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## WATERLOO NORTH HYDRO INC.

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December 10, 2010

Ontario Energy Board  
P.O. Box 2319  
27<sup>th</sup> Floor  
2300 Yonge Street  
Toronto, Ontario  
M4P 1E4

**Attention: Ms. Kirsten Walli, Board Secretary**

Dear Ms Walli:

**Re: May 1, 2011 Cost of Service Interrogatory Responses/ EB-2010-0144**

Pursuant to the Board's Procedural Order of November 5, 2010, Waterloo North Hydro Inc. (WNH) is enclosing two copies of its Interrogatory Responses to the Board Staff Interrogatories of November 22, 2010 and Responses to Intervenor Interrogatories from Energy Probe, dated November 26, 2010, School Energy Coalition, dated November 26, 2010 and Vulnerable Energy Consumers Coalition, dated November 28, 2010. WNH notes that it was not able to complete Board Staff Interrogatory#40 in the time frame available, WNH will file its response to this interrogatory by December 15, 2010.

WNH has filed an electronic copy of this document via the Board's web portal RESS.

If there are any questions, please contact Albert Singh at 519-888-5542, [asingh@wnhydro.com](mailto:asingh@wnhydro.com) or myself, Rene Gatien at 519-888-5544, [rgatien@wnhydro.com](mailto:rgatien@wnhydro.com).

Yours truly,

*Original Signed By*

Rene W. Gatien, P.Eng, MBA  
President & C.E.O.

Board Staff Interrogatories

**1. Responses to Letters of Comment**

***Following publication of the Notice of Application, did Waterloo North Hydro Inc. (“WN Hydro”) receive any letters of comment? If so, please confirm whether a reply was sent from the applicant to the author of the letter. If confirmed, please file that reply with the Board. If not confirmed, please explain why a response was not sent and confirm if the applicant intends to respond.***

Waterloo North Hydro Inc. (WNH) did not directly receive any letters of comment related to the publication of the Notice of Application. One customer copied WNH on an email of a letter of comment that was directed to the Board Secretary, and Board staff forwarded a copy of a second email of comment that was sent only to the Board Secretary.

As neither of the emails of comment was directed to WNH, we felt it was inappropriate to respond.

At this time, WNH does not intend to respond to the letters addressed directly to the Board Secretary.

**2. Conditions of Service**

***On its website, [www.wnhydro.com](http://www.wnhydro.com), WN Hydro provides its Conditions of Service at <http://www.wnhydro.com/residential/conditionsofservice.pdf> and [http://www.wnhydro.com/commercial\\_industrial/conditionsofservice.pdf](http://www.wnhydro.com/commercial_industrial/conditionsofservice.pdf).***

***a) Please confirm that the version of the Conditions of Service published on its website is the most current one. If not, please provide an explanation.***

This confirms that Version 2, dated June 22, 2009, of the Conditions of Services posted on WNH's website is its most current.

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***b) Please identify any rates and charges that are included in the applicant's conditions of service and provide an explanation for the nature of the costs being recovered.***

Charges included in WNH's Conditions of Service include:

- Service Connection
- Energy Supply
- Security Deposits
- Late Payment Charges

The costs recovered for service connections include labour, material and equipment required to connect to the distribution system. Energy supply has associated cost of power costs. Security deposits are as reflected in the Distribution System Code and late payment charges are associated with collection activity costs.

***c) Please provide a schedule outlining the revenues recovered from these rates and charges from 2006 to 2009 and the revenue forecasted for the 2010 bridge and 2011 test years.***

WNH notes that the Service Connection Revenue is recorded as Contributed Capital, Energy Supply is recorded as Cost of Power Expense. Security Deposits are recorded as Liability on the Balance Sheet as they are not revenue and are applied towards the customer's final bill or repaid after specified repayment periods upon good payment history. Late Payment Charges are recorded in USoA 4225, Late Payment Revenue. Details of the Service Revenue and Late Payment Revenue are provided below; Energy Supply costs are detailed in Exhibit 3.

**Table IR# 2 (c)**  
**Revenues – Condition of Service**

	2006	2007	2008	2009	2010 Bridge	2011 Test
Late Payment Charge Revenue	187,406	186,505	168,746	180,266	180,000	180,000

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- d) Please explain whether in the applicant's view, these rates and charges should be included on the applicant's tariff sheet.**

The Late Payment Charge Percentage is included on WNH's tariff sheet.

WNH submits that no further inclusion on WNH's tariff sheet is applicable to these rates and charges. The Service Connection Revenue is charged on a Time and Material Basis, thus, WNH submits that it should not be included on WNH's tariff sheet. Security Deposits in the Conditions of Service are conditions set out in the Distribution System Code and Energy Supply is based on either the market rates or OEB RPP rates, thus, neither is appropriate to include in WNH's tariff sheet.

- e) Please identify if WN Hydro's Conditions of Service will need to change if WN Hydro's application is approved as filed. If the Conditions of Service will need to change, please identify the expected changes.**

WNH's Conditions of Service will not need to change if the rate application is approved as filed.

