0078	2.05	260	0.0074	1.92	(0.12)	(6.04%)
	Delivery Sub-Total			20.31			22.04	1.82	8.95%
	Other Charges (kWh)	263	0.0135	3.55	260	0.0135	3.51	(0.03)	(0.96%)
	Cost of Power Commodity (kWh)	263	0.0650	17.07	260	0.0650	16.91	(0.16)	(0.96%)
	Total Bill Before Taxes			38.88			40.54	1.66	4.27%
	HST		13.00%	5.05		13.00%	5.27	0.22	4.27%
	Total Bill			43.93			45.81	1.88	4.27%

Table 8-22

RESIDENTIAL									
	2010 BILL			2011 BILL			IMPACT		
	Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	Change \$	Change %	% of Total Bill
Consumption									
500 kWh									
Monthly Service Charge			14.56			14.56	0.00	0.00%	19.67%
Distribution (kWh)	500	0.0131	6.55	500	0.0202	10.10	3.55	54.20%	13.64%
Low Voltage Rider (kWh)	500	0.0001	0.05	500	0.0001	0.05	0.00	0.00%	0.07%
Smart Meter Rider (per month)			1.00			1.00	0.00	0.00%	1.35%
LRAM & SSM Rider (kWh)	500		0.00	500	0.0002	0.12	0.12	100.00%	0.16%
Deferral & Variance Acct (kWh)	500	(0.0024)	-1.20	500	(0.0023)	(1.15)	0.05	(4.17%)	(1.55%)
Distribution Sub-Total			20.96			24.68	3.72	17.73%	33.33%
Retail Transmission (kWh)	525	0.0078	4.10	520	0.0074	3.85	(0.25)	(6.04%)	5.20%
Delivery Sub-Total			25.06			28.53	3.64	14.51%	38.53%
Other Charges (kWh)	525	0.0135	7.09	520	0.0135	7.02	(0.07)	(0.96%)	9.49%
Cost of Power Commodity (kWh)	525	0.0650	34.14	520	0.0650	33.81	(0.33)	(0.96%)	45.68%
Total Bill Before Taxes			62.19			65.51	3.32	5.34%	88.50%
HST		13.00%	8.08		13.00%	8.52	0.43	5.34%	11.50%
Total Bill			70.28			74.03	3.75	5.34%	100.00%

RESIDENTIAL									
	2010 BILL			2011 BILL			IMPACT		
	Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	\$	%	% of Total Bill
Consumption									
800 kWh									
Monthly Service Charge			14.56			14.56	0.00	0.00%	12.33%
Distribution (kWh)	800	0.0131	10.48	800	0.0202	16.16	5.68	54.20%	13.68%
Low Voltage Rider (kWh)	800	0.0001	0.08	800	0.0001	0.08	0.00	0.00%	0.07%
Smart Meter Rider (per month)			1.00			1.00	0.00	0.00%	0.85%
LRAM & SSM Rider (kWh)	800		0.00	800	0.0002	0.19	0.19	100.00%	0.16%
Deferral & Variance Acct (kWh)	800	(0.0024)	(1.92)	800	(0.0023)	(1.84)	0.08	(4.17%)	(1.56%)
Distribution Sub-Total			24.20			30.15	5.95	24.57%	25.52%
Retail Transmission (kWh)	840	0.0078	6.56	832	0.0074	6.16	(0.40)	(6.04%)	5.21%
Delivery Sub-Total			30.76			36.31	5.82	18.92%	30.74%
Other Charges (kWh)	840	0.0135	11.35	832	0.0135	11.24	(0.11)	(0.96%)	9.51%
SSS Administration Charge			0.25			0.25	0.00	0.00%	0.21%
Special Purpose Charge	840	0.0003725	0.31	832	0.0003725	0.31	(0.00)	(0.96%)	0.26%
Cost of Power Commodity (kWh)	600	0.0650	39.00	600	0.0650	39.00	0.00	0.00%	33.02%
Cost of Power Commodity (kWh)	240	0.0750	18.03	232	0.0750	17.42	(0.61)	(3.36%)	14.75%
Total Bill Before Taxes			99.69			104.53	5.10	5.12%	88.50%
HST		13.00%	12.96		13.00%	13.59	0.63	4.85%	11.50%
Total Bill			112.65			118.11	5.73	5.08%	100.00%

Table 8-22

RESIDENTIAL									
		2010 BILL			2011 BILL			IMPACT	
		Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	\$	%
Consumption									% of Total Bill
	1,000 kWh								
	Monthly Service Charge			14.56			14.56	0.00	0.00%
	Distribution (kWh)	1,000	0.0131	13.10	1,000	0.0202	20.20	7.10	54.20%
	Low Voltage Rider (kWh)	1,000	0.0001	0.10	1,000	0.0001	0.10	0.00	0.00%
	Smart Meter Rider (per month)			1.00			1.00	0.00	0.00%
	LRAM & SSM Rider (kWh)	1,000		0.00	1,000	0.0002	0.23	0.23	100.00%
	Deferral & Variance Acct (kWh)	1,000	(0.0024)	(2.40)	1,000	(0.0023)	(2.30)	0.10	(4.17%)
	Distribution Sub-Total			26.36			33.79	7.43	28.20%
	Retail Transmission (kWh)	1,051	0.0078	8.19	1,040	0.0074	7.70	(0.49)	(6.04%)
	Delivery Sub-Total			34.55			41.49	7.27	21.05%
	Other Charges (kWh)	1,051	0.0135	14.18	1,040	0.0135	14.05	(0.14)	(0.96%)
	Cost of Power Commodity (kWh)	600	0.0650	39.00	600	0.0650	39.00	0.00	0.00%
	Cost of Power Commodity (kWh)	451	0.0750	33.79	440	0.0750	33.03	(0.76)	(2.24%)
	Total Bill Before Taxes			121.52			127.57	6.38	5.25%
	HST		13.00%	15.80		13.00%	16.58	0.79	4.97%
	Total Bill			137.32			144.15	7.16	5.22%

RESIDENTIAL									
		2010 BILL			2011 BILL			IMPACT	
		Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	\$	%
Consumption									% of Total Bill
	1,500 kWh								
	Monthly Service Charge			14.56			14.56	0.00	0.00%
	Distribution (kWh)	1,500	0.0131	19.65	1,500	0.0202	30.30	10.65	54.20%
	Low Voltage Rider (kWh)	1,500	0.0001	0.15	1,500	0.0001	0.15	0.00	0.00%
	Smart Meter Rider (per month)			1.00			1.00	0.00	0.00%
	LRAM & SSM Rider (kWh)	1,500		0.00	1,500	0.0002	0.35	0.35	100.00%
	Deferral & Variance Acct (kWh)	1,500	(0.0024)	-3.60	1,500	(0.0023)	(3.45)	0.15	(4.17%)
	Distribution Sub-Total			31.76			42.91	11.15	35.11%
	Retail Transmission (kWh)	1,576	0.0078	12.29	1,561	0.0074	11.55	(0.74)	(6.04%)
	Delivery Sub-Total			44.05			54.46	10.91	24.76%
	Other Charges (kWh)	1,576	0.0135	21.27	1,561	0.0135	21.07	(0.20)	(0.96%)
	Cost of Power Commodity (kWh)	600	0.0650	39.00	600	0.0650	39.00	0.00	0.00%
	Cost of Power Commodity (kWh)	976	0.0750	73.18	961	0.0750	72.05	(1.14)	(1.55%)
	Total Bill Before Taxes			177.50			186.57	9.57	5.39%
	HST		13.00%	23.08		13.00%	24.25	1.18	5.11%
	Total Bill			200.58			210.83	10.75	5.36%

Table 8-22

RESIDENTIAL									
Consumption	2,000 kWh	2010 BILL			2011 BILL			IMPACT	
		Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	\$	%
								% of Total Bill	
		Monthly Service Charge		14.56			14.56	0.00	0.00%
		Distribution (kWh)	2,000	0.0131	26.20	2,000	0.0202	40.40	54.20%
		Low Voltage Rider (kWh)	2,000	0.0001	0.20	2,000	0.0001	0.20	0.00%
		Smart Meter Rider (per month)		1.00			1.00	0.00	0.00%
		LRAM & SSM Rider (kWh)	2,000		0.00	2,000	0.0002	0.47	100.00%
		Deferral & Variance Acct (kWh)	2,000	(0.0024)	-4.80	2,000	(0.0023)	(4.60)	(4.17%)
		Distribution Sub-Total		37.16			52.03	14.87	40.01%
		Retail Transmission (kWh)	2,101	0.0078	16.39	2,081	0.0074	15.40	(0.99%)
		Delivery Sub-Total		53.55			67.43	14.54	27.16%
		Other Charges (kWh)	2,101	0.0135	28.36	2,081	0.0135	28.09	(0.27%)
		Cost of Power Commodity (kWh)	600	0.0650	39.00	600	0.0650	39.00	0.00%
		Cost of Power Commodity (kWh)	1,501	0.0750	112.58	1,481	0.0750	111.06	(1.51%)
		Total Bill Before Taxes		233.49			245.58	12.76	5.46%
		HST		13.00%	30.35		13.00%	31.92	5.18%
		Total Bill		263.84			277.50	14.33	5.43%

GENERAL SERVICE < 50 kW									
Consumption	1,000 kWh	2010 BILL			2011 BILL			IMPACT	
		Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	\$	%
								% of Total Bill	
		Monthly Service Charge		30.63			30.63	0.00	0.00%
		Distribution (kWh)	1,000	0.0104	10.40	1,000	0.0148	14.80	42.31%
		Low Voltage Rider (kWh)	1,000	0.0001	0.10	1,000	0.0001	0.10	0.00%
		Smart Meter Rider (per month)		1.00			1.00	0.00	0.00%
		LRAM & SSM Rider (kWh)	1,000		0.00	1,000	0.0001	0.07	100.00%
		Deferral & Variance Acct (kWh)	1,000	(0.0024)	-2.40	1,000	(0.0024)	(2.40)	(1.56%)
		Distribution Sub-Total		39.73			44.20	4.47	11.26%
		Retail Transmission (kWh)	1,051	0.0071	7.46	1,040	0.0068	7.07	(0.38%)
		Delivery Sub-Total		47.19			51.28	4.17	8.83%
		Other Charges (kWh)	1,051	0.0135	14.18	1,040	0.0135	14.05	(0.14%)
		Cost of Power Commodity (kWh)	750	0.0650	48.75	750	0.0650	48.75	0.00%
		Cost of Power Commodity (kWh)	301	0.0750	22.54	290	0.0750	21.78	(0.76%)
		Total Bill Before Taxes		132.66			135.85	\$3.27	2.47%
		HST		13.00%	17.25		13.00%	17.66	2.41%
		Total Bill		149.90			153.52	\$3.69	2.46%

Table 8-22

GENERAL SERVICE < 50 kW										
		2010 BILL			2011 BILL			IMPACT		
		Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	\$	%	% of Total Bill
Consumption	Monthly Service Charge			30.63			30.63	0.00	0.00%	10.90%
	Distribution (kWh)	2,000	0.0104	20.80	2,000	0.0148	29.60	8.80	42.31%	10.54%
2,000 kWh	Low Voltage Rider (kWh)	2,000	0.0001	0.20	2,000	0.0001	0.20	0.00	0.00%	0.07%
	Smart Meter Rider (per month)			1.00			1.00	0.00	0.00%	0.36%
	LRAM & SSM Rider (kWh)	2,000		0.00	2,000	0.0001	0.15	0.15	100.00%	0.05%
	Deferral & Variance Acct (kWh)	2,000	(0.0024)	-4.80	2,000	(0.0024)	(4.80)	0.00	0.00%	(1.71%)
	Distribution Sub-Total			47.83			56.78	8.95	18.71%	20.21%
	Retail Transmission (kWh)	2,101	0.0071	14.92	2,081	0.0068	14.15	(0.77)	(5.15%)	5.04%
	Delivery Sub-Total			62.75			70.93	8.33	13.28%	25.25%
	Other Charges (kWh)	2,101	0.0135	28.36	2,081	0.0135	28.09	(0.27)	(0.96%)	10.00%
	SSS Administration Charge			0.25			0.25	0.00	0.00%	0.09%
	Special Purpose Charge	2,101	0.000373	0.78	2,081	0.000373	0.78	(0.01)	(0.96%)	0.28%
	Cost of Power Commodity (kWh)	750	0.0650	48.75	750	0.0650	48.75	0.00	0.00%	17.35%
	Cost of Power Commodity (kWh)	1,351	0.0750	101.33	1,331	0.0750	99.81	(1.51)	(1.50%)	35.53%
	Total Bill Before Taxes			242.22			248.60	\$6.54	2.70%	88.50%
	HST		13.00%	31.49		13.00%	32.32	0.83	2.64%	11.50%
	Total Bill			273.71			280.92	\$7.37	2.69%	100.00%

GENERAL SERVICE < 50 kW										
		2010 BILL			2011 BILL			IMPACT		
		Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	\$	%	% of Total Bill
Consumption	Monthly Service Charge			30.63			30.63	0.00	0.00%	4.65%
	Distribution (kWh)	5,000	0.0104	52.00	5,000	0.0148	74.00	22.00	42.31%	11.24%
5,000 kWh	Low Voltage Rider (kWh)	5,000	0.0001	0.50	5,000	0.0001	0.50	0.00	0.00%	0.08%
	Smart Meter Rider (per month)			1.00			1.00	0.00	0.00%	0.15%
	LRAM & SSM Rider (kWh)	5,000		0.00	5,000	0.0001	0.37	0.37	100.00%	0.06%
	Deferral & Variance Acct (kWh)	5,000	(0.0024)	(12.00)	5,000	(0.0024)	(12.00)	0.00	0.00%	(1.82%)
	Distribution Sub-Total			72.13			94.50	22.37	31.02%	14.35%
	Retail Transmission (kWh)	5,253	0.0071	37.29	5,202	0.0068	35.37	(1.92)	(5.15%)	5.37%
	Delivery Sub-Total			109.42			129.88	20.83	19.04%	19.72%
	Other Charges (kWh)	5,253	0.0135	70.91	5,202	0.0135	70.23	(0.68)	(0.96%)	10.66%
	Cost of Power Commodity (kWh)	750	0.0650	48.75	750	0.0650	48.75	0.00	0.00%	7.40%
	Cost of Power Commodity (kWh)	4,503	0.0750	337.69	4,452	0.0750	333.90	(3.79)	(1.12%)	50.71%
	Total Bill Before Taxes			566.77			582.75	\$16.36	2.89%	88.50%
	HST		13.00%	73.68		13.00%	75.76	2.08	2.82%	11.50%
	Total Bill			640.45			658.51	\$18.44	2.88%	100.00%