**Exhibit 1 – Administration**

**3. Ref: Exhibit 1/page 19 – Calculation of Revenue Requirement**

***In describing the drivers for the increase in the revenue requirement and the determination of the revenue deficiency, WN Hydro states that direct and indirect labour costs are one factor, and further states:***

***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.***

***What was the actual negotiated increase for 2009?***

The actual negotiated increase for 2009 was 3.3%.

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**Exhibit 2 – Rate Base**

**4. Ref: Exhibit 2/pages 8-9, Exhibit 2/page 55 and Exhibit 3/page 38 – Existing Northfield Drive Administration and Operations Building**

*WN Hydro has documented that it has removed the Gross Book Value and accumulated depreciation for its existing Northfield Drive operations and administration building from 2011 test year fixed assets while including the new operations and administration centre to be occupied expected for December 1, 2011.*

*In Exhibit 3/page 38, WN Hydro has proposed that, since the existing Northfield Drive building will not be sold in the 2011 test year, it be allowed to record net proceeds from any sale in a deferral account with 50% of such proceeds to be refunded to customers upon disposition in a subsequent rate application.*

*In the case of Toronto Hydro-Electric System Limited's ("THESL's") 2008 Cost of Service application considered under File No. EB-2007-0680, the Board determined that 100% of the net proceeds from the sale of existing administration and operations centre no longer "used and useful" would be refunded to customers upon replacement by newer or refurbished centres to effect consolidation of staff:*

*At the time the Applicant's 2006 rates were set, there was no provision made for the rate making treatment of capital gains on sale of property. Also, there is no provision in any other Board-issued document which would have made it a requirement for the Applicant to bring forward any capital gains for disposition. To direct sharing of any capital gains in 2006 and 2007 would be out of period ratemaking.*

*Therefore, with respect to the Belfield property sold in 2006, the Board will not direct any sharing of the capital gains.*

*The Company's reply argument confirms that the 228 Wilson Ave. and 175 Goddard St. work centres were not sold in 2007. The Board agrees with intervenors that these two properties, as well as 28 Underwriters Road and 60 Eglinton West, have been rendered redundant and have been or will be sold as part of the Company's Facilities Consolidation and Renewal Plan (the "Plan"). If it were not for the Plan, the properties would continue to be used and useful. The properties' functions are useful and will be transferred to or replaced by other facilities, at a substantial cost to the ratepayer. The total capital cost of the Plan to 2011 is estimated at \$105 Million. The estimated capital cost of the Plan up to and including 2009 is \$62.5 Million.*

*To defray these substantial costs to the ratepayer, the Board finds that 100% of the net after tax gains from the sale of 228 Wilson Avenue, 175 Goddard Street, and 28 Underwriters Road, the properties that are planned to be sold in 2008, should go to the ratepayer. The Company's revenue requirement for the 2008 test year shall be adjusted downward by \$10.3 Million to reflect this finding. As the sale of 60 Eglinton West is planned for 2010, it does not impact the rates being set in this proceeding. [Emphasis added, footnotes omitted]*

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**a) Please provide the estimated Gross Book Value and Accumulated Depreciation associated with the Northfield Drive centre and contents as of January 1, 2011 and December 31, 2011 as if they were retained in rate base.**

The estimated Gross Book Value and Accumulated Depreciation associated with the Northfield Drive Administration and Service Centre as of January 1, 2011 and December 31, 2011, as if they were retained in rate base, are provided in the table below. The contents have remained in rate base with a Gross Book Value of \$814,186 and Accumulated Depreciation of \$678,557 at December 31, 2011. The contents were not removed from rate base as some of these assets will be used in the new building.

**Table IR# 4 (a) - Gross Book Value and Accumulated Depreciation**

	January 1, 2011			December 31, 2011		
	Cost	Accumulated Depreciation	Net Book Value	Cost	Accumulated Depreciation	Net Book Value
Northfield Drive Administration and Service Centre Land	743,394		743,394	743,394		743,394
Northfield Drive Administration and Service Centre Building	4,674,465	1,758,156.41	2,916,308	4,674,465	1,840,582.00	2,833,883
Northfield Drive Administration and Service Centre Contents <sup>1</sup>	803,983	639,567	164,415	814,186	678,557	135,630
	6,221,841	2,397,724	3,824,118	6,232,045	2,519,139	3,712,906

<sup>1</sup> Office Furniture and Fixtures

**b) Please provide the estimated remaining service life of the Northfield Drive centre as of December 31, 2011.**

The building at Northfield Drive is made up of a number of major components and systems, all at various stages of depreciation; some of which, are at or near end of life. Major components and systems requiring replacement or upgrade due to age, condition or inefficiency include the roofing system, pavement, HVAC, plumbing, flooring, windows, and insulation. The existing building also would require upgrades to current building code. WNH would be limited in its ability to renovate and carry on day to day operations, limited in its ability to provide efficient use of space with the existing architecture and the provision of barrier free access, without major structural changes to the building at Northfield Drive. In addition, WNH has outgrown the available space in the building at Northfield Drive. The building may have use to a buyer where the building fits their space needs and that is also willing to invest to replace the systems and components noted above. We understand some prospective buyers for the Northfield Drive location are interested in the property and would likely demolish the existing building and rebuild to better utilize the property.