Table 8-22

GENERAL SERVICE < 50 kW									
	2010 BILL			2011 BILL			IMPACT		
	Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	\$	%	% of Total Bill
Consumption									
10,000 kWh									
Monthly Service Charge			30.63			30.63	0.00	0.00%	2.37%
Distribution (kWh)	10,000	0.0104	104.00	10,000	0.0148	148.00	44.00	42.31%	11.48%
Low Voltage Rider (kWh)	10,000	0.0001	1.00	10,000	0.0001	1.00	0.00	0.00%	0.08%
Smart Meter Rider (per month)			1.00			1.00	0.00	0.00%	0.08%
LRAM & SSM Rider (kWh)	10,000		0.00	10,000	0.0001	0.75	0.75	100.00%	0.06%
Deferral & Variance Acct (kWh)	10,000	(0.0024)	(24.00)	10,000	(0.0024)	(24.00)	0.00	0.00%	(1.86%)
Distribution Sub-Total			112.63			157.38	44.75	39.73%	12.20%
Retail Transmission (kWh)	10,505	0.0071	74.59	10,404	0.0068	70.75	(3.84)	(5.15%)	5.49%
Delivery Sub-Total			187.22			228.13	41.66	22.25%	17.69%
Other Charges (kWh)	10,505	0.0135	141.82	10,404	0.0135	140.45	(1.36)	(0.96%)	10.89%
Cost of Power Commodity (kWh)	750	0.0650	48.75	750	0.0650	48.75	0.00	0.00%	3.78%
Cost of Power Commodity (kWh)	9,755	0.0750	731.63	9,654	0.0750	724.05	(7.58)	(1.04%)	56.14%
Total Bill Before Taxes			1,109.41			1,141.38	\$32.72	2.95%	88.50%
HST		13.00%	144.22		13.00%	148.38	4.16	2.88%	11.50%
Total Bill			1,253.63			1,289.76	\$36.88	2.94%	100.00%

GENERAL SERVICE < 50 kW									
	2010 BILL			2011 BILL			IMPACT		
	Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	\$	%	% of Total Bill
Consumption									
15,000 kWh									
Monthly Service Charge			30.63			30.63	0.00	0.00%	1.59%
Distribution (kWh)	15,000	0.0104	156.00	15,000	0.0148	222.00	66.00	42.31%	11.56%
Low Voltage Rider (kWh)	15,000	0.0001	1.50	15,000	0.0001	1.50	0.00	0.00%	0.08%
Smart Meter Rider (per month)			1.00			1.00	0.00	0.00%	0.05%
LRAM & SSM Rider (kWh)	15,000		0.00	15,000	0.0001	1.12	1.12	100.00%	0.06%
Deferral & Variance Acct (kWh)	15,000	(0.0024)	(36.00)	15,000	(0.0024)	(36.00)	0.00	0.00%	(1.87%)
Distribution Sub-Total			153.13			220.25	67.12	43.83%	11.47%
Retail Transmission (kWh)	15,758	0.0071	111.88	15,606	0.0068	106.12	(5.76)	(5.15%)	5.52%
Delivery Sub-Total			265.01			326.37	62.49	23.58%	16.99%
Other Charges (kWh)	15,758	0.0135	212.73	15,606	0.0135	210.68	(2.05)	(0.96%)	10.97%
Cost of Power Commodity (kWh)	750	0.0650	48.75	750	0.0650	48.75	0.00	0.00%	2.54%
Cost of Power Commodity (kWh)	15,008	0.0750	1,125.56	14,856	0.0750	1,114.20	(11.36)	(1.01%)	58.00%
Total Bill Before Taxes			1,652.05			1,700.00	\$49.08	2.97%	88.50%
HST		13.00%	214.77		13.00%	221.00	6.23	2.90%	11.50%
Total Bill			1,866.81			1,921.00	\$55.31	2.96%	100.00%

Table 8-22

GENERAL SERVICE > 50 kW									
		2010 BILL			2011 BILL			IMPACT	
		Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	Change \$	Change %
Consumption	Monthly Service Charge			187.01			187.01	0.00	0.00%
10,000 kWh	Distribution (kW)	60	3.5420	212.52	60	4.4027	264.16	51.64	24.30%
60 kW	Low Voltage Rider (kW)	60	0.03	1.80	60	0.0561	3.37	1.57	87.00%
	Smart Meter Rider (per month)			1.00			1.00	0.00	0.00%
	LRAM & SSM Rider (kW)	60		0.00	60	0.1402	8.41	8.41	100.00%
	Deferral & Variance Acct (kW)	60	(0.9766)	-58.60	60	(1.0219)	(61.31)	(2.72)	4.64%
	Distribution Sub-Total			343.73			402.64	58.90	17.14%
	Retail Transmission (kW)	60	3.184	191.04	60	3.0288	181.73	(9.31)	(4.87%)
	Delivery Sub-Total			534.77			584.36	56.85	10.63%
	Other Charges (kWh)	10,505	0.0135	141.82	10,404	0.0135	140.45	(1.36)	(0.96%)
	Cost of Power Commodity (kWh)	10,505	0.0644	676.31	10,404	0.0644	669.81	(6.50)	(0.96%)
	Total Bill Before Taxes			1,887.68			1,978.99	98.57	5.22%
	HST		13.00%	245.40		13.00%	257.27	11.87	4.84%
	Total Bill			2,133.08			2,236.26	110.44	5.18%

GENERAL SERVICE > 50 kW									
		2010 BILL			2011 BILL			IMPACT	
		Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	Change \$	Change %
Consumption	Monthly Service Charge			187.01			187.01	0.00	0.00%
30,000 kWh	Distribution (kW)	100	3.5420	354.20	100	4.4027	440.27	86.07	24.30%
100 kW	Low Voltage Rider (kW)	100	0.03	3.00	100	0.0561	5.61	2.61	87.00%
	Smart Meter Rider (per month)			1.00			1.00	0.00	0.00%
	LRAM & SSM Rider (kW)	100		0.00	100	0.1402	14.02	14.02	100.00%
	Deferral & Variance Acct (kW)	100	(0.9766)	-97.66	100	(1.0219)	(102.19)	(4.53)	4.64%
	Distribution Sub-Total			447.55			545.72	98.17	21.93%
	Retail Transmission (kW)	100	3.184	318.40	100	3.0288	302.88	(15.52)	(4.87%)
	Delivery Sub-Total			765.95			848.60	94.75	12.37%
	Other Charges (kWh)	31,515	0.0135	425.45	31,212	0.0135	421.36	(4.09)	(0.96%)
	Cost of Power Commodity (kWh)	31,515	0.0644	2,028.94	31,212	0.0644	2,009.43	(19.51)	(0.96%)
	Total Bill Before Taxes			3,986.29			4,127.99	153.80	3.86%
	HST		13.00%	518.22		13.00%	536.64	18.42	3.55%
	Total Bill			4,504.51			4,664.63	172.22	3.82%

Table 8-22

GENERAL SERVICE > 50 kW									
		2010 BILL			2011 BILL			IMPACT	
		Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	Change \$	Change %
Consumption	Monthly Service Charge			187.01			187.01	0.00	0.00%
	Distribution (kW)	250	3.5420	885.50	250	4.4027	1,100.68	215.18	24.30%
	Low Voltage Rider (kW)	250	0.03	7.50	250	0.0561	14.03	6.53	87.00%
	Smart Meter Rider (per month)			1.00			1.00	0.00	0.00%
	LRAM & SSM Rider (kW)	250		0.00	250	0.1402	35.05	35.05	100.00%
	Deferral & Variance Acct (kW)	250	(0.9766)	-244.15	250	(1.0219)	(255.48)	(11.33)	4.64%
	Distribution Sub-Total			836.86			1,082.28	245.42	29.33%
	Retail Transmission (kW)	250	3.184	796.00	250	3.0288	757.20	(38.80)	(4.87%)
	Delivery Sub-Total			1,632.86			1,839.48	236.87	14.51%
	Other Charges (kWh)	105,050	0.0135	1,418.18	104,040	0.0135	1,404.54	(13.64)	(0.96%)
	SSS Administration Charge			0.25			0.25	0.00	0.00%
	Special Purpose Charge	105,050	0.000373	39.13	104,040	0.000373	38.75	(0.38)	(0.96%)
	Cost of Power Commodity (kWh)	105,050	0.0644	6,763.12	104,040	0.0644	6,698.10	(65.02)	(0.96%)
	Total Bill Before Taxes			11,486.40			11,820.61	364.46	3.17%
	HST		13.00%	1,493.23		13.00%	1,536.68	43.45	2.91%
	Total Bill			12,979.63			13,357.29	407.91	3.14%

GENERAL SERVICE > 50 kW									
		2010 BILL			2011 BILL			IMPACT	
		Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	Change \$	Change %
Consumption	Monthly Service Charge			187.01			187.01	0.00	0.00%
	Distribution (kW)	500	3.5420	1,771.00	500	4.4027	2,201.35	430.35	24.30%
	Low Voltage Rider (kW)	500	0.03	15.00	500	0.0561	28.05	13.05	87.00%
	Smart Meter Rider (per month)			1.00			1.00	0.00	0.00%
	LRAM & SSM Rider (kW)	500		0.00	500	0.1402	70.10	70.10	100.00%
	Deferral & Variance Acct (kW)	500	(0.9766)	-488.30	500	(1.0219)	(510.95)	(22.65)	4.64%
	Distribution Sub-Total			1,485.71			1,976.56	490.85	33.04%
	Retail Transmission (kW)	500	3.184	1,592.00	500	3.0288	1,514.40	(77.60)	(4.87%)
	Delivery Sub-Total			3,077.71			3,490.96	473.75	15.39%
	Other Charges (kWh)	210,100	0.0135	2,836.35	208,080	0.0135	2,809.08	(27.27)	(0.96%)
	Cost of Power Commodity (kWh)	210,100	0.0644	13,526.24	208,080	0.0644	13,396.19	(130.05)	(0.96%)
	Total Bill Before Taxes			22,518.01			23,187.19	729.68	3.24%
	HST		13.00%	2,927.34		13.00%	3,014.33	86.99	2.97%
	Total Bill			25,445.35			26,201.52	816.67	3.21%

Table 8-22

GENERAL SERVICE > 50 kW									
	2010 BILL			2011 BILL			IMPACT		
	Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	Change \$	Change %	% of Total Bill
Consumption									
400,000 kWh									
1,000 kW									
Monthly Service Charge			187.01			187.01	0.00	0.00%	0.36%
Distribution (kW)	1,000	3.5420	3,542.00	1,000	4.4027	4,402.70	860.70	24.30%	8.47%
Low Voltage Rider (kW)	1,000	0.03	30.00	1,000	0.0561	56.10	26.10	87.00%	0.11%
Smart Meter Rider (per month)			1.00			1.00	0.00	0.00%	0.00%
LRAM & SSM Rider (kW)	1,000		0.00	1,000	0.1402	140.20	140.20	100.00%	0.27%
Deferral & Variance Acct (kW)	1,000	(0.9766)	-976.60	1,000	(1.0219)	(1,021.90)	(45.30)	4.64%	(1.97%)
Distribution Sub-Total			2,783.41			3,765.11	981.70	35.27%	7.24%
Retail Transmission (kW)	1,000	3.184	3,184.00	1,000	3.0288	3,028.80	(155.20)	(4.87%)	5.83%
Delivery Sub-Total			5,967.41			6,793.91	947.50	15.88%	13.07%
Other Charges (kWh)	420,200	0.0135	5,672.70	416,160	0.0135	5,618.16	(54.54)	(0.96%)	10.81%
Cost of Power Commodity (kWh)	420,200	0.0644	27,052.48	416,160	0.0644	26,792.38	(260.10)	(0.96%)	51.55%
Total Bill Before Taxes			44,660.00			45,998.36	1,459.36	3.27%	88.50%
HST		13.00%	5,805.80		13.00%	5,979.79	173.99	3.00%	11.50%
Total Bill			50,465.80			51,978.14	1,633.35	3.24%	100.00%

GENERAL SERVICE > 50 kW									
	2010 BILL			2011 BILL			IMPACT		
	Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	Change \$	Change %	% of Total Bill
Consumption									
2,400,000 kWh									
5,400 kW									
Monthly Service Charge			187.01			187.01	0.00	0.00%	0.06%
Distribution (kW)	5,400	3.5420	19,126.80	5,400	4.4027	23,774.58	4,647.78	24.30%	7.90%
Low Voltage Rider (kW)	5,400	0.03	162.00	5,400	0.0561	302.94	140.94	87.00%	0.10%
Smart Meter Rider (per month)			1.00			1.00	0.00	0.00%	0.00%
LRAM & SSM Rider (kW)	5,400		0.00	5,400	0.1402	757.07	757.07	100.00%	0.25%
Deferral & Variance Acct (kW)	5,400	(0.9766)	-5,273.64	5,400	(1.0219)	(5,518.26)	(244.62)	4.64%	(1.83%)
Distribution Sub-Total			14,203.17			19,504.34	5,301.17	37.32%	6.48%
Retail Transmission (kW)	5,400	3.184	17,193.60	5,400	3.0288	16,355.52	(838.08)	(4.87%)	5.44%
Delivery Sub-Total			31,396.77			35,859.86	5,116.48	16.30%	11.92%
Other Charges (kWh)	2,521,200	0.0135	34,036.20	2,496,960	0.0135	33,708.96	(327.24)	(0.96%)	11.21%
Cost of Power Commodity (kWh)	2,521,200	0.0644	162,314.86	2,496,960	0.0644	160,754.28	(1,560.57)	(0.96%)	53.44%
Total Bill Before Taxes			259,144.60			266,182.96	7,691.75	2.97%	88.50%
HST		13.00%	33,688.80		13.00%	34,603.79	914.99	2.72%	11.50%
Total Bill			292,833.39			300,786.75	8,606.74	2.94%	100.00%

Table 8-22

LARGE USER (> 5000 kW)									
	2010 BILL			2011 BILL			IMPACT		
	Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	Change \$	Change %	% of Total Bill
Consumption									
12,000,000 kWh									
6,500 kW									
Monthly Service Charge			6,686.47			6,686.47	0.00	0.00%	0.58%
Distribution (kW)	6,500	2.6959	17,523.35	6,500	3.3726	21,921.90	4,398.55	25.10%	1.89%
Low Voltage Rider (kW)	6,500	0.0374	243.10	6,500	0.0563	365.95	122.85	50.53%	0.03%
Smart Meter Rider (per month)			1.00			1.00	0.00	0.00%	0.00%
LRAM & SSM Rider (kW)	6,500		0.00	6,500	0.0000	0.00	0.00	0.00%	0.00%
Deferral & Variance Acct (kW)	6,500	(1.2243)	-7,957.95	6,500	(1.2944)	(8,413.60)	(455.65)	5.73%	(0.72%)
Distribution Sub-Total			16,495.97			20,561.72	4,065.75	24.65%	1.77%
Retail Transmission (kW)	6,500	3.4325	22,311.25	6,500	3.2712	21,262.80	(1,048.45)	(4.70%)	1.83%
Delivery Sub-Total			38,807.22			41,824.52	2,684.50	6.92%	3.60%
Other Charges (kWh)	12,054,000	0.0135	162,729.00	12,060,000	0.0135	162,810.00	81.00	0.05%	14.02%
SSS Administration Charge			0.25			0.25	0.00	0.00%	0.00%
Special Purpose Charge	12,054,000	0.000373	4,490.12	12,060,000	0.000373	4,492.35	2.23	0.05%	0.39%
Cost of Power Commodity (kWh)	12,054,000	0.0644	776,036.52	12,060,000	0.0644	776,422.80	386.28	0.05%	66.88%
Total Bill Before Taxes			1,020,870.33			1,027,374.44	6,171.31	0.60%	88.50%
HST		13.00%	132,713.14		13.00%	133,558.68	845.53	0.64%	11.50%
Total Bill			1,153,583.47			1,160,933.12	7,016.85	0.61%	100.00%