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- c) Please provide WN Hydro's reasons for omitting the Northfield Drive building from its 2011 rate base. Please provide any precedents of similar treatment that WN Hydro is aware of.***

In WNH's view it is in the best interest of WNH's customers to remove the Northfield Building from its 2011 rate base. If this is not done, there will be two buildings included in the rate base in 2011 and for the IRM period that will follow. This approach is similar to that taken by Guelph Hydro Electric Systems Inc. with respect to its Dawson Road property, as discussed in the Board's July 31, 2008 Decision on Guelph Hydro's 2008 cost of service electricity distribution rate application (EB-2007-0742). In that case, the utility's Dawson Road operations were moved into a new facility as the Dawson Road Building was no longer suitable. The Board determined that the Dawson Road building should not form part of the rate base for 2008 test year.

- d) Please provide WN Hydro's views, with reasons as to why, given the THESL decision, should WN Hydro refund only 50% of net proceeds from the sale of Northfield Drive to ratepayers to defray the costs of the replacement operations centre.***

WNH has reviewed the THESL Decision of May 15, 2008. WNH notes that in that Decision (at page 27), the Board determined that a THESL property that was to be sold after the test year "does not impact the rates being set in this proceeding". The sale of WNH's Northfield Drive property is not expected to occur until 2012 at the earliest, as reflected in WNH's response to Energy Probe IR # 5 (e). Accordingly, consistent with the Board's THESL decision, the Northfield Drive property does not impact the rates being set in the current proceeding. As discussed above, the Northfield Drive property is being removed from WNH's rate base, and that clearly benefits ratepayers, however, there is nothing to be refunded to ratepayers as there will be no disposition of the property in the 2011 Test Year. In the absence of a disposition, WNH submits that this issue does not apply to WNH's 2011 rate application.

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If necessary, WNH will make further submissions in this regard later in this proceeding. For the time being, WNH has suggested in its Application that a 50% allocation of the proceeds would be reasonable. While there is no allocation to be made in this proceeding, WNH still considers that approach reasonable, and it is consistent with both the Board's Decision in the Guelph Hydro 2008 cost of service application and the Board's policy and practice with respect to the disposition of property of this kind. That Decision was issued two months after the Board's decision in the THESL proceeding. As noted above, Guelph Hydro had moved its Dawson Road operations to its new facility, and had declared the Dawson Road property no longer useful for its operations – these are similar circumstances to those of WNH. At page 6 of its decision, the Board stated:

“Consistent with Board policy and practice<sup>2</sup>, the net gains from the sale are to be equally shared between the shareholder and ratepayers. The amount owed to ratepayers shall be in a form of a rate rider from the effective date of the new rates to the end of the 2008 rate year (April 30, 2009).”

Footnote no.2, referred to in the preceding paragraph, stated:

*“<sup>2</sup>For example, EBRO 341 (Consumers' Gas) June 30, 1976, EBRO 465 (Consumers' Gas) March 1, 1991, RP-2002-0133 (Enbridge Gas) November 7, 2003, RP-2003-0048 (Enbridge Gas) August 13, 2003, RP-2002-0147/EB-2002-0446 (NRG), RP-2002-0130 (Union Gas) May 8, 2003, EB-2005-0211/EB- 2006-0081, Decision and Order, January 30, 2006. The Report of the Board on the 2006 Electricity Distribution Rate Handbook in RP-2004-0188, May 11, 2005 also established a general 50:50 sharing of the net proceeds of sales, with the exception of affiliated transactions.”*

The Board's policy, as set out in the 2005 Report on the 2006 Handbook, was developed after a lengthy consultative process involving a broad range of stakeholders in the electricity sector. WNH submits that this policy represents a fair and equitable approach to the allocation of proceeds of property sales.

The situation in the present case is more consistent with that of Guelph Hydro than that considered by the Board in the THESL proceeding. The THESL proceeding involved the consolidation of multiple work centres as part of a \$105 million Facilities Consolidation and Renewal Plan. The Board determined that certain THESL facilities (that became the subject of its requirement to refund 100% of the net gains to ratepayers) would still be used and useful for



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utility purposes if it were not for the consolidation plan. In WNH's case, as with that of Guelph, the utility is simply moving its operations from a facility that does not, and will not, meet the needs of WNH into a new building. WNH has discussed the basis for moving to a new building rather than attempting to renovate the Northfield building in its response to Board Staff IR # 5 (a) and SEC IR # 3. The Northfield building was no longer suitable for use by WNH and the cost of attempting to renovate that building was not justifiable in comparison to constructing a new facility. Accordingly, if there were a disposition in the test year (which there will not be), the 50% allocation set out in the Board's Report and applied to Guelph Hydro would be appropriate.

**5. Ref: Exhibit 2/page 87 – Administration and Operations Centre**

***On Exhibit 2/page 87, WN Hydro provides the following table of the four options considered:***

Option1	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

***WN Hydro opted for option 4, noting that its existing building would need further updates to meet building codes with renovation.***

- a) It appears that WN Hydro has considered only the options whereby all employees are centrally located in one location. Given the relative size of its service area, consisting of both urban and rural areas in the City of Waterloo and the Townships of Wellesley and Woolwich, did WN Hydro consider options of a satellite operations centre elsewhere while maintaining the Northfield Drive administration and operations centre?***

WNH did not consider two buildings as a viable option. Three of the senior management team members worked at utilities where more than one building, separated by some

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distance, was part of the development of the utility. The experience of all three was that two buildings negatively affected the efficient and effective operation of the utility. Eventually those utilities consolidated into one building and the observed result was a more efficient operation and improved staff communication by being in one building.

WNH does have a large service area; however, we are small in our number of employees relative to the size of the service area. WNH would be unable to staff two buildings efficiently without dividing some departments, again negatively impacting the efficient operation of the business. Two buildings would also duplicate some operating expenses and would not reduce property taxes.

Therefore, WNH did not consider two buildings as a viable operation.

WNH submits the following information below: Background of the decision to build a new building, a comparison of project costs for similar sustainable building projects (LEED Projects), property valuations for the current building and property, and proposal for WNH's consideration. This information below provides the rationale to WNH's decision to construct a new building. Some of this information is in the original submission of August 27, 2010.

### **Background to Decide to Build a New Building.**

The original building of 39,000 sq. ft. was constructed in 1981-82 when WN Hydro serviced 22,000 customers. At that time WNH had 85 employees and 24 large trucks in a fleet of 45 vehicles. In 1988, an expansion of 9,000 sq. ft. was added including space for the Control Room, the Stores Warehouse, expansion of the locker room, an addition to the vehicle repair garage, offices in the Operations area, and office space in what is now Customer Service. The number of employees had grown to 103 and the number of customers was about 30,000.

A renovation in 1993 added a freight elevator to the second level over the Stores Warehouse and created a new area for the Metering department. The movement of Metering into this area created a major shuffle to maximize the use of the existing area. Information Services moved into the area vacated by Metering, Accounting moved into the

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old I.S. area and Customer Service expanded into the area previously occupied by Accounting.

Further interior renovations took place in 2003 and again in 2006 as we added some offices and office furniture systems to accommodate growth in staff within the existing building.

WNH is now at 115 staff in full-time positions with additional staff from temporary agencies and co-op students from time-to-time. WNH services over 51,000 customers.

WNH's need for expansion exists in several parts of the business. The major impact is in our Operations area. The fleet has changed substantially since 1982 as the industry has seen improvements in labour saving devices such as bucket trucks and digger trucks. The original trucks were all single axle vehicles with a maximum length of 21 feet and a turning radius of 23 feet. The current fleet has 21 large trucks that are tandem axle vehicles with the maximum length being 38 feet and the turning radius of vehicles in the 60 – 75 foot range. (Length affects parking space, turning radius impacts on the room required to maneuver in or out of a parking space.)

LDCs the size of WNH and larger generally park hydraulic vehicles (bucket trucks and digger trucks) in garage spaces that are protected from the elements with some heat in the winter. The most obvious reason is for quick response to power outages from winter storms. Vehicles parked outside require time to warm up and may need de-icing of the insulated booms before use near energized circuits.

Wear and tear on the equipment is a second consideration. We rely on the integrity of the fiberglass booms in our bucket trucks and digger trucks for the safety of our employees and the public. Booms that are exposed to the elements will wear faster due to exposure to the sun and wind. Manufactured boom covers can be used to help protect the boom, however, the booms still pick up moisture or can be contaminated by birds and bird nests. Both situations can require cleaning and drying the boom before performing live line work or work near energized equipment, which is the majority of work for WNH.

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Protection from the elements and minimal heat in the winter will reduce maintenance costs and extend the life of the vehicles and some live line tools. During the ice storm of 1998, many utilities sent bucket trucks to eastern Ontario where the vehicles parked outside in winter weather for a period of several weeks. WNH and other LDCs experienced an increase in the frequency of repairs to hydraulic components during the six-month period following the ice storm response.

WNH can only accommodate 16 of the large vehicles in parking spaces in the current garage as well as our two tension stringing machines (which take up one parking space.) The vehicles today require several forward and reverse motions to jockey into the tight space just to park. One of our trucks is too long to park inside the garage and still allow other vehicles to move around it. That vehicle is stored outside year round. The remaining four trucks park outside in the summer and we park two of the four vehicles in the middle aisle way of the garage in the winter. Those two vehicles must be moved out first thing every morning on a regular workweek or if we need to get to other vehicles after normal work hours to respond to trouble calls.

Based on the above, our needs analysis included a parking garage to fit 21 hydraulic vehicles, 3 specialty vehicles with sensitive electronic equipment, and 2 tension-stringing machines. All other vehicles will park outside. The garage increased from 13,300 sq. ft. to about 21,000 sq. feet. The existing garage had to expand in both width and length to accommodate our needs. The existing concrete dock, which the vehicles park against, is 28 inches high, runs the entire length of both sides of the parking garage, and was designed at a time when most large trucks had an open back. The higher dock made material loading easier. Most vehicles for the last few years and into the future have a back closed in by material bins. The higher dock is an impediment now to loading material and poses some safety risks. Newer LDC buildings have a vehicle parking dock about 10"-11" tall. To break up, remove the existing steel reinforced concrete dock, and replace it with a lower concrete dock is a significant expense. A lower dock in the current parking garage location causes elevation issues with the Stores warehouse, the Line workshop and the Operations Administration areas.