Street Lighting									
	2010 BILL			2011 BILL			IMPACT		
	Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	Change \$	Change %	% of Total Bill
Billing Determinants									
1 Connections									
50.00 kWh									
0.14 kW									
Monthly Service Charge	1	0.3300	0.33	1	0.3300	0.33	0.00	0.00%	3.62%
Distribution (kW)	0	6.7448	0.94	0	9.6165	1.35	0.40	42.58%	14.76%
Low Voltage Rider (kW)	0	0.0228	0.00	0	0.0347	0.00	0.00	52.19%	0.05%
LRAM & SSM Rider (kW)	0		0.00	0	0.2330	0.03	0.03	100.00%	0.36%
Deferral & Variance Acct (kW)	0	(0.9707)	-0.14	0	(0.9297)	(0.13)	0.01	(4.22%)	(1.43%)
Distribution Sub-Total			1.14			1.58	0.44	38.72%	17.37%
Retail Transmission (kW)	0	2.1794	0.31	0	2.0784	0.29	(0.01)	(4.63%)	3.19%
Delivery Sub-Total			1.45			1.87	0.47	32.35%	20.56%
Other Charges (kWh)	53	0.0135	0.71	52	0.0135	0.70	(0.01)	(0.96%)	7.70%
SSS Administration Charge			0.25			0.25	0.00	0.00%	2.74%
Special Purpose Charge	53	0.000373	0.02	52	0.000373	0.02	(0.00)	(0.96%)	0.21%
Cost of Power Commodity (kWh)	53	0.0644	3.38	52	0.0644	3.35	(0.03)	(0.96%)	36.73%
Total Bill Before Taxes			7.25			8.07	0.86	11.81%	88.50%
HST		13.00%	0.94		13.00%	1.05	0.11	11.25%	11.50%
Total Bill			8.20			9.12	0.96	11.74%	100.00%

Table 8-22

Street Lighting									
Billing Determinants		2010 BILL			2011 BILL			IMPACT	
		Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	Change \$	Change %
1 Connections	Monthly Service Charge	1	0.3300	0.33	1	0.3300	0.33	0.00	0.00%
150 kWh	Distribution (kW)	1	6.7448	6.74	1	9.6165	9.62	2.87	42.58%
1.00 kW	Low Voltage Rider (kW)	1	0.0228	0.02	1	0.0347	0.03	0.01	52.19%
	LRAM & SSM Rider (kW)	1		0.00	1	0.2330	0.23	0.23	100.00%
	Deferral & Variance Acct (kW)	1	(0.9707)	-0.97	1	(0.9297)	(0.93)	0.04	(4.22%)
	Distribution Sub-Total			6.13			9.28	3.16	51.54%
	Retail Transmission (kW)	1	2.1794	2.18	1	2.0784	2.08	(0.10)	(4.63%)
	Delivery Sub-Total			8.31			11.36	3.34	40.24%
	Other Charges (kWh)	158	0.0135	2.13	156	0.0135	2.11	(0.02)	(0.96%)
	Cost of Power Commodity (kWh)	158	0.0644	10.14	156	0.0644	10.05	(0.10)	(0.96%)
	Total Bill Before Taxes			28.88			34.88	6.28	21.75%
	HST		13.00%	3.75		13.00%	4.53	0.78	20.76%
	Total Bill			32.64			39.41	7.06	21.63%

Unmetered Scattered									
Consumption		2010 BILL			2011 BILL			IMPACT	
		Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	Change \$	Change %
150 kWh	Monthly Service Charge			15.31			15.31	0.00	0.00%
	Distribution (kWh)	150	0.0103	1.55	150	0.0190	2.85	1.31	84.47%
	Low Voltage Rider (kWh)	150	0.0001	0.02	150	0.0001	0.02	0.00	0.00%
	LRAM & SSM Rider (kWh)	150		0.00	150	0.0044	0.66	0.66	100.00%
	Deferral & Variance Acct (kWh)	150	(0.0024)	-0.36	150	(0.0018)	(0.27)	0.09	(25.00%)
	Distribution Sub-Total			16.51			18.57	2.06	12.48%
	Retail Transmission (kWh)	158	0.0071	1.12	156	0.0068	1.06	(0.06)	(5.15%)
	Delivery Sub-Total			17.63			19.63	2.76	15.64%
	Other Charges (kWh)	158	0.0135	2.13	156	0.0135	2.11	(0.02)	(0.96%)
	Cost of Power Commodity (kWh)	158	0.0650	10.24	156	0.0650	10.14	(0.10)	(0.96%)
	Total Bill Before Taxes			28.88			30.82	1.94	6.72%
	HST		13.00%	3.75		13.00%	4.01	0.25	6.72%
	Total Bill			32.63			34.83	2.19	6.72%

Table 8-22

Unmetered Scattered Load									
	2010 BILL			2011 BILL			IMPACT		
	Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	Change \$	Change %	% of Total Bill
Consumption									
250 kWh									
Monthly Service Charge			15.31			15.31	0.00	0.00%	32.92%
Distribution (kWh)	250	0.0103	2.58	250	0.0190	4.75	2.18	84.47%	10.21%
Low Voltage Rider (kWh)	250	0.0001	0.03	250	0.0001	0.03	0.00	0.00%	0.05%
LRAM & SSM Rider (kWh)	250		0.00	250	0.0044	1.11	1.11	100.00%	2.38%
Deferral & Variance Acct (kWh)	250	(0.0024)	-0.60	250	(0.0018)	(0.45)	0.15	(25.00%)	(0.97%)
Distribution Sub-Total			17.31			20.74	3.43	19.83%	44.60%
Retail Transmission (kWh)	263	0.0071	1.86	260	0.0068	1.77	(0.10)	(5.15%)	3.80%
Delivery Sub-Total			19.17			22.51	4.59	23.96%	48.40%
Other Charges (kWh)	263	0.0135	3.55	260	0.0135	3.51	(0.03)	(0.96%)	7.55%
SSS Administration Charge			0.25			0.25	0.00	0.00%	0.54%
Special Purpose Charge	263	0.000373	0.10	260	0.000373	0.10	(0.00)	(0.96%)	0.21%
Cost of Power Commodity (kWh)	263	0.0650	17.07	260	0.0650	16.91	(0.16)	(0.96%)	36.35%
Total Bill Before Taxes			37.93			41.16	3.23	8.53%	88.50%
HST		13.00%	4.93		13.00%	5.35	0.42	8.53%	11.50%
Total Bill			42.86			46.51	3.66	8.53%	100.00%

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STATUS OF DEFERRAL AND VARIANCE ACCOUNTS

This Schedule contains descriptions of Deferral and Variance Accounts ("DVAs") currently used by WNH and the balances as at December 31, 2009.

Based on "Report of the Board on Electricity Distributors' Deferral and Variance Account Review Initiative (EDDVAR)", WNH reports the Deferral and Variance accounts according to the two prescribed groupings.

Group 1 Accounts

1580 Retail Settlement Variance Account - Wholesale Market Service Charges

1584 Retail Settlement Variance Account - Retail Transmission Network Charges

1586 Retail Settlement Variance Account - Retail Transmission Connection Charges

1588 Retail Settlement Variance Account – Power

1588 Retail Settlement Variance Account - Power, Sub-account Global Adjustments

1590 Recovery of Regulatory Asset Balances

1595 Disposition and Recovery of Regulatory Balances Control and Sub-accounts

Group 2 Accounts

1508 Other Regulatory Assets

1508 Other Regulatory Assets - Sub-account OEB Cost Assessments

1508 Other Regulatory Assets - Sub-account Pension Contributions

1508 Other Regulatory Assets – IFRS

1508 Other Regulatory Assets – Sub-account Incremental Capital Charges

1518 Retail Cost Variance Account - Retail Service Charges

1525 Miscellaneous Deferred Debits

1548 Retail Cost Variance Account – Service Transaction Request Charges

1555 Smart Meter Capital Account

1556 Smart Meter OM&A Account

1562 Deferred Payments in Lieu of Taxes

1563 Contra Account — Deferred PILs

1565 Conservation and Demand Management Expenditures and Recoveries

1566 Conservation and Demand Management Contra Account

1580 Retail Settlement Variance Account - One-time Wholesale Market Service

1592 PILs and Tax Variances for 2006 and Subsequent Years

ACCOUNT BALANCES

Table 9-1 contains account balances at December 31, 2009. Table 9-2 shows the interest rates that have been used in the calculation of carrying charges on the accounts in accordance with the methodology approved by the Board in EB-2006-0117 on November 28, 2006. The OEB Deferral and Variance Account Continuity Statement is attached as Appendix A.

WNH notes an adjustment was made to the 2009 USoA 1508 Other Regulatory Assets to re-allocate costs to the proper account; thus, this account balance differs from the 2009 2.1.7.

WNH received Board approval on March 25, 2010, EB-2009-0210, for the disposition of Group 1 balances at December 31, 2008 and interest projected to April 30, 2010. WNH, thus notes, that the Group 1 balances at December 31, 2009 that are being proposing for disposition in this filing will reflect only activities for 2009 and interest projected to April 30, 2011 on these accounts.

Table 9-1
Deferral and Variance Account Balances (December 31, 2009)

Account Description	USoA	Principal Amounts as of Dec 31, 2009	Interest to Dec 31, 2009	Total Principal & Interest
RSVA				
Low Voltage Charges	1550	5,480	(17)	5,463
RSVA - Wholesale Market Service Charge	1580	(450,123)	(1,076)	(451,199)
RSVA - One-time Wholesale Market Service Charge	1582	68,855	12,184	81,039
RSVA - Retail Transmission Network Charge	1584	290,198	1,285	291,483
RSVA - Retail Transmission Connection Charge	1586	(6,300)	27	(6,273)
RSVA - Power (excluding Global Adjustment)	1588	(1,023,433)	(5,143)	(1,028,576)
RSVA - Power Global Adjustment	1588-1	1,656,502	5,781	1,662,283
Total for RSVA		541,179	13,041	554,220
Non-RSVA				
Other Regulatory Assets - OEB Cost Assessments	1508-1	355,186	45,569	400,755
Other Regulatory Assets - Pensions	1508-2	613,095	78,660	691,755
Other Regulatory Assets - IFRS	1508-3	44,170	161	44,331
Other Regulatory Assets - HONI Capital Adjustment Model	1508-4	750	1	751
RCVA - Retail Cost Variance	1518	(256,142)	(18,016)	(274,158)
RCVA - STR	1548	(13,478)	(1,083)	(14,561)
Miscellaneous Deferred Debits	1525	3,455	564	4,019
Smart Meter Revenue and Capital	1555	3,862,222	(13,076)	3,849,146
Smart Meter OM&A	1556	230,857	764	231,621
Deferred Payment in Lieu of Taxes	1562	(1,316,766)	(39,084)	(1,355,850)
Conservation and Demand Management	1565	-	158	158
Conservation and Demand Management Contra Account	1566	-	(158)	(158)
Recovery of Regulatory Asset Balance	1595	(13,868,829)	-	(13,868,829)
PILs and Tax Variance	1592	(92,930)	(2,199)	(95,128)
Total for Non-RSVA		(10,438,411)	52,261	(10,386,149)
Total Deferral and Variance Account Balances		(9,897,231)	65,302	(9,831,929)

Table 9-2
Interest Rates Applied to Deferral and Variance Accounts

	Account 1508	All Other Accounts
Q1 2005	3.88%	7.25%
Q2 2005	3.88%	7.25%
Q3 2005	3.88%	7.25%
Q4 2005	3.88%	7.25%
Q1 2006	3.88%	7.25%
Q2 2006	4.14%	4.14%
Q3 2006	4.59%	4.59%
Q4 2006	4.59%	4.59%
Q1 2007	4.59%	4.59%
Q2 2007	4.59%	4.59%
Q3 2007	4.59%	4.59%
Q4 2007	5.14%	5.14%
Q1 2008	5.14%	5.14%
Q2 2008	4.08%	4.08%
Q3 2008	3.35%	3.35%
Q4 2008	3.35%	3.35%
Q1 2009	2.45%	2.45%
Q2 2009	1.00%	1.00%
Q3 2009	0.55%	0.55%
Q4 2009	0.55%	0.55%
Q1 2010 ¹	0.55%	0.55%
Q2 2010 ¹	0.55%	0.55%
Q3 2010 ¹	0.89%	0.89%

¹ Rates used in projection of interest

1 The following accounts will be discontinued if approved for disposition in this filing:

2
3 **Group 2**

- 4
5 1508 Other Regulatory Assets - Sub-account OEB Cost Assessments
6 1508 Other Regulatory Assets - Sub-account Pension Contributions
7 1565 Conservation and Demand Management Expenditures and Recoveries
8 1566 Conservation and Demand Management Contra Account
9

10 All of the remaining Regulatory Asset accounts will continue on a going forward basis.
11

12 Upon receiving approval to recover (or refund) account balances in distribution rates as part of
13 this rate application, WNH will use the Board Approved 1595 account – Disposition and
14 Recovery of Regulatory Balances and sub-accounts to record the disposition and recoveries of
15 Deferral and Variance account balances.
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CLEARANCE OF DEFERRAL AND VARIANCE ACCOUNTS

In the Report of the Board on Electricity Distributors' Deferral and Variance Account Review Initiative (EDDVAR), the Board states that "at the time of rebasing, all Account balances should be disposed of unless otherwise justified by the distributor or as required by a specific Board decision or guideline" (EB-2008-0046).

Further, in its report, the Board stated that the default disposition period used to clear the Account balances through a rate rider should be one year. However, a distributor could propose a different disposition period to mitigate rate impacts or address any other considerations, where appropriate.

WNH is therefore requesting the disposition of all Group 1 and Group 2 Accounts with the exception of:

- 1508 – Other Regulatory Assets – IFRS,
- 1555 - Smart Meter Capital,
- 1556 - Smart Meter OM&A,
- 1562 - Deferred PILs,
- 1592 - PILs & Tax Variance,
- 1595 – Disposition and Recovery of Regulatory Balances Control and Sub-accounts

WNH is not requesting disposition of account 1508 – Other Regulatory Assets – IFRS as costs are difficult to reasonably forecast and the Canadian Accounting Standards Board (AcSB) has issued an Exposure Draft proposing to extend the implementation date for rate regulated entities by two years to January 1, 2013. Given these uncertainties WNH is proposing to leave the charges it currently has in the deferral account and seek disposition in a future rate application.

WNH is not requesting disposition of accounts 1555 and 1556, Smart Meter Capital and Smart Meter OM&A respectively, as WNH had not deployed 50% of its smart meters by December 31, 2009 as is required for seeking disposition as per the Board's Guideline Smart Meter Funding and Cost Recovery October 22, 2008. WNH expects to be fully deployed by the end of 2010 and will seek disposition in a future rate application.

1 WNH is not requesting disposition of accounts 1562 and 1592, Deferred PILs and PILs & Tax
2 Variance respectively, as the current proceeding 2008-0381 is in the process of determining the
3 rules and methodologies applicable to these accounts.
4

5 WNH is not requesting disposition of account 1595 –Disposition and Recovery of Regulatory
6 Balances Control and Sub-accounts as the account only commenced being used upon the
7 approval of WNH's 2010 IRM rates (EB-2009-0210).
8

9 The amount to be disposed of is the principal balances as of December 31, 2009 plus interest
10 forecasted to April 30, 2011. The proposed method of recovery is allocated to rate classes on
11 the basis of the applicable cost drivers over a four-year period.
12

13 The balances as of December 31, 2009 and the forecasted interest through April 30, 2011 are
14 presented in Table 9-3. The Annual Interest Rate of 0.55% was used for January to June 2010
15 and .89% (based on the most recent Board Approved carrying charge rate) was used for July
16 2010 to April 2011. The total amount requested for disposition is \$1,375,587 and is allocated to
17 the six major rate classes.
18

19 The rationale supporting a four-year recovery period instead of one year as preferred by the
20 Board (EB-2008-0046), is that a one year disposition of the total owing by the customers
21 \$1,375,587 would create rate shock for customers both at the onset of the rate rider and upon
22 its discontinuance. In its decision of March 25, 2010, EB-2009-0210, the Board approved the
23 repayment of WNH's Group 1 Accounts over a four-year period and thus, and in order to be fair
24 and equitable to its customers, WNH is proposing that a four-year recovery period is also
25 applied to balances in this filing.
26

27 Tables 9-4 and 9-5 show the allocations to the rate classes.
28

29 Table 9-6 is a series of tables that illustrate the details of allocation to each rate class using the
30 appropriate allocator.
31

32 Table 9-7 illustrates the details and calculation of the proposed regulatory asset rate riders by
33 customer rate class.
34
35
36

Proposed Rates and Bill Impacts

The proposed rates and bill impacts that result from the disposal of the balances, as requested, are set out in Table 9-8. For a Residential customer at monthly consumption of 800 kWh, the bill impact only accounts for (0.07%) of the total bill.

Table 9-3
Interest Calculation to April 30, 2011 on Deferral and Variance Account Balances

Account Description	USoA	Principal Amounts as of Dec 31, 2009	Interest to Dec 31, 2009	Interest Jan 1 - Dec 31, 2010 ²	Interest Jan 1 to Apr 30, 2011 ²	Total
Low Voltage	1580	5,480	(17)	40	16	5,519
RSVA - Wholesale Market Service Charge	1580	(450,123)	(1,076)	(3,241)	(1,335)	(455,775)
RSVA - One-time Wholesale Market Service Charge	1582	68,855	12,184	496	204	81,739
RSVA - Retail Transmission Network Charge	1584	290,198	1,285	2,089	861	294,433
RSVA - Retail Transmission Connection Charge	1586	(6,300)	27	(45)	(19)	(6,337)
RSVA - Power (excluding Global Adjustment)	1588	(1,023,433)	(5,143)	(7,369)	(3,036)	(1,038,981)
RSVA - Global Adjustment	1588-1	1,656,502	5,781	11,927	4,914	1,679,124
Sub-Totals		541,179	13,041	3,897	1,605	559,722
Other Regulatory Assets - OEB Cost Assessments	1508-1	355,186	45,569	2,557	1,054	404,366
Other Regulatory Assets - Pensions	1508-2	613,095	78,660	4,414	1,819	697,988
Other Regulatory Assets - HONI Capital Adjustment Model	1508-4	750	1	5	2	758
RCVA - Retail Cost Variance	1518	(256,142)	(18,016)	(1,844)	(760)	(276,762)
RCVA - STR	1548	(13,478)	(1,083)	(97)	(40)	(14,698)
Miscellaneous Deferred Debits	1525	3,455	564	25	10	4,054
Conservation and Demand Managment	1565	-	158	1		159
Recovery of Regulatory Asset Balance	1595					-
Sub-Totals		702,866	105,853	5,061	2,085	815,865
Totals per Column - Applying For Disposition		1,244,045	118,894	8,958	3,690	1,375,587
Accounts Excluded from Disposition						
Smart Meter Revenue and Capital	1555	3,862,222	(13,076)	27,808	11,458	3,888,412
Smart Meter OM&A	1556	230,857	764	1,662	685	233,968
Deferred Payment in Lieu of Taxes	1562	(1,316,766)	(39,084)			(1,355,850)
Conservation and Demand Managment Contra Account	1566	-	(158)	(1)		(159)
PILs and Tax Variance	1592	(92,930)	(2,199)			(95,128)
Recovery of Regulatory Asset Balance	1595	(13,868,829)				(13,868,829)
Other Regulatory Assets - IFRS	1508-3	44,170	161	318	131	44,780
Sub-Totals		(11,141,276)	(53,592)	29,787	12,274	(11,152,807)
Totals per Column		(9,897,231)	65,302	38,745	15,964	(9,777,220)
			(9,831,929)			
² Annual Interest Rate				Q1 & Q2 - .55%, Q3 & Q4 - .89%	0.089%	

Table 9-4
2011 Allocation by Rate Class

2011 Data by Class	kW	kWh	Customer Numbers	Distribution Revenue	kWh for Non-RPP Customers (2009)	# of Customers with rebate	% of CDM Expenditures
Residential		382,563,062	45,913	15,705,203	76,542,128	6,492	63.7%
General Service <50 kW		175,321,434	5,412	4,507,259	1,342,284	479	11.3%
General Service >50 kW	1,637,891	727,723,747	669	7,794,397	640,528,204	17	
Large User	148,593	78,636,807	1	581,384	76,507,951		
Street Lighting	21,547	7,792,006	6	259,710	3,056,553		8.4%
Unmetered Scattered Load		1,648,666	13	131,840	74,661		16.6%
Totals	1,808,031	1,373,685,721	52,014	28,979,794	798,051,782	6,988	100.0%

Table 9-5
2011 Allocation by Rate Class on a % Basis

2011 Data by Class	kW	kWh	Customer Numbers	Distribution Revenue	kWh for Non-RPP Customers (2009)	# of Customers with rebate
Residential	0.0%	27.8%	88.3%	54.2%	9.6%	92.9%
General Service <50 kW	0.0%	12.8%	10.4%	15.6%	0.2%	6.9%
General Service >50 kW	90.6%	53.0%	1.3%	26.9%	80.3%	0.2%
Large User	8.2%	5.7%	0.0%	2.0%	9.6%	0.0%
Street Lighting	1.2%	0.6%	0.0%	0.9%	0.4%	0.0%
Unmetered Scattered Load	0.0%	0.1%	0.0%	0.5%	0.0%	0.0%
Totals	100%	100%	100%	100%	100%	100%

Table 9-6
Rate Rider Calculation on Applied For Accounts for Disposition

Detailed below are the Allocation of \$ by Rate Class using the Appropriate Allocator

Based on a kWh Allocator									
Rate Class	Billed kWh	% kWh	Low Voltage Charges 1550	RSVA - WMS 1580	RSVA - Network 1584	RSVA - Connection 1586	RSVA - Power 1588 ³	RSVA - One- Time 1582	Total
Residential	382,563,062	27.8%	1,537	(126,931)	81,998	(1,765)	(289,350)	22,764	(311,747)
GS < 50kW	175,321,434	12.8%	704	(58,170)	37,578	(809)	(132,604)	10,432	(142,868)
GS > 50kW	727,723,747	53.0%	2,924	(241,451)	155,979	(3,357)	(550,411)	43,302	(593,014)
Large User	78,636,807	5.7%	316	(26,091)	16,855	(363)	(59,477)	4,679	(64,080)
Street Lighting	7,792,006	0.6%	31	(2,585)	1,670	(36)	(5,893)	464	(6,350)
USL	1,648,666	0.1%	7	(547)	353	(8)	(1,247)	98	(1,343)
Total	1,373,685,721	100.0%	5,519	(455,775)	294,433	(6,337)	(1,038,981)	81,739	(1,119,402)

³ RSVA Power (Excluding Global Adjustment)

Based on a Non-RPP kWh Allocator			
Rate Class	Non-RPP Billed kWh	% kWh	RSVA - Power - GA 1588-1 ⁴
Residential	76,542,128	9.59%	161,047
GS < 50kW	1,342,284	0.17%	2,824
GS > 50kW	640,528,204	80.26%	1,347,690
Large User	76,507,951	9.59%	160,975
Street Lighting	3,056,553	0.38%	6,431
USL	74,661	0.01%	157
Total	798,051,782	100.0%	1,679,124

⁴ RSVA Global Adjustment

Detailed below are the Allocation of \$ by Rate Class using the Appropriate Allocator

Based on a Distribution Revenue Allocator				
Rate Class	Distribution Revenue	% Distribution Revenue	Other Regulatory Assets - All 1508	Other Regulatory Assets - Applied For 1508 ³
Residential	15,705,203	54.2%	622,084	597,816
GS < 50kW	4,507,259	15.6%	178,533	171,568
GS > 50kW	7,794,397	26.9%	308,737	296,693
Large User	581,384	2.0%	23,029	22,130
Street Lighting	259,710	0.9%	10,287	9,886
USL	131,840	0.5%	5,222	5,018
Total	28,979,794	100.0%	1,147,892	1,103,112

³ Not applying for 1508-IFRS in this application

Based on a # Customers Allocator					
Rate Class	# of Customers	% # of Customers	RCVA - Retail 1518	RCVA - STR 1548	Total
Residential	45,913	88.3%	(244,297)	(12,974)	(257,271)
GS < 50kW	5,412	10.4%	(28,798)	(1,529)	(30,327)
GS > 50kW	669	1.3%	(3,561)	(189)	(3,750)
Large User	1	0.0%	(5)	(0)	(6)
Street Lighting	6	0.0%	(32)	(2)	(34)
USL	13	0.0%	(69)	(4)	(73)
Total	52,014	100.0%	(276,762)	(14,698)	(291,460)

Detailed below are the Allocation of \$ by Rate Class using the Appropriate Allocator

Based on a % CDM Expenditure Allocator		
Rate Class	% CDM Expenditure	CDM Expenditure & Recovery 1565
Residential	63.7%	101
GS < 50kW	11.3%	18
GS > 50kW	0.0%	-
Large User	0.0%	-
Street Lighting	8.4%	13
USL	16.6%	26
Total	1	159

Based on a # Customers with Cheque Rebate Allocator			
Rate Class	# Customers with Rebate	% Rebates	Miscellaneous Deferred Debits 1525
Residential	6,492	92.90%	3,766
GS < 50kW	479	6.85%	278
GS > 50kW	17	0.24%	10
Large User	-	0.00%	-
Street Lighting	-	0.00%	-
USL	-	0.00%	-
	6,988	100.0%	4,054

Table 9-7
Rate Rider Calculation by
Rate Class (Recovery of Applied For Accounts)

					Allocation of \$ to Classes - Over 4 Years									[K = E / B or K = E / C] over 4 years	[L = (D+F+G+H+I)/A or L = (D+E+F+G+H+I)/C] over 4 years
					A	B	C	D	E	F	G	H	I			J = D+E+F+G+H +I
					\$ Based on Type of Allocator to each Class										
Rate Class	Volmetric	kWh	Non-RPP kWh	kW	kWh \$	Non-RPP kWh \$	Distribution Revenue \$	# Customers \$	% CDM Expenditure \$	# Customers Rebate \$	Total \$ to Allocate	Rate Rider GA	Rate Rider Deferral/Variance (no GA)		
Residential	kWh	382,563,062	76,542,128	-	(311,747)	161,047	597,816	(257,271)	101	3,766	193,713	0.0001	0.0000		
General Service Less Than 50 kW	kWh	175,321,434	1,342,284	-	(142,868)	2,824	171,568	(30,327)	18	278	1,493	0.0000	(0.0000)		
General Service 50 to 4,999 kW	kW	727,723,747	640,528,204	1,637,891	(593,014)	1,347,690	296,693	(3,750)	-	10	1,047,629	0.0005	(0.0458)		
Large Use	kW	78,636,807	76,507,951	148,593	(64,080)	160,975	22,130	(6)	-	-	119,019	0.0005	(0.0706)		
Street Lighting	kW	7,792,006	3,056,553	21,547	(6,350)	6,431	9,886	(34)	13	-	9,947	0.0002	0.0408		
USL	kWh	1,648,666	74,661	-	(1,343)	157	5,018	(73)	26	-	3,786	0.0000	0.0006		
Total		1,373,685,721	798,051,782	1,808,031	(1,119,402)	1,679,124	1,103,112	(291,460)	159	4,054	1,375,587				

Table 9-8
Proposed Rates and Bill Impacts

Rate Class	Billing Determinant	Proposed Rate Rider GA	GA Bill Impact on Total Bill (%)	Rate Rider Deferral/Variance (no GA)	Def/Var Bill Impact on Total Bill (%)
Residential, 800 kWh	kWh	0.0001	0.07%	0.0000	0.00%
GS <50, 2,000 kWh	kWh	0.0000	0.00%	(0.0000)	0.00%
GS >50, 100,000 kWh, 250 kW	kW	0.0005	0.00%	(0.0458)	-0.09%
Large User, 12,000,000 kWh, 6,500 kW	kW	0.0005	0.00%	(0.0706)	-0.04%
Street Lighting 50 kWh, 0.14 kW	kW	0.0002	0.00%	0.0408	0.06%
Unmetered Scattered Load, 250 kWh	kWh	0.0000	0.00%	0.0006	0.30%

SMART METERS STANDARD \$1.00 FUNDING ADDER REQUEST

WNH requests continuation of the standard Smart Meter Funding Adder that it currently has as part of its distribution rates. WNH received Board Approval to increase its Smart Meter Funding Adder to \$1.00 (from \$0.26) per metered customer per month through the 2009 electricity distribution rate application process (EB-2008-0216).

In 2008, WNH became authorized by regulation (O. Reg. 427/06) to conduct Smart Meter activities, conditional on its meters being acquired pursuant to and in compliance with the Request for Proposal issued by London Hydro Inc. WNH is now an active distributor for the purposes of Smart Meter installations and has plans to deploy and install all of its Smart Meters by the end of 2010. WNH is therefore requesting that the Board approve the standard \$1.00 smart meter funding adder in its 2011 electricity distribution rates.

SMART METER VARIANCE ACCOUNTS

WNH notes an adjustment of (\$215,747) was made to the 2009 Smart Meter Capital Expenditures to adjust for an item incorrectly allocated to this account. The balance will then differ to WNH's 2009 2.1.7.