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The Stores Warehouse will also see a significant increase from 5,000 sq. ft. to 15,000 sq. ft. We currently store some materials off site from the Service Centre at some of our municipal substations. WNH expects to store all necessary materials at the Service Centre for efficiency improvements and to allow for the eventual disposal of surplus substation properties.

WNH has a need for additional meeting room space; in addition to the boardroom and a large training room that is in the metering storage space, we currently have only two other meeting rooms in the entire building. We require additional office area space; the last two people hired that required desks are temporarily placed in a file storage room for one and in a vestibule of a hallway for the other. We also need to expand our Control Room facilities to fit the requirements for GIS, SCADA and ODS screens.

Totten Sims Hubicki Associates (THSA), a local architectural firm, assisted WNH to compile a detailed space needs analysis. In 2007, we determined our total space needs required an additional 40,000 sq. feet of usable space, in addition to the existing 48,000 sq. feet of space.

Through investigation, it was determined that the existing Northfield Drive building did not lend itself well to renovations and had several negative considerations;

1. Renovation of the existing building would require major upgrades to comply with current building code standards.
2. The central hall divides the building and in some cases divides departments.
3. Many of the internal walls are load-bearing walls that cannot be moved for renovations, limiting efficient design and efficient use of space.
4. Although a single story building for the most part, the building was built on sloping land and structurally has three distinct levels. Providing barrier free access is difficult and expensive in the current building.
5. The existing building requires replacement of the roofing system, insulation, the HVAC system and most of the plumbing to continue with its current use beyond 2011.

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6. Renovation of the existing building as part of a new building would need the replacement of old inefficient window systems, replacement of most of the ceiling due to age and some water leak damage, upgrading of the electrical system, and replacement of worn flooring.
7. Approximately 50% of the major components of the newly built and renovated building would be 30 years old by the time construction was completed
8. Also considered was the significant operational implications and negative cost impact of renovating existing spaces while attempting to maintain normal business operations.

WNH believed that we should consider energy efficiency in the design of any renovation or new building, including LEED certification.

LEED is the acronym for Leadership in Energy and Environmental Design. The LEED certification is for projects that demonstrate higher performance standards in environmental responsibility and energy efficiency in the building design, construction and operation.

The LEED Canada structure is adapted specifically for Canadian climates and is organized into five categories:

- Sustainable sites
- Water efficiency
- Energy and atmosphere
- Materials and resources
- Indoor environmental quality

THSA assisted WNH to look at four options to meet the space needs and generated estimates of costs involved for each option. The four options are presented below in 2007 dollars: (also on page 87 of Exhibit 2 of the August 27, 2010 submission)

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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 a new building to LEED standards	\$23.5 million

These options included estimates for applicable fees (building permits, development charges, architects, consulting), allowances for some new furnishings and equipment where required, and taxes.

Given the nature of our role in the community and the conservation message we deliver, WNH believed that we must have a LEED component to any option we chose. WNH owns 17.6 acres at our current site, which could allow room to expand or to build a new building.

Renovating our existing space in conjunction with adding space would require construction in some areas, moving people and furniture, and then renovating the space vacated by the move. This would take several iterations along with interruptions to our day-to-day activities to complete the building. We would expect about a two-year completion schedule.

A new building could be completed in about 18 months and would require one move.

The Board of Directors for WNH considered the two options with a LEED component (Option 2 and Option 4) and noted a 20% cost difference between renovation of the existing building and completely new construction. The renovated building would have 55% of the space that would be over 30 years old. It would have required six months longer to build and would involve more disruption of our day-to-day business. If WNH constructed a new building, the existing building could be sold or leased to reduce the net expense.

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On August 16, 2007, Management received direction from the Board of WNH to pursue Option 4; build a new building to LEED standards as the appropriate option. Management was further directed to provide information to support the new building cost estimate and to pursue feasible options to lease or sell the existing building.

### Comparison of Project Costs for Similar Sustainable Building Projects (LEED Projects)

TSHA provided details and costs for five LEED certified buildings that are of a similar nature to the building proposed for WNH. The projects had completion dates ranging from 2003 to 2006. The attached chart provides a summary of the projects, indicating the style of building and comparative costs in 2008 dollars.

Comparison of Similar Completed Projects to WNH Proposal	Year	Office	Material Storage	Vehicle Maintenance	Vehicle Garage	Operations Centre	Area	LEED Rating Level	Constructed Cost (GST Extra)	Cost (\$ 2008) (GST Extra) (3)	Cost / sq ft
1 City of Vancouver Works	2003	Y	Y	Y	Y	Y	100,000	Gold	\$ 23,000,000	\$ 26,022,389	\$ 260
2 Cambridge Civic Administration	2006	Y					86,100	Silver	\$ 29,000,000	\$ 30,468,125	\$ 354
3 Ontario LDC Operations Centre PH 2	2005	Y					38,000	Silver	\$ 9,000,000	\$ 9,692,016	\$ 255
4 Kingston Police Headquarters	2006	Y	Y	Y	Y	Y	120,000	Silver	\$ 26,600,000	\$ 27,946,625	\$ 233
5 Ottawa Paramedic Service Headquarters	2004	Y	Y	Y	Y	Y	100,000	Certified	\$ 22,000,000	\$ 24,283,884	\$ 243
Average	2005							Silver			\$ 269

### Property Valuations for Current Building and Property

A commercial realty company provided opinions and options for the property value of the WNH property at 300 Northfield Drive East, Waterloo.