WNH notes that it has not provided OEB Appendix 2-R, as section 2.10.3 of the Minimum Filing Requirements states, that in situations where an applicant is proposing to change its current Board-approved Smart Meter Funding Adder, or, is proposing to dispose of, or partially dispose of account 1555 and 1556, Appendix 2-R must be filed. WNH is proposing to maintain its Smart Meter Funding Adder at its current level, thus, the Appendix is not being filed.

RECOVERY OF LATE PAYMENT PENALTY LITIGATION COSTS

1. As part of this application, Waterloo North Hydro Inc. will be seeking recovery of a one-time expense in the amount of \$174,349.09 which is expected to be paid on June 30, 2011. If this payment is made, it will serve to resolve long-standing litigation against all former municipal electric utilities ("MEUs") in the Province in relation to late payment penalty ("LPP") charges collected pursuant to, first, Ontario Hydro rate schedules and, after industry restructuring, Ontario Energy Board rate orders (the "LPP Class Action").
2. On July 22, 2010, The Honourable Mr. Justice Cumming of the Ontario Superior Court of Justice approved a settlement of the LPP Class Action, the principal terms of which are the following:
 - (a) Former MEUs collectively pay \$17 million in damages;
 - (b) Payment is not due until June 30, 2011; and
 - (c) Amounts paid, after deduction for class counsel fee, will be paid to the Winter Warmth Fund or similar charities.
3. Subject to any appeal and the right of the LDCs to terminate the settlement if more than 10,000 plaintiff class members opt out of the settlement, Waterloo North Hydro Inc. will make a payment of \$174,349.09 by June 30, 2011. This amount represents Waterloo North Hydro Inc.'s share of the settlement, applicable taxes and legal fees. Waterloo North Hydro Inc. believes that the settlement is in its best interest and the best interest of its customers and that the payment in connection with the settlement will be a prudent one.
4. The LDCs propose that, following expiry of applicable appeal and opt out periods (the "Date of Final Determination")¹, the Board hold a generic hearing to determine if the costs incurred in this litigation and settlement are recoverable from customers and, if so, the form and timing of recovery from customers. If the Board agrees to hold this generic hearing, the LDCs will collectively file written evidence to address the prudence of the settlement, the costs incurred, the methodology of allocating total settlement costs amongst the LDCs, the proposed method of recovery, and any other matters the Board determines appropriate.

¹ The Date of Final Determination falls on the 30th day after the plaintiff opt out notice is published in *The Globe and Mail*, which will occur after the expiry of the appeal period. The Date of Final Determination is expected to occur on September 22, 2010.

- 1 5. If the Board determines that it will not hold a generic proceeding, Waterloo North Hydro
2 Inc. asks to be advised of this fact by the Date of Final Determination so that it can file,
3 to permit adjudication as part of this proceeding, written evidence to address the
4 prudence of the settlement, the costs incurred, the methodology of allocating total
5 settlement costs amongst the LDCs, the proposed method and timing of recovery, and
6 any other matters the Board determines appropriate.

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Appendix A

Deferral and Variance Account Continuity Schedule

SHEET 1 - Regulatory Assets - Continuity Schedule

NAME OF UTILITY	Waterloo North Hydro Inc.	LICENCE NUMBER	ED-2002-0545
NAME OF CONTACT	Albert P. Singh	DOCID NUMBER	EB-2010-0144
E-mail Address	asingh@wnhydro.com		
VERSION NUMBER	v8.0	PHONE NUMBER	519-888-5542
Date	25-Aug-10	(extension)	

Enter appropriate data in cells which are highlighted in yellow only.

Enter the total applied for Regulatory Asset amounts for each account in the appropriate cells below:
Debits should be recorded as positive numbers and credits should be recorded as negative numbers.

Repeat cells going across as necessary for each year in application

If account balances have been disposed in a previous application, for applicable accounts, fill out the Continuity Schedule from the date of last disposition.

** Account Disposed of for balances at December 31, 2008 + projected interest in 2010
Application, EB-2009-0210

2005											
Account Description	Account Number	Opening Principal Amounts as of Jan-1-05 ¹	Transactions (additions) during 2005, excluding interest and adjustments ⁶	Transactions (reductions) during 2005, excluding interest and adjustments ⁶	Adjustments during 2005 - instructed by Board ^{2,2A}	Adjustments during 2005 - other ³	Closing Principal Balance as of Dec-31-05	Opening Interest Amounts as of Jan-1-05	Interest Jan-1 to Dec31-05	Closing Interest Amounts as of Dec-31-05	
Group 1 Accounts											
Low Voltage Account	1550**						\$ -			\$ -	
RSVA - Wholesale Market Service Charge	1580**						\$ -			\$ -	
RSVA - Retail Transmission Network Charge	1584**						\$ -			\$ -	
RSVA - Retail Transmission Connection Charge	1586**						\$ -			\$ -	
RSVA - Power (excluding Global Adjustment)	1588**						\$ -			\$ -	
RSVA - Power - Sub-Account - Global Adjustment	1588**						\$ -			\$ -	
Recovery of Regulatory Asset Balances	1590**						\$ -			\$ -	
Disposition and Recovery of Regulatory Balances ¹⁰	1595						\$ -			\$ -	
Group 1 Sub-Total (including Account 1588 - Global Adjustment)		\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Group 1 Sub-Total (excluding Account 1588 - Global Adjustment)		\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
RSVA - Power - Sub-Account - Global Adjustment	1588	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Group 2 Accounts											
Other Regulatory Assets - Sub-Account - OEB Cost Assessments	1508	\$ 93,429	\$ 193,728				\$ 287,157			\$ -	
Other Regulatory Assets - Sub-Account - Pension Contributions	1508		\$ 409,153				\$ 409,153			\$ -	
Other Regulatory Assets - Sub-Account Deferred IFRS Transition Costs	1508						\$ -			\$ -	
Other Regulatory Assets - Sub-Account - Incremental Capital (HONI) ⁷	1508						\$ -			\$ -	
Other Regulatory Assets - Sub-Account - Other ⁷	1508						\$ -			\$ -	
Retail Cost Variance Account - Retail	1518		\$ 39,718	\$ (56,603)			\$ (16,885)		\$ (245)	\$ (245)	
Retail Cost Variance Account - STR	1548			\$ (1,252)			\$ (1,252)		\$ (31)	\$ (31)	
Misc. Deferred Debits	1525		\$ 3,820				\$ 3,820		\$ 24	\$ 24	
LV Variance Account	1550						\$ -			\$ -	
Renewable Connection Capital Deferral Account	1531										
Renewable Connection OM&A Deferral Account	1532										
Smart Grid Capital Deferral Account	1534										
Smart Grid OM&A Deferral Account	1535										
Smart Meter Capital and Recovery Offset Variance - Sub-Account - Capital	1555						\$ -			\$ -	
Smart Meter Capital and Recovery Offset Variance - Sub-Account - Recoveries	1555						\$ -			\$ -	
Smart Meter Capital and Recovery Offset Variance - Sub-Account - Stranded Meter Costs	1555						\$ -			\$ -	
Smart Meter OM&A Variance	1556						\$ -			\$ -	
Conservation and Demand Management Expenditures and Recoveries	1565						\$ -		\$ 158	\$ 158	
CDM Contra	1566						\$ -		\$ (158)	\$ (158)	
Qualifying Transition Costs ⁵	1570		n/a	n/a			\$ -			\$ -	
Pre-Market Opening Energy Variances Total ⁵	1571		n/a	n/a			\$ -			\$ -	
Extra-Ordinary Event Costs	1572						\$ -			\$ -	
Deferred Rate Impact Amounts	1574						\$ -			\$ -	
RSVA - One-time Wholesale Market Service	1582		\$ 71,364				\$ 71,364		\$ 1,567	\$ 1,567	
Other Deferred Credits	2425						\$ -			\$ -	
Group 2 Sub-Total		\$ 93,429	\$ 717,783	\$ (57,855)	\$ -	\$ -	\$ 753,357	\$ -	\$ 1,315	\$ 1,315	
Deferred Payments in Lieu of Taxes	1562										
2006 PILs & Taxes Variance	1592										
Sub-total											
Total		\$ 93,429	\$ 717,783	\$ (57,855)	\$ -	\$ -	\$ 753,357	\$ -	\$ 1,315	\$ 1,315	
The following is not included in the total claim but are included on a memo basis:											
Deferred PILs Contra Account ⁸	1563										
Disposition and Recovery of Regulatory Balances ¹⁰	1595										

K:\Exhibit 9 Jy 25 10\Exhibit 9 Tables\Exhibit 9 Table 1 to.xls\Table 9-3 Applied For

Completed versions of the Regulatory Assets Continuity Schedule are required to be filed in working Microsoft Excel format.

¹ As per general ledger, if does not agree to Dec-31-04 balance filed in 2006 EDR then provide supplementary analysis

² Provide supporting statement indicating whether due to denial of costs in 2006 EDR by the Board, 10% transition costs write-off, and etc.

^{2A} Adjustments Instructed by the Board include deferral/variance account balances moved to Account 1595 per disposition of account balances as ordered by the Board.

³ Provide supporting statement indicating nature of this adjustments and periods they relate to

⁴ Not included in sub-total

⁵ Closed April 30, 2002

⁶ For RSVA accounts only, report the net additions to the account during the year. For all other accounts, record the additions and reductions separately.

⁷ Please describe "other" components of 1508 and add more component lines if necessary.

⁸ 1563 is a contra-account and is not included in the total but is shown on a memo basis. Account 1562 establishes the obligation to the ratepayer.

⁹ Interest projected on December 31, 2009 closing principal balance.

¹⁰ Include Account 1595 as part of Group 1 accounts (line 26) for review and disposition if the recovery (or refund) period has been completed, and the audited financial statements support the underlying residual balance in account 1595. If the recovery (or refund) period has not been completed, include the balances in Account 1595 on a memo basis only (line 1

** Account Disposed of for balances at December 31, 2008 + projected interest in 2010
Application, EB-2009-0210

2006												
** Account Disposed of for balances at December 31, 2006 + projected interest in 2010 Application, EB-2009-0210												
Account Description	Account Number	Opening Principal Amounts as of Jan-1-06	Transactions (additions) during 2006, excluding interest and adjustments 6	Transactions (reductions) during 2006, excluding interest and	Adjustments during 2006 - instructed by Board 2, 2A	Adjustments during 2006 - other 3	Transfer of Board approved amounts to 1590 as per 2006 EDR	Closing Principal Balance as of Dec-31-06	Opening Interest Amounts as of Jan-1-06	Interest Jan-1 to Dec31-06	Transfer of Board approved amounts to 1590 as per 2006 EDR	Closing Interest Amounts as of Dec-31-06
Group 1 Accounts												
Low Voltage Account	1550**	\$ -						\$ -	\$ -			\$ -
RSVA - Wholesale Market Service Charge	1580**	\$ -						\$ -	\$ -			\$ -
RSVA - Retail Transmission Network Charge	1584**	\$ -						\$ -	\$ -			\$ -
RSVA - Retail Transmission Connection Charge	1586**	\$ -						\$ -	\$ -			\$ -
RSVA - Power (excluding Global Adjustment)	1588**	\$ -						\$ -	\$ -			\$ -
RSVA - Power - Sub-Account - Global Adjustment	1588**	\$ -						\$ -	\$ -			\$ -
Recovery of Regulatory Asset Balances	1590**	\$ -						\$ -	\$ -			\$ -
Disposition and Recovery of Regulatory Balances10	1595	\$ -						\$ -	\$ -			\$ -
Group 1 Sub-Total (including Account 1588 - Global Adjustment)		\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Group 1 Sub-Total (excluding Account 1588 - Global Adjustment)		\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RSVA - Power - Sub-Account - Global Adjustment	1588	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Group 2 Accounts												
Other Regulatory Assets - Sub-Account - OEB Cost Assessments	1508	\$ 287,157	\$ 68,029					\$ 355,186	\$ -	\$ 10,602		\$ 10,602
Other Regulatory Assets - Sub-Account - Pension Contributions	1508	\$ 409,153	\$ 203,942					\$ 613,095	\$ -	\$ 18,301		\$ 18,301
Other Regulatory Assets - Sub-Account Deferred IFRS Transition Costs	1508	\$ -						\$ -	\$ -			\$ -
Other Regulatory Assets - Sub-Account - Incremental Capital (HONI) 7	1508	\$ -						\$ -	\$ -			\$ -
Other Regulatory Assets - Sub-Account - Other 7	1508	\$ -						\$ -	\$ -			\$ -
Retail Cost Variance Account - Retail	1518	\$ (16,885)	\$ 6,000	\$ (76,462)				\$ (87,347)	\$ (245)	\$ (2,626)		\$ (2,871)
Retail Cost Variance Account - STR	1548	\$ (1,252)		\$ (3,635)				\$ (4,887)	\$ (31)	\$ (142)		\$ (173)
Misc. Deferred Debits	1525	\$ 3,820		\$ (365)				\$ 3,455	\$ 24	\$ 201		\$ 225
LV Variance Account	1550	\$ -						\$ -	\$ -			\$ -
Renewable Connection Capital Deferral Account	1531											
Renewable Connection OM&A Deferral Account	1532											
Smart Grid Capital Deferral Account	1534											
Smart Grid OM&A Deferral Account	1535											
Smart Meter Capital and Recovery Offset Variance - Sub-Account - Capital	1555	\$ -						\$ -	\$ -			\$ -
Smart Meter Capital and Recovery Offset Variance - Sub-Account - Recoveries	1555	\$ -	\$ (100,410)					\$ (100,410)	\$ -	\$ (1,304)		\$ (1,304)
Smart Meter Capital and Recovery Offset Variance - Sub-Account - Stranded Meter Costs	1555	\$ -						\$ -	\$ -			\$ -
Smart Meter OM&A Variance	1556	\$ -						\$ -	\$ -			\$ -
Conservation and Demand Management Expenditures and Recoveries	1565	\$ -						\$ -	\$ 158			\$ 158
CDM Contra	1566	\$ -						\$ -	\$ (158)			\$ (158)
Qualifying Transition Costs 5	1570	\$ -						\$ -	\$ -			\$ -
Pre-Market Opening Energy Variances Total 5	1571	\$ -	n/a	n/a				\$ -	\$ -			\$ -
Extra-Ordinary Event Costs	1572	\$ -						\$ -	\$ -			\$ -
Deferred Rate Impact Amounts	1574	\$ -						\$ -	\$ -			\$ -
RSVA - One-time Wholesale Market Service	1582	\$ 71,364	\$ (2,509)					\$ 68,855	\$ 1,567	\$ 3,836		\$ 5,403
Other Deferred Credits	2425	\$ -						\$ -	\$ -			\$ -
Group 2 Sub-Total		\$ 753,357	\$ 175,052	\$ (80,462)	\$ -	\$ -	\$ -	\$ 847,946	\$ 1,315	\$ 28,868	\$ -	\$ 30,183
Deferred Payments in Lieu of Taxes	1562							see PILs reconciliation requested				
2006 PILs & Taxes Variance	1592							see PILs reconciliation requested				
Sub-total												
		\$ 753,357	\$ 175,052	\$ (80,462)	\$ -	\$ -	\$ -	\$ 847,946	\$ 1,315	\$ 28,868	\$ -	\$ 30,183
The following is not included in the total claim but are included on a memo basis:												
Deferred PILs Contra Account 8	1563							see PILs reconciliation requested				
Disposition and Recovery of Regulatory Balances10	1595											