The options are summarized as follows:

1. Sell existing building with approximately 4.5 acres \$3,100,000
2. Lease existing building with capital investment by WNH to convert building space. Net value \$2,701,250
3. Retain existing site, sell excess land (approximately 13 acres) \$3,900,000
4. Sell entire property and building \$7,000,000



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WNH used options 1 and 4 to prepare net cost per square foot of a new building and sale of the existing building. We did not consider the lease option as the commercial realty company recommended the sale as providing more value than a lease and we were not in the leasing business.

**Proposals for WNH's Consideration (See attached Chart)**

WNH management provided the Board of Directors three options on the chart below to compare different approaches to meeting our space needs and the associated project costs.

Option One is to build a new building on the vacant area of the existing site and move all operations to the new building. The storage yard, employee parking and vehicle access would need realignment. The existing building would be sold as is with approximately 4.5 acres of land (the minimum parcel recommended by a commercial realty company, Coldwell Banker) at fair market value to reduce the net capital investment. WNH has not included any costs of disruption to maintain operations in the existing building during construction of the new building and renovations to storage yard, employee parking and vehicle access. The sale of the 4.5 acres limits the remaining site to no further expansion in the future

Option Two involved finding a suitable piece of property in Woolwich Township that provided similar ease of access to main roads. Land costs are much lower in the Township than in the City of Waterloo. We used an estimate of the cost of land in the Township and for ease of direct comparison we assumed purchasing the same size parcel of land as our current site. A new building would be constructed on this new site with an allowance for expansion in the future. The entire existing site and building would be sold at fair market value to reduce the net capital investment.

Option Three provides further detail on the option of renovating the existing building (to normal building standards), constructing a new addition to the building (to LEED standards), and moving some of the existing stores yard and parking areas. WNH has not included any costs of disruption to maintain operations in the existing building during construction and renovations.

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Options to meet WNH Space Needs	Year	Office	Material Storage	Vehicle Maintenance	Vehicle Garage	Operations Centre	Area	LEED Rating Level	Constructed Cost (GST Extra)	Cost (\$ 2008) (GST Extra) (3)	Cost / sq ft
<b>Option 1</b>											
(1) New WNH Service Centre on Existing Site	2008	Y	Y	Y	Y	Y	86,889	Silver	\$ 22,167,255	\$ 22,721,436	\$ 255
(2) Sale of Existing Building & 4.5 acres	2010						86,889		\$ 3,100,000	\$ 3,338,361	\$ 36
Net Cost										\$ 19,383,075	\$ 219
<b>Option 2</b>											
New WNH Service Centre on New Township Site	2008	Y	Y	Y	Y	Y	86,889	Silver	\$ 22,167,255	\$ 22,721,436	\$ 255
(2) Purchase of new site (17.6 acres)	2008								\$ 880,000	\$ 902,000	
(2) Sale of Existing Building & 17.6 acres	2010						86,889		\$ 7,000,000	\$ 7,538,234	\$ 81
Net Cost										\$ 16,085,202	\$ 175
<b>Option 3</b>											
WNH Service Centre addition to Existing Building New	2008	Y	Y	Y	Y	Y	39,661	Silver	\$ 9,807,218	\$ 10,052,398	\$ 247
(1) Renovated	2008	Y	Y	Y	Y	Y	47,228	N/A	\$ 8,849,628	\$ 9,070,868	\$ 187
Total		Y	Y	Y	Y	Y	86,889		\$ 18,656,845	\$ 19,123,266	\$ 220
(1) Costs do not include staff costs and loss of productivity to maintain operations while existing building is under renovation or new building is under construction.											
(2) Land sale & purchase costs from commercial realty company											
(3) Assume average 2.5% inflation to gross up numbers from 2007 estimates to 2008 dollars.											

On November 29, 2007, Management received direction from the Board of WN Hydro to pursue Option 2 above; build a complete new building to LEED standards on a new site in Woolwich Township. This option provided the lowest net capital investment for a new building, provided a building entirely built to new energy efficient LEED standards, and will provide a better property for expansion in the future. A new building design also overcomes operational inefficiencies in the existing building that result from a poor initial design.

**b) If yes, please document the options considered.**

Please refer to IR# 5 (a) above.

**c) If no, please explain why this option was not considered.**

Please refer to IR# 5 (a) above.