		2007									
Account Description		Account Number	Opening Principal Amounts as of Jan-1-07	Transactions (additions) during 2007, excluding interest and	Transactions (reductions) during 2007, excluding	Adjustments during 2007 - instructed by Board 2, 2A	Adjustments during 2007 - other 3	Closing Principal Balance as of Dec-31-07	Opening Interest Amounts as of Jan-1-07	Interest Jan-1 to Dec31-07	Closing Interest Amounts as of Dec-31-07
Group 1 Accounts											
Low Voltage Account	1550**	\$	-					\$	-	\$	-
RSVA - Wholesale Market Service Charge	1580**	\$	-					\$	-	\$	-
RSVA - Retail Transmission Network Charge	1584**	\$	-					\$	-	\$	-
RSVA - Retail Transmission Connection Charge	1586**	\$	-					\$	-	\$	-
RSVA - Power (excluding Global Adjustment)	1588**	\$	-					\$	-	\$	-
RSVA - Power - Sub-Account - Global Adjustment	1588**	\$	-					\$	-	\$	-
Recovery of Regulatory Asset Balances	1590**	\$	-					\$	-	\$	-
Disposition and Recovery of Regulatory Balances10	1595	\$	-					\$	-	\$	-
Group 1 Sub-Total (including Account 1588 - Global Adjustment)		\$	-	\$	-	\$	-	\$	-	\$	-
Group 1 Sub-Total (excluding Account 1588 - Global Adjustment)		\$	-	\$	-	\$	-	\$	-	\$	-
RSVA - Power - Sub-Account - Global Adjustment	1588	\$	-	\$	-	\$	-	\$	-	\$	-
Group 2 Accounts											
Other Regulatory Assets - Sub-Account - OEB Cost Assessments	1508	\$	355,186					\$	355,186	\$	10,602
Other Regulatory Assets - Sub-Account - Pension Contributions	1508	\$	613,095					\$	613,095	\$	18,301
Other Regulatory Assets - Sub-Account Deferred IFRS Transition Costs	1508	\$	-					\$	-	\$	-
Other Regulatory Assets - Sub-Account - Incremental Capital (HONI) 7	1508	\$	-					\$	-	\$	-
Other Regulatory Assets - Sub-Account - Other 7	1508	\$	-					\$	-	\$	-
Retail Cost Variance Account - Retail	1518	\$	(87,347)	\$	16,500	\$	(82,412)	\$	(153,259)	\$	(2,871)
Retail Cost Variance Account - STR	1548	\$	(4,887)			\$	(5,144)		(10,031)	\$	(173)
Misc. Deferred Debits	1525	\$	3,455					\$	3,455	\$	225
LV Variance Account	1550	\$	-					\$	-	\$	-
Renewable Connection Capital Deferral Account	1531										
Renewable Connection OM&A Deferral Account	1532										
Smart Grid Capital Deferral Account	1534										
Smart Grid OM&A Deferral Account	1535										
Smart Meter Capital and Recovery Offset Variance - Sub-Account - Capital	1555	\$	-					\$	-	\$	-
Smart Meter Capital and Recovery Offset Variance - Sub-Account - Recoveries	1555	\$	(100,410)	\$	(152,810)			\$	(253,220)	\$	(1,304)
Smart Meter Capital and Recovery Offset Variance - Sub-Account - Stranded Meter Costs	1555	\$	-					\$	-	\$	-
Smart Meter OM&A Variance	1556	\$	-					\$	-	\$	-
Conservation and Demand Management Expenditures and Recoveries	1565	\$	-					\$	-	\$	158
CDM Contra	1566	\$	-					\$	-	\$	(158)
Qualifying Transition Costs 5	1570	\$	-	n/a		n/a		\$	-	\$	-
Pre-Market Opening Energy Variances Total 5	1571	\$	-	n/a		n/a		\$	-	\$	-
Extra-Ordinary Event Costs	1572	\$	-					\$	-	\$	-
Deferred Rate Impact Amounts	1574	\$	-					\$	-	\$	-
RSVA - One-time Wholesale Market Service	1582	\$	68,855					\$	68,855	\$	5,403
Other Deferred Credits	2425	\$	-					\$	-	\$	-
Group 2 Sub-Total		\$	847,946	\$	(136,310)	\$	(87,556)	\$	624,080	\$	30,183
Deferred Payments in Lieu of Taxes	1562										
2006 PILs & Taxes Variance	1592										
Sub-total											
Total		\$	847,946	\$	(136,310)	\$	(87,556)	\$	624,080	\$	30,183
The following is not included in the total claim but are included on a memo basis:											
Deferred PILs Contra Account 8	1563										
Disposition and Recovery of Regulatory Balances10	1595										

** Account Disposed of for balances at December 31, 2008 + projected interest in 2010
Application, EB-2009-0210

2008										
Account Description	Account Number	Opening Principal Amounts as of Jan-1-08	Transactions (additions) during 2008, excluding interest and adjustments 6	Transactions (reductions) during 2008, excluding interest and adjustments 6	Adjustments during 2008 - instructed by Board 2, 2A	Adjustments during 2008 - other 3	Closing Principal Balance as of Dec-31-08	Opening Interest Amounts as of Jan-1-08	Interest Jan-1 to Dec31-08	Closing Interest Amounts as of Dec-31-08
Group 1 Accounts										
Low Voltage Account	1550**	\$ -					\$ -	\$ -		\$ -
RSVA - Wholesale Market Service Charge	1580**	\$ -					\$ -	\$ -		\$ -
RSVA - Retail Transmission Network Charge	1584**	\$ -					\$ -	\$ -		\$ -
RSVA - Retail Transmission Connection Charge	1586**	\$ -					\$ -	\$ -		\$ -
RSVA - Power (excluding Global Adjustment)	1588**	\$ -					\$ -	\$ -		\$ -
RSVA - Power - Sub-Account - Global Adjustment	1588**	\$ -					\$ -	\$ -		\$ -
Recovery of Regulatory Asset Balances	1590**	\$ -					\$ -	\$ -		\$ -
Disposition and Recovery of Regulatory Balances10	1595	\$ -					\$ -	\$ -		\$ -
Group 1 Sub-Total (including Account 1588 - Global Adjustment)		\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Group 1 Sub-Total (excluding Account 1588 - Global Adjustment)		\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RSVA - Power - Sub-Account - Global Adjustment	1588	\$ -	\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Group 2 Accounts										
Other Regulatory Assets - Sub-Account - OEB Cost Assessments	1508	\$ 355,186					\$ 355,186	\$ 27,393	\$ 14,136	\$ 41,529
Other Regulatory Assets - Sub-Account - Pension Contributions	1508	\$ 613,095					\$ 613,095	\$ 47,285	\$ 24,401	\$ 71,686
Other Regulatory Assets - Sub-Account Deferred IFRS Transition Costs	1508	\$ -					\$ -	\$ -		\$ -
Other Regulatory Assets - Sub-Account - Incremental Capital (HONI) 7	1508	\$ -					\$ -	\$ -		\$ -
Other Regulatory Assets - Sub-Account - Other 7	1508	\$ -					\$ -	\$ -		\$ -
Retail Cost Variance Account - Retail	1518	\$ (153,259)	\$ 17,842	\$ (70,223)			\$ (205,640)	\$ (8,520)	\$ (6,989)	\$ (15,509)
Retail Cost Variance Account - STR	1548	\$ (10,031)		\$ (2,219)			\$ (12,250)	\$ (502)	\$ (438)	\$ (940)
Misc. Deferred Debits	1525	\$ 3,455					\$ 3,455	\$ 388	\$ 137	\$ 525
LV Variance Account	1550	\$ -					\$ -	\$ -		\$ -
Renewable Connection Capital Deferral Account	1531									
Renewable Connection OM&A Deferral Account	1532									
Smart Grid Capital Deferral Account	1534									
Smart Grid OM&A Deferral Account	1535									
Smart Meter Capital and Recovery Offset Variance - Sub-Account - Capital	1555	\$ -	\$ 609,112				\$ 609,112	\$ -	\$ 1,377	\$ 1,377
Smart Meter Capital and Recovery Offset Variance - Sub-Account - Recoveries	1555	\$ (253,220)	\$ (155,648)				\$ (408,868)	\$ (9,440)	\$ (12,609)	\$ (22,049)
Smart Meter Capital and Recovery Offset Variance - Sub-Account - Stranded Meter Costs	1555	\$ -					\$ -	\$ -		\$ -
Smart Meter OM&A Variance	1556	\$ -	\$ 24,155				\$ 24,155	\$ -	\$ 91	\$ 91
Conservation and Demand Management Expenditures and Recoveries	1565	\$ -					\$ -	\$ 158		\$ 158
CDM Contra	1566	\$ -					\$ -	\$ (158)		\$ (158)
Qualifying Transition Costs 5	1570	\$ -	n/a	n/a			\$ -	\$ -		\$ -
Pre-Market Opening Energy Variances Total 5	1571	\$ -	n/a	n/a			\$ -	\$ -		\$ -
Extra-Ordinary Event Costs	1572	\$ -					\$ -	\$ -		\$ -
Deferred Rate Impact Amounts	1574	\$ -					\$ -	\$ -		\$ -
RSVA - One-time Wholesale Market Service	1582	\$ 68,855					\$ 68,855	\$ 8,659	\$ 2,746	\$ 11,405
Other Deferred Credits	2425	\$ -					\$ -	\$ -		\$ -
Group 2 Sub-Total		\$ 624,080	\$ 495,461	\$ (72,442)	\$ -	\$ -	\$ 1,047,100	\$ 65,263	\$ 22,852	\$ 88,115
Deferred Payments in Lieu of Taxes	1562									
2006 PILs & Taxes Variance	1592									
Sub-total										
Total		\$ 624,080	\$ 495,461	\$ (72,442)	\$ -	\$ -	\$ 1,047,100	\$ 65,263	\$ 22,852	\$ 88,115
The following is not included in the total claim but are included on a memo basis:										
Deferred PILs Contra Account 8	1563									
Disposition and Recovery of Regulatory Balances10	1595									

see PILs reconciliation requested
see PILs reconciliation requested
see PILs reconciliation requested
see PILs reconciliation requested

** Account Disposed of for balances at December 31, 2008 + projected interest in 2010
Application, EB-2009-0210

2009										
Account Description	Account Number	Opening Principal Amounts as of Jan-1-09	Transactions (additions) during 2009, excluding interest and adjustments 6	Transactions (reductions) during 2009, excluding interest and adjustments 6	Adjustments during 2009 - instructed by Board 2, 2A	Adjustments during 2009 - other 3	Closing Principal Balance as of Dec-31-09	Opening Interest Amounts as of Jan-1-09	Interest Jan-1 to Dec31-09	Closing Interest Amounts as of Dec-31-09
Group 1 Accounts										
Low Voltage Account	1550**	\$ -	\$ 5,480				\$ 5,480	\$ -	\$ (17)	\$ (17)
RSVA - Wholesale Market Service Charge	1580**	\$ -	\$ (450,123)				\$ (450,123)	\$ -	\$ (1,076)	\$ (1,076)
RSVA - Retail Transmission Network Charge	1584**	\$ -	\$ 290,198				\$ 290,198	\$ -	\$ 1,285	\$ 1,285
RSVA - Retail Transmission Connection Charge	1586**	\$ -	\$ (6,300)				\$ (6,300)	\$ -	\$ 27	\$ 27
RSVA - Power (excluding Global Adjustment)	1588**	\$ -	\$ (1,023,433)				\$ (1,023,433)	\$ -	\$ (5,143)	\$ (5,143)
RSVA - Power - Sub-Account - Global Adjustment	1588**	\$ -	\$ 1,656,502				\$ 1,656,502	\$ -	\$ 5,781	\$ 5,781
Recovery of Regulatory Asset Balances	1590**	\$ -					\$ -	\$ -		\$ -
Disposition and Recovery of Regulatory Balances10	1595	\$ -					\$ -	\$ -		\$ -
Group 1 Sub-Total (including Account 1588 - Global Adjustment)		\$ -	\$ 472,324		\$ -	\$ -	\$ 472,324	\$ -	\$ 857	\$ 857
Group 1 Sub-Total (excluding Account 1588 - Global Adjustment)		\$ -	\$ (1,184,178)		\$ -	\$ -	\$ (1,184,178)	\$ -	\$ (4,924)	\$ (4,924)
RSVA - Power - Sub-Account - Global Adjustment	1588	\$ -	\$ 1,656,502		\$ -	\$ -	\$ 1,656,502	\$ -	\$ 5,781	\$ 5,781
Group 2 Accounts										
Other Regulatory Assets - Sub-Account - OEB Cost Assessments	1508	\$ 355,186					\$ 355,186	\$ 41,529	\$ 4,040	\$ 45,569
Other Regulatory Assets - Sub-Account - Pension Contributions	1508	\$ 613,095					\$ 613,095	\$ 71,686	\$ 6,974	\$ 78,660
Other Regulatory Assets - Sub-Account Deferred IFRS Transition Costs	1508	\$ -	\$ 44,170				\$ 44,170	\$ -	\$ 161	\$ 161
Other Regulatory Assets - Sub-Account - Incremental Capital (HONI) 7	1508	\$ -	\$ 750				\$ 750	\$ -	\$ 1	\$ 1
Other Regulatory Assets - Sub-Account - Other 7	1508	\$ -					\$ -	\$ -		\$ -
Retail Cost Variance Account - Retail	1518	\$ (205,640)	\$ 19,464	\$ (69,966)			\$ (256,142)	\$ (15,509)	\$ (2,507)	\$ (18,016)
Retail Cost Variance Account - STR	1548	\$ (12,250)		\$ (1,228)			\$ (13,478)	\$ (940)	\$ (143)	\$ (1,083)
Misc. Deferred Debits	1525	\$ 3,455					\$ 3,455	\$ 525	\$ 39	\$ 564
LV Variance Account	1550	\$ -					\$ -	\$ -		\$ -
Renewable Connection Capital Deferral Account	1531									
Renewable Connection OM&A Deferral Account	1532									
Smart Grid Capital Deferral Account	1534									
Smart Grid OM&A Deferral Account	1535									
Smart Meter Capital and Recovery Offset Variance - Sub-Account - Capital	1555	\$ 609,112	\$ 4,119,455				\$ 4,728,567	\$ 1,377	\$ 13,229	\$ 14,606
Smart Meter Capital and Recovery Offset Variance - Sub-Account - Recoveries	1555	\$ (408,868)	\$ (457,478)				\$ (866,345)	\$ (22,049)	\$ (5,633)	\$ (27,682)
Smart Meter Capital and Recovery Offset Variance - Sub-Account - Stranded Meter Costs	1555	\$ -					\$ -	\$ -		\$ -
Smart Meter OM&A Variance	1556	\$ 24,155	\$ 206,702				\$ 230,857	\$ 91	\$ 673	\$ 764
Conservation and Demand Management Expenditures and Recoveries	1565	\$ -					\$ -	\$ 158		\$ 158
CDM Contra	1566	\$ -					\$ -	\$ (158)		\$ (158)
Qualifying Transition Costs 5	1570	\$ -	n/a	n/a			\$ -	\$ -		\$ -
Pre-Market Opening Energy Variances Total 5	1571	\$ -	n/a	n/a			\$ -	\$ -		\$ -
Extra-Ordinary Event Costs	1572	\$ -					\$ -	\$ -		\$ -
Deferred Rate Impact Amounts	1574	\$ -					\$ -	\$ -		\$ -
RSVA - One-time Wholesale Market Service	1582	\$ 68,855					\$ 68,855	\$ 11,405	\$ 779	\$ 12,184
Other Deferred Credits	2425	\$ -					\$ -	\$ -		\$ -
Group 2 Sub-Total		\$ 1,047,100	\$ 3,933,063	\$ (71,194)	\$ -	\$ -	\$ 4,908,969	\$ 88,115	\$ 17,613	\$ 105,728
Deferred Payments in Lieu of Taxes	1562									
2006 PILs & Taxes Variance	1592									
Sub-total										
Total		\$ 1,047,100	\$ 4,405,388	\$ (71,194)	\$ -	\$ -	\$ 5,381,294	\$ 88,115	\$ 18,470	\$ 106,585
The following is not included in the total claim but are included on a memo basis:										
Deferred PILs Contra Account 8	1563									
Disposition and Recovery of Regulatory Balances10	1595									