Board Staff Interrogatories

6. Ref: Exhibit 2/pages 21 to 29 – Capital Expenditures and Additions

Board staff has prepared the following table summarizing annual capital expenditures per year from 2004 actual to 2013 forecasts from the data shown in Tables 2-3 to 2-11.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Capex	\$ 6,331,739	\$ 7,135,384	\$ 11,678,980	\$ 10,104,075	\$ 12,481,008	\$ 19,161,112	\$ 29,907,392	\$ 31,261,380	\$ 13,325,500	\$ 11,778,000
CWIP Start			\$ 5,128	\$ 2,983,947	\$ -	\$ 1,216,890	\$ 6,151,497	\$ 13,661,662	\$ 1,229,133	\$ -
End			-\$ 2,983,947		-\$ 1,216,890	-\$ 6,151,497	-\$ 13,661,662	-\$ 1,229,133		
Capital Additions	\$ 6,331,739	\$ 7,135,384	\$ 8,700,161	\$ 13,088,022	\$ 11,264,118	\$ 14,226,505	\$ 22,397,227	\$ 43,693,909	\$ 14,554,633	\$ 11,778,000
Change in Capex		\$ 803,645	\$ 4,543,596	-\$ 1,574,905	\$ 2,376,933	\$ 6,680,104	\$ 10,746,280	\$ 1,353,988	-\$ 17,935,880	-\$ 1,547,500
% Change in Capex		12.7%	63.7%	-13.5%	23.5%	53.5%	56.1%	4.5%	-57.4%	-11.6%
Average Annual % change since 2006								21.8%		

Source: Exhibit 2/Tables 2-3 to 2-11

WN Hydro shows increased capex in the 2010 bridge and 2011 test years, with capex in 2012 and 2013 decreasing towards levels in 2008 and 2009. WN Hydro explains that the rebuilding and upgrading of a Transformer Station and 2009 to 2011 capex are largely impacted by the building of the new administration and operations centre.

WN Hydro's rate base, summarized in Table 2-12, shows the impacts of the capital additions as shown in the following table:

Rate Base (Table 2-12)

	2006 OEB					2010 Bridge	2011 Test	
Description	Approved	2006 Actual	2007 Actual	2008 Actual	2009 Actual	Year	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	
Variances (Year-over-year)								2006 to 2011 change
Average Net Book Value		\$ 2,613,730	\$ 4,323,777	\$ 5,356,287	\$ 5,400,547	\$ 10,359,561	\$ 22,839,387	\$ 48,279,559
Working Capital Allowance		\$ 819,264	-\$ 25,885	-\$ 87,497	-\$ 1,973,122	\$ 5,709,021	-\$ 186,621	\$ 3,435,896
Rate Base		\$ 3,432,995	\$ 4,297,891	\$ 5,268,790	\$ 3,427,426	\$ 16,068,581	\$ 22,652,766	\$ 51,715,454
Average Annual Change (2006 to 2011)								
Annual Percentage Changes								
Average Net Book Value		3.15%	5.05%	5.95%	5.66%	10.28%	20.55%	9.35%
Working Capital Allowance		5.62%	-0.17%	-0.57%	-12.90%	42.87%	-0.98%	4.11%
Rate Base		3.52%	4.25%	5.00%	3.10%	14.08%	17.40%	8.61%

**Board Staff Interrogatories**

***Average net book value of assets increases from about \$85 million in 2006 by about \$5 million per year, with an increase in 2010 of \$11 million to \$111 million and then a \$22 million increase in the 2011 test year.***

***WN Hydro also notes that the data shown exclude smart meter capex.***

***a) Given the “lumpiness” in the numbers shown above, please confirm or correct the data shown.***

WNH confirms the calculations above, except for 2012. The \$13,325,500 was forecast to be the Capital Additions; WNH forecast the CWIP Start and End for 2012 and 2013 to be the same values as the ending 2011 CWIP.

***b) Please provide a similar table including smart meter capital expenditures.***

WNH has provided below a table similar to the Board Staff's table above, including smart meter capital expenditures, below. WNH also included smart meter OM&A costs (excluding depreciation, carrying charges and any MDM/R costs) in its working capital allowance calculation for the purpose of providing this table.

Board Staff Interrogatories

Table IR # 6 (b) - Capital Expenditures including Smart Meters

Description	2006 OEB Approved	2006 Actual Year	2007 Actual Year	2008 Actual Year	2009 Actual Year	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
Gross Fixed Assets Smart Meters				630,116	4,935,077	8,454,407	9,396,459
Accumulated Depreciation	65,162,758	77,523,158	83,930,906	90,632,779	97,965,764	105,748,291	112,488,866
Accumulated Depreciation Smart Meters				21,004	206,510	639,059	1,220,321
Net Book Value	83,562,811	86,774,655	93,250,959	98,096,342	108,780,620	126,021,699	157,906,966
Average Net Book Value	83,075,300	85,689,030	90,012,807	95,673,650	103,438,481	117,401,160	141,964,333
Working Capital	97,230,451	102,692,215	102,519,646	101,936,330	88,782,187	126,842,329	125,598,185
Smart Meters OM&A Costs (excluding Depreciation)				3,151	21,196	66,190	135,170
Working Capital Allowance	14,584,568	15,403,832	15,377,947	15,290,922	13,320,507	19,036,278	18,860,003
<b>Rate Base</b>	<b>97,659,868</b>	<b>101,092,863</b>	<b>105,390,754</b>	<b>110,964,573</b>	<b>116,758,989</b>	<b>136,437,437</b>	<b>160,824,336</b>
<b>Variances (Year-over Year)</b>							
Average Net Book Value		2,613,730	4,323,777	5,660,843	7,764,831	13,962,678	24,563,173
Working Capital Allowance		819,265	(25,885)	(87,025)	(1,970,415)	5,715,770	(176,275)
Rate Base		3,432,995	4,297,891	5,573,819	5,794,416	19,678,449	24,386,898
							<b>2006 to 2011 Change</b>
							56,275,302
							3,456,171
							59,731,473
							<b>Average Annual Change (2006 to 2011)</b>
<b>Annual Percentage Changes</b>							
Average Net Book Value		3.15%	5.05%	6.29%	8.12%	13.50%	20.92%
Working Capital Allowance		5.62%	-0.17%	-0.57%	-12.89%	42.91%	-0.93%
Rate Base		3.52%	4.25%	5.29%	5.22%	16.85%	17.87%
							10.62%
							4.13%
							9.73%

Board Staff Interrogatories

**c) Noting that the construction of the new administration and operations centre may not, in large part, utilize WN Hydro's own staff, and that WN Hydro has also largely been involved in smart meter deployment in 2009 and 2010, but these activities are not reflected in the tables in Exhibit 2; the increased capex and capital additions in 2010 and 2011 appear to be unprecedented for WN Hydro.**

**i. Please provide WN Hydro's capex and capital additions to year-to-date (e.g. October 31, 2010 or November 30, 2010). Please provide WN Hydro's current estimate of its expected 2010 year end capex.**

As described in Exhibit 2, page 19, WNH tracks and monitors its capital expenditures on a project basis; the projects are described in Table 2-2, also in Exhibit 2, page 19. Conversion to USoA account numbers has not yet occurred in WNH's fixed asset system, thus, WNH is unable to provide capital additions in the format of the USoA.

WNH has provided its capital additions to November 30, 2010, WNH notes that the figures below are unofficial internal data without full year end accruals and adjustments; WIP at November 30, 2010 is currently not available.

**IR # 6 (c) (i) - Capital Additions at November 30, 2010**

Project Code	Project Description	Capital Spending at November 2010
06EN01	Furniture & Equipment Engineering	10,005
06EN03	Land Rights	18,724
06EN04	Overhead Rebuild Lines	5,596,214
06EN05	Overhead Relocate Lines	215,008
06EN06	Overhead New Feeders	1,780,441
06EN07	Overhead New Services	1,077,492
06EN08	Underground New Feeders	1,412,621
06EN09	Underground Cable Replacement	1,708,052
06EN10	Underground Residential Subdivisions	716,621
06EN11	Underground New Services	1,238,672
06EN13	GIS - Mapping	63,922
06FL01	Furniture & Equipment Fleet	124,804
06FL02	Vehicles	632,140
06MT02	Meters Commercial	248,057
06MT03	Meters Wholesale	60,790
06MT04	Furniture & Equipment Metering	11,556
06OH01	Operations Overhead Capital	310,532
06PS01	Furniture & Equipment Purchasing/Stores	2,700
06SN02	TS Building	399,986
06SN03	MS Building	80,206
06SN04	TS Equipment	5,317,401
06SN05	SCADA	134,044
06SS02	Systems Hardware	41,185
06SS03	Systems Software	271,515
07OU01	Operations Underground Capital	235,444
09GM03	New Service Centre Costs	4,861,071
<b>Total</b>		<b>26,569,204</b>

**Board Staff Interrogatories**

WNH has also provided its current estimate of expected 2010 year end capex in the table below:

**IR # 6 (c) (i) - Capex and Capital Additions Estimate at December 31, 2010**

Project		Total Spending in 2010	2009 WIP	2010 WIP	2010 Estimate CAPEX
06EN03	Land Rights	16,000	-	-	16,000
06EN04	Overhead Rebuild Lines	5,224,443	691,823	(323,660)	5,592,606
06EN05	Overhead Relocate Lines	635,539	-	(83,543)	551,996
06EN06	Overhead New Feeders	1,504,175	175,274	-	1,679,449
06EN07	Overhead New Services	1,093,728	5,515	-	1,099,243
06EN08	Underground New Feeders	1,500,490	486,696	(842,842)	1,144,344
06EN09	Underground Cable Replacement	1,683,275	103,704	(18,238)	1,768,741
06EN10	Underground Residential Subdivisions	878,472	-	-	878,472
06EN11	Underground New Services	1,303,936	-	-	1,303,936
06EN13	GIS - Mapping	70,000	-	-	70,000
06MT02	Meters Commercial	386,907	1,556	-	388,463
06MT03	Meters Wholesale	67,742	-	-	67,742
06MT04	Furniture & Equipment Metering	13,500	-	-	13,500
06FL01	Furniture & Equipment Fleet	188,000	21,118	-	209,118
06FL02	Vehicles	594,000	139,072	(95,000)	638,072
06OH01	Operations Overhead