see PILs reconciliation requested

see PILs reconciliation requested

see PILs reconciliation requested

see PILs reconciliation requested

Account Description

Account Description			Account Number	Projected Interest on Dec 31 -09 balance from Jan 1, 2010 to Dec 31, 2010 9	Projected Interest on Dec 31 -09 balance from Jan 1, 2011 to April 30, 2011 9, 10	Total Claim before Forecasted Transactions in 2010 and 2011	Forecasted Transactions, Excluding Interest from Jan 1, 2010 to Dec 31, 2010	Forecasted Transactions, Excluding Interest from Jan 1, 2011 to April 30, 2011 10	Projected Interest from Jan 1, 2010 to April 30, 2011 on Forecasted Transactions (Excl Interest) from Jan 1, 2010 to Dec 31, 2010	Projected Interest from Jan 1, 2011 to April 30, 2011 on Forecasted Transactions (Excl Interest) from Jan 1, 2011 to Apr 30, 2011 10	Forecasted Transactions in 2010 and 2011, not included in Total Claim
Group 1 Accounts											
Low Voltage Account	1550**										
RSVA - Wholesale Market Service Charge	1580**	\$ 40	\$ 16	\$ 5,519							\$ -
RSVA - Retail Transmission Network Charge	1584**	\$ (3,241)	\$ (1,335)	\$ (455,775)							\$ -
RSVA - Retail Transmission Connection Charge	1586**	\$ 2,089	\$ 861	\$ 294,433							\$ -
RSVA - Power (excluding Global Adjustment)	1588**	\$ (45)	\$ (19)	\$ (6,337)							\$ -
RSVA - Power - Sub-Account - Global Adjustment	1588**	\$ (7,369)	\$ (3,036)	\$ (1,038,981)							\$ -
Recovery of Regulatory Asset Balances	1590**	\$ 11,927	\$ 4,914	\$ 1,679,124							\$ -
Disposition and Recovery of Regulatory Balances10	1595			\$ -							\$ -
				\$ -							\$ -
Group 1 Sub-Total (including Account 1588 - Global Adjustment)		\$ 3,401	\$ 1,401	\$ 477,983	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Group 1 Sub-Total (excluding Account 1588 - Global Adjustment)		\$ (8,526)	\$ (3,513)	\$ (1,201,141)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RSVA - Power - Sub-Account - Global Adjustment	1588	\$ 11,927	\$ 4,914	\$ 1,679,124	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Group 2 Accounts											
Other Regulatory Assets - Sub-Account - OEB Cost Assessments	1508										
Other Regulatory Assets - Sub-Account - Pension Contributions	1508	\$ 2,557	\$ 1,054	\$ 404,366							\$ -
Other Regulatory Assets - Sub-Account Deferred IFRS Transition Costs	1508	\$ 4,414	\$ 1,819	\$ 697,988							\$ -
Other Regulatory Assets - Sub-Account - Incremental Capital (HONI) 7	1508	\$ 318	\$ 131	\$ 44,780							\$ -
Other Regulatory Assets - Sub-Account - Other 7	1508	\$ 5	\$ 2	\$ 758							\$ -
Retail Cost Variance Account - Retail	1518			\$ -							\$ -
Retail Cost Variance Account - STR	1548	\$ (1,844)	\$ (760)	\$ (276,762)							\$ -
Misc. Deferred Debits	1525	\$ (97)	\$ (40)	\$ (14,698)							\$ -
LV Variance Account	1550	\$ 25	\$ 10	\$ 4,054							\$ -
Renewable Connection Capital Deferral Account	1531			\$ -							\$ -
Renewable Connection OM&A Deferral Account	1532			\$ -							\$ -
Smart Grid Capital Deferral Account	1534			\$ -							\$ -
Smart Grid OM&A Deferral Account	1535			\$ -							\$ -
Smart Meter Capital and Recovery Offset Variance - Sub-Account - Capital	1555			\$ -							\$ -
Smart Meter Capital and Recovery Offset Variance - Sub-Account - Recoveries	1555	\$ 34,046	\$ 14,028	\$ 4,791,247							\$ -
Smart Meter Capital and Recovery Offset Variance - Sub-Account - Stranded Meter Costs	1555	\$ (6,238)	\$ (2,570)	\$ (902,835)							\$ -
Smart Meter OM&A Variance	1556			\$ -							\$ -
Conservation and Demand Management Expenditures and Recoveries	1565	\$ 1,662	\$ 685	\$ 233,968							\$ -
CDM Contra	1566	\$ 1		\$ 159							\$ -
Qualifying Transition Costs 5	1570	\$ (1)		\$ (159)							\$ -
Pre-Market Opening Energy Variances Total 5	1571			\$ -							\$ -
Extra-Ordinary Event Costs	1572			\$ -							\$ -
Deferred Rate Impact Amounts	1574			\$ -							\$ -
RSVA - One-time Wholesale Market Service	1582			\$ -							\$ -
Other Deferred Credits	2425	\$ 496	\$ 204	\$ 81,739							\$ -
				\$ -							\$ -
Group 2 Sub-Total		\$ 35,344	\$ 14,563	\$ 5,064,604	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Deferred Payments in Lieu of Taxes	1562			\$ (1,355,850)							
2006 PILs & Taxes Variance	1592			\$ (95,128)							
Sub-total				\$ (1,450,978)							\$ -
Total		\$ 38,745	\$ 15,964	\$ 5,542,588	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
The following is not included in the total claim but are included on a memo basis:											
Deferred PILs Contra Account 8	1563			\$ -							
Disposition and Recovery of Regulatory Balances10	1595			\$ (13,868,829)							

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Exhibit 10 – RECOVERY OF LRAM AND SSM AMOUNTS

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 Table 10 - 2 – LRAM and SSM Rate Impacts by Class 8

Waterloo North Hydro Inc. LRAM and SSM Support August 16, 2010 9

Waterloo North Hydro Inc. LRAM and SSM Support August 16, 2010 Report 10

RECOVERY OF LRAM AND SSM AMOUNTS

Overview

On May 31, 2004, the Minister of Energy granted approval to all electricity distributors in Ontario to apply to the OEB for adjustments to their 2005 electricity distribution rates that would enable them to recover the third tranche of their incremental market adjusted revenue requirements ("MARR"). The Minister's approval was conditional on a commitment to reinvest an equivalent amount in Conservation and Demand Management ("CDM") initiatives. The CDM Plans of WNH were approved by the OEB.

WNH's CDM efforts have been successful, but as a result, with decreases in kWh consumption and kW demand, WNH has experienced distribution revenue losses. The OEB has authorized distributors to apply for Lost Revenue Adjustment Mechanism ("LRAM") and Shared Savings Mechanism ("SSM") adjustments. The authorization to apply for LRAM and SSM adjustments for 2005 and 2007 is derived from the OEB's December 2004 decision on the Pollution Probe motion in file No. RP-2004-0203; and the OEB's May 2005 Report on the 2006 Electricity Distribution Rate Handbook (the "Report", OEB File No. RP-2004-0188). WNH is also requesting LRAM adjustments for 2005 to 2009.

At page 107 of the Report, the OEB addressed LRAM recoveries, stating:

"In its December 2004 Decision RP-2004-0203, the Board concluded that an LRAM was appropriate and that it should apply to 3rd tranche expenditures. The Board indicated, at that time, that the LRAM formula would be established as part of the 2006 proceeding.

The Board continues to believe that an LRAM is appropriate and concludes that it will be retrospective, not prospective. At this time, greater accuracy will be achieved if the LRAM is calculated after-the-fact, based on actual results.

Accordingly, a distributor will be expected to calculate the energy savings by customer class and to value those energy savings by the board-approved distribution charge appropriate to that class.

The resulting amount may be claimed in a subsequent rate year as compensation for lost revenue".

With respect to SSM, at page 110 of its Report, the OEB wrote:

1 *"The Board, in its RP-2004-0203 Decision, found that a distributor shareholder incentive was an appropriate way to*
2 *encourage distributors to pursue CDM programs. The Board continues to be of this view. Distributors should be*
3 *rewarded with 5 percent of the net savings established by the TRC test. The Board recognizes that it will be essential*
4 *to establish certain inputs and to define avoided costs. Accordingly, the Board's Conservation Manual will address*
5 *these matters. This will allow parties to screen CDM programs and calculate the relevant incentives."*

6
7 At page 111 of the Report, the OEB wrote:

8
9 *"The SSM will apply to TRC benefits achieved by 3rd tranche expenditures as well as any incremental expenditures*
10 *that are approved in 2006. However, as in the case of the Board's Decision with respect to 2005, the incentive will not*
11 *apply to utility-side activities. Because the SSM will be retrospective, no claims for a shareholder incentive should be*
12 *made in the 2006 rate applications.*

13
14 *There has been considerable discussion in this proceeding as to whether CDM expenditures on the utility side should*
15 *be differentiated from customer-side expenditures. The Board recognizes that conservation programs should have a*
16 *balance between the two. It is important to recall however, the Board's earlier finding that the SSM incentive does not*
17 *apply to utility-side investments. The Board previously ruled with respect to the 2005 SSM that the inclusion of*
18 *capitalised assets into rate base provides sufficient incentives. The Board continues to hold that view."*

19
20 In accordance with the Report, WNH's LRAM/SSM request includes only customer-side
21 activities. WNH has calculated energy savings by customer class and valued those savings by
22 the OEB- approved distribution charge appropriate to each class, as required by the Report.

23
24 On September 8, 2005 the OEB issued its Conservation Manual, under the name of the Total
25 Resource Cost Guide (the "TRC Guide"). The TRC Guide sets out an OEB-approved
26 methodology and associated parameters for the financial evaluation of CDM programs. The
27 TRC Guide was revised October 2, 2006 to reflect the OEB's Decision in the EB-2005-0523
28 proceeding concerning the attribution of benefits between utilities and non-rate-regulated third
29 parties.

30
31 The Board introduced a process outlined in the March 28, 2008 Guidelines for Electricity
32 Distributor Conservation and Demand Management (EB-2008-0037), ("CDM Guidelines") for
33 rate-based applications to recover revenues lost to customer energy conservation, and to share
34 in the gains from effective CDM programs prior to the completion of Third Tranche CDM
35 programs.

36
37

WNH has used the most current input assumptions in the calculation of its LRAM and SSM in accordance with the Board's October 8, 2009 Decision for Horizon Utilities (EB-2009-0192). In the Decision the Board stated "... *utilities should always use the most current input assumptions which have been adopted by the Board when preparing their applications because these assumptions represent the best estimate of the impact of the programs.*"

In addition to the requirements with respect to this Application, the Filing Requirements contain provisions relating to applications for LRAM and SSM adjustments, and WNH submits that it has relied on and complied with the LRAM/SSM provisions of the Report, the OEB's TRC Guide and the Filing Requirements in preparing this request for LRAM/SSM adjustments for the years 2005 to 2009.

SUMMARY OF LRAM/SSM REQUEST

WNH seeks approval for the recovery of 2005 to 2009 LRAM and SSM amounts as part of this Application. Recovery is to be based on a volumetric rate rider commencing May 1, 2011. WNH is proposing a four year recovery period in order to mitigate customer rate impacts, therefore the rate rider would remain in effect until April 30, 2015. In addition, WNH had its Group 1 Regulatory Account balances at December 31, 2004 approved for disposition in its 2010 Rate Application (EB-2009-0210). The repayment period approved was a four year period, thus, WNH submits that collection of the LRAM/SSM rate rider over a four year period is a fair and equitable treatment to its customers.

In accordance with the *Report of the Board on the Regulatory Framework for Conservation and Demand Management by Ontario Electricity Distributors in 2007 and Beyond* dated March 2, 2007 where the Board concluded:

"The Board has determined that distributors will be expected to undertake program evaluations, and to provide results to the Board that have been reviewed by a third party."

WNH contracted Burman Energy Consultants Group Inc. (BECGI) to conduct an independent review of its third-tranche CDM and OPA-sponsored programs. A summary of the business activities undertaken by BECGI is below:

1 BECGI serves a primary market of local distribution utilities with services in CDM program
2 evaluation, distribution system analysis, regulatory support, utility management, and operations.
3 BECGI tailors its products and services to provide an appropriate level of “bench strength”
4 support that complements a client’s existing resources. BECGI has managed both the complete
5 year-end CDM reporting process for LDCs on a turnkey basis, and specialized support in
6 preparation of requisite reporting schedules and supporting TRC analysis. The firm holds its
7 Certification of Authorization from the Professional Engineers of Ontario, and is a commercial
8 steering committee member of the Electricity Distributors Association. More information about
9 BECGI is available at www.burmanenergy.ca.

10
11 BECGI has a breadth and depth of experience in the evaluation of CDM program performance
12 and regulatory reporting:

- 13
14 • Prepared LRAM and SSM business cases or third party evaluations for ten LDCs since
15 2007
16
- 17 • Originator of the TRC Calculator tool that automates TRC calculations based on OEB
18 assumptions and tables. This tool, and/or TRC support services, are used by more than
19 25 LDCs. (The TRC Calculator was upgraded in 2008 to automate LRAM and SSM
20 calculations based on TRC values)
21
- 22 • Currently the largest third-party evaluator of Electricity Retrofit Incentive Program (ERIP)
23 project evaluation serving some 23 utilities, and evaluating more than 250 individual
24 projects
25
- 26 • Now implementing the Power Savings Blitz program for 16 LDCs in 39 communities,
27 including project evaluation and audits.
28

29
30 BECGI’s review of WNH’s third-tranche and OPA-sponsored CDM activities concluded in the
31 final report which is attached as Appendix A.
32

33 WNH has prepared its LRAM and SSM rate rider request using the results of BECGI’s analysis.

1 BECGI's has calculated WNH's LRAM claim to be \$1,309,126.39 (\$67,993.19 for third- tranche
2 expenditures and \$1,124,133.20 for OPA programs) and the SSM claim to be \$28,557.85
3 (applies only to third-tranche expenditures) for a total of the two claims of \$1,337,684.24.
4

5 The total combined LRAM and SSM amount for recovery is \$1,337,684.24. The LRAM and SSM
6 amounts and corresponding rate riders are set out by rate class in Table 10-1 below. WNH
7 proposes a single rate rider for recovery of the total LRAM and SSM. To minimize monthly bill
8 impacts over the period when the riders are in effect, a four year recovery period is proposed,
9 as shown in Table 10-1.

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Table 10-1
2011 Test Year – LRAM and SSM Rider

Rate Class	Amounts 2005 - 2009		Billing Units (2011)		Rate Riders Recovered Over One Year			Four Year Rate Rider Total \$/unit (kWh or kW) ¹
	LRAM	SSM			LRAM	SSM	Total	
	\$	\$	kWh	kW	\$/unit (kWh or kW)	\$/unit (kWh or kW)	\$/unit (kWh or kW)	
Residential	355,024	2,541	382,563,062		0.0009	0.0000	0.0009	0.0002
GS < 50 kW	42,933	9,518	175,321,434		0.0002	0.0001	0.0003	0.0001
GS > 50 kW	878,363	-		1,566,291	0.5608	-	0.5608	0.1402
Large User	-	-	-	-	-	-	-	-
Street Lighting	10,152	9,927		21,547	0.4712	0.4607	0.9319	0.2330
USL	22,655	6,572	1,648,666		0.0137	0.0040	0.0177	0.0044
Total	1,309,126	28,558						

¹ WNH is proposing a Four Year Recovery Period

1 **RELIEF REQUESTED**

2
3 WNH proposes that the LRAM and SSM rate riders be combined into, and recovered through a
4 single distribution rate rider as provided in Table 10-1, "Four Year Rate Rider", and that the total
5 LRAM and SSM rate rider be implemented effective May 1, 2011 for a period of four years
6 ending April 30, 2015.

7
8 **BILL IMPACTS**

9
10 WNH proposes that the LRAM and SSM amounts be recovered over four years through rate
11 riders effective May 1, 2011 until April 30, 2015. Table 10-2 below provides a summary of the
12 impacts of the proposed LRAM and SSM adjustments, on the variable distribution rate, the
13 percent change in distribution charge, and the percent change in total bill, for the average
14 customer in each affected rate class.

15
16 WNH submits that the recovery of the LRAM and SSM adjustments over four years satisfactorily
17 mitigates the rate impact to customers, and that further mitigation is not required.

Table 10-2
LRAM and SSM Rate Impacts by Class

Standard Consumption per Month	Estimated Charge	Total Distribution Charges	% Change Distribution Charge	Total Bill	% Change Total Bill
Residential, 800 kWh	\$ 0.16	\$ 30.12	0.5%	\$ 118.08	0.1%
GS < 50, 2,000 kWh	\$ 0.20	\$ 56.83	0.4%	\$ 280.97	0.1%
GS > 50, 100,000 kWh, 250 kW	\$ 35.05	\$ 1,082.28	3.2%	\$ 13,357.29	0.3%
Large User, 12,000,000 kWh, 6,500 kW	\$ -	\$ 20,561.72	0.0%	\$ 1,160,933.12	0.0%
Street Lighting, 50 kWh, .14 kW	\$ 0.03	\$ 1.58	2.1%	\$ 9.12	0.4%
USL, 250 kWh	\$ 1.10	\$ 20.73	5.3%	\$ 46.50	2.4%

Waterloo North Hydro Inc.

LRAM and SSM Support

August 16, 2010

Waterloo North Hydro Inc.

LRAM and SSM Support

August 16, 2010

Prepared by: Bart Burman, MBA, BA.Sc. P.Eng., President

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Attachments

Attachment A – CDM Load Impacts by Class and Program

Attachment B - Foregone Revenue by Class and Program

Attachment C – SSM Amounts by Class and Program

Attachment D - LRAM & SSM Totals

Attachment E - LRAM & SSM Input Assumptions

1. Introduction

Waterloo North Hydro Inc. (Waterloo North Hydro) initiated Eight Conservation and Demand Management (CDM) programs since Third Tranche CDM funding commenced in 2005, and augmented those local programs through direct support and involvement with Ontario Power Authority (OPA) provincial programs. By the end of 2008, Waterloo North Hydro had completed the CDM programs in the residential, commercial/industrial and infrastructure segments from its Third Tranche funding of \$1,204,761. This commitment to CDM has returned energy savings of 6,510,457 kWh and reduced peak demand by more than 546 kW (as reported by Waterloo North Hydro in their 2008 CDM Annual Report).

With success in its CDM activities, Waterloo North Hydro has lost revenues that need to be addressed as part of its 2011 rates submission to the Ontario Energy Board (OEB). This process will ensure that future CDM investments are sustainable in the long term by becoming a standard element in future rate filings.

The Ontario Energy Board (OEB) introduced a process outlined in the March 28, 2008 Guidelines for Electricity Distributor Conservation and Demand Management EB-2008-0037 ("CDM Guidelines") for rate-based applications to recover revenues lost to customer energy conservation, and to share in gains from effective CDM programs prior to the completion of Third Tranche CDM programs. The mechanism developed by the OEB to calculate lost revenue for savings is the Lost Revenue Adjustment Mechanism (LRAM) and the Shared Savings Mechanism (SSM).

SSM is calculated as 5% of the net present value of the future net benefits from CDM investments. LRAM calculations are made from the energy savings data from measured CDM program results, or other documented results as applied to the affected rate class. OPA sponsored programs, such as Every Kilowatt Counts, are not eligible for SSM because the OPA compensates LDCs through a contractual arrangement rather than the LDC recovering SSM amounts through rate riders. Results from OEB-approved (third tranche) CDM programs, OPA CDM programs and Waterloo North Hydro funded programs represent the potential for lost revenue to the LDC, and will be included in calculations under LRAM.

The application for LRAM and SSM compensation is part of Waterloo North Hydro's 2011 Cost of Service filing and is based on its 2005 to 2009 inclusive CDM results.

2. Required

Waterloo North Hydro requested that Burman Energy Consultants Group Inc. (BECGI) review the LDC's preliminary LRAM and SSM and supporting information and assist in producing finalized calculations and report suitable to support an LRAM and SSM claim as part of its 2011 rates submission. In completing the scope of work related to LRAM and SSM, BECGI committed to:

1. Review LRAM, SSM and Third Tranche Total Resource Cost (TRC) calculations and underlying data prepared by Waterloo North Hydro for annual year end CDM reports, and assess compliance with the CDM Guidelines, identifying variances and reconciliations.
2. Prepare and finalize LRAM and SSM calculations and assumptions consistent with CDM Guidelines and suitable for inclusion in Waterloo North Hydro's 2011 Cost of Service application, with supporting details.
3. Produce a report, recommendations, and supporting Attachments related to LRAM and SSM assessments/findings.

In performing the above tasks, BECGI's involvement is intended to constitute a third party review as specified in the OEB's CDM Guidelines.

3. About LRAM/SSM

The OEB issued GUIDELINES FOR ELECTRICITY DISTRIBUTOR CONSERVATION AND DEMAND MANAGEMENT, EB-2008-0037 were applied to the preparation of this LRAM application.

LRAM was calculated as the product of the demand/energy savings by customer class and the Board-approved variable distribution charge appropriate to each respective class (net of Regulatory Asset Recovery rate riders). Both Third Tranche and OPA sponsored program kW/kWhs savings were deemed eligible for consideration capacity of the LRAM claim.

For SSM, a distributor may seek to recover 5% of the net benefits (TRC) created by CDM portfolio investments. An SSM claim applies only to customer focused initiatives that reduce the demand for electricity and/or the amount of energy used. Programs designed to improve Distribution System efficiency (eg. loss reduction) and OPA sponsored programs (eg., Every Kilowatt Counts) are excluded from SSM considerations.

4. Methodology

To optimize the calculation of LRAM and SSM amounts, BECGI:

1. Reviewed existing LRAM and SSM CDM Guidelines and precedents set through LDC submissions to the OEB, to identify the most prudent course for Waterloo North Hydro's LRAM and SSM application.
2. Sought counsel within OEB staff to validate assumptions and processes to complete LRAM submission consistent with other LDC submissions. Validation by each specific technology employed is included in the accompanying documentation.
3. Reviewed Waterloo North Hydro's CDM program results and TRC calculations, verified assumptions and calculations, identified variances with reported values, and recommended adjustments as appropriate to maintain consistency with the CDM Guidelines. Actual program results were provided by Waterloo North Hydro, including CDM Annual Reports, OPA program results reports, and supplemental information relevant to LRAM and SSM calculations.
4. Prepared report and recommendations related to LRAM and SSM calculations consistent with OEB CDM Guidelines which are in the accompanying documentation.

5. Results

A review of LDC CDM programs with Waterloo North Hydro verified that documentation exists to support participation levels associated with the LRAM or SSM for Third Tranche and Waterloo North Hydro funded programs.

The OPA has validated the results allocated to Waterloo North Hydro for OPA sponsored programs through Third Party Verification. Program results were confirmed to begin the year after program implementation.

The timing of results used in LRAM calculations for OPA sponsored programs are contained in the accompanying documentation under OPA Conservation Results, issued August 13, 2010.

The accompanying table below sets out the calculated amounts for LRAM and SSM for Waterloo North Hydro's Third Tranche and OPA CDM programming. The calculation of the results, by program and customer class as applicable, are explained in the text below, and detailed in the appended attachment.

Rate Class			
	LRAM \$	SSM \$	TOTAL \$
Third Tranche			
RESIDENTIAL	\$28,574.58	\$2,540.64	\$31,115.22
GENERAL SERVICE < 50kW	\$6,612.25	\$9,518.27	\$16,130.52
STREET LIGHTING	\$10,151.78	\$9,926.55	\$20,078.33
UNMETERED SCATTERED LOAD	\$22,654.58	\$6,572.39	\$29,226.97
OPA Programs			
RESIDENTIAL	\$326,449.66		\$326,449.66
GENERAL SERVICE <50KW	\$36,320.80		\$36,320.80
GENERAL SERVICE >50KW	\$878,362.74		\$878,362.74
	\$1,309,126.39	\$28,557.85	\$1,337,684.24

6. Determination of SSM Amount

For SSM, a distributor may recover 5% of the net benefits (TRC) created by CDM portfolio investments. As set out in the CDM Guidelines, program net benefits are determined by the present value of the avoided electricity costs over the technology's/program's life minus the present value of program costs. All results are net of free ridership. Incentive payments identified by Waterloo North Hydro are excluded from these calculations. For all programs/projects, the OEB Total Resource Cost Guide, Section 5, Assumptions and Measures List September 8, 2005 were used in TRC calculations in accordance with OEB's direction letter, Conservation and Demand Management ("CDM") Input Assumptions Board File No.: EB-2008-0352, January 27, 2009.

BECGI has validated applied TRC methodology against the CDM Guidelines (included in documentation) and calculated net TRC benefits for each CDM program. CDM incremental general administrative costs were included as part of overall portfolio TRC costs. BECGI's TRC Calculator © was used to ensure appropriate application of avoided costs, free ridership, discounted future benefits, and energy efficiency technology life.

Utility-side programs, such as Loss Reduction on the Distribution System and Smart Metering Pilot Project are not eligible for SSM treatment and were excluded from these calculations. Also excluded were results from OPA sponsored programs (e.g., Every Kilowatt Counts).

Programs considered for this application are described in annually submitted year-end CDM reports for 2006, 2007 and 2008. For each eligible program, net load reductions were calculated (net of free ridership) for both SSM and LRAM calculations. Attachment A summarizes these load reductions.

For the purpose of TRC calculation to derive SSM, the applied discount rates for Waterloo North Hydro (approved Weighted Average Cost of Capital) were 7.25565% (2005), 6.50583% (2006-2007) and 6.4289% (2008). The sum of all program NPVs, is \$571,157.04 resulting in the SSM

claim of \$28,557.85. Attachment C summarizes the calculation of the SSM amounts by program, technology and in total. The supporting source data and TRC calculations are set out in detail in the documentation accompanying this report.

7. Determination of LRAM Amount

LRAM amounts were identified by rate class consistent with the CDM Guidelines for programs that impacted revenues from 2006 to 2009, for both Third Tranche and OPA CDM programs. No forecast or other adjustment for the effects of CDM programs was made to the load quantities used in the preparation of Waterloo North Hydro's rate cases in prior years. The entire actual load reduction achieved by the eligible Third Tranche CDM programs is subject to LRAM treatment. All results are net of free ridership. For all programs/projects, the most recently published OPA assumptions and measures list were used in LRAM calculations in accordance with OEB's direction letter, Conservation and Demand Management ("CDM") Input Assumptions Board File No.: EB-2008-0352, January 27, 2009 and consistent with recent Decision and Order EB-2009-0192 for Horizon Utilities Corporation that directed LRAM calculations use the most current available input assumptions for all CDM programs.

OPA sponsored programs also represent lost revenue through their successful implementation and are included in LRAM calculations. Lost revenue from results attributable to Waterloo North Hydro funded programs were also included in the LRAM calculations. Although not specifically addressed in the CDM Guidelines, this assessment was considered to be consistent with the CDM Guideline intention of removing the disincentive of eroding distributor revenues due to lower than forecast revenues.

The sum of all program LRAM calculations, including OPA sponsored programs is \$1,309,126.39

Attachment A summarizes load impacts by class and program. Attachment B (Foregone Revenue By Class and Program) summarizes the CDM load impacts by program and rate class and the resultant revenue impacts.

8. Allocation and Manner of Recovery for LRAM Amounts

The LRAM and SSM amounts arising from CDM programs in each respective rate class are allocated to that class for recovery. LRAM and SSM rate riders should be combined and expressed as a single rate rider for each class, based on approaches taken by other LDCs

9. Recommendations

BECGI recommends the following:

1. LRAM/SSM amounts arising from CDM programs in each rate class be allocated to that class for recovery.
2. Incorporate impacts of CDM programming which occurred during the period 2005 to 2008 in future Cost of Service rate applications inclusive. This recognizes CDM as an established customer service element in the years ahead, with identifiable costs and benefits.
3. Use TRC/SSM calculation as one of the methods to assess the potential value of CDM programs considered for implementation.
4. Monitor savings attributed to 2009 OPA program implementation. LRAM calculations include preliminary 2009 results for programs implemented in 2009 as well as final results for programs implemented between 2006 to 2008. This report did not consider any OPA programs implemented or operated during 2010, as the results for these programs will not be available until sometime in 2011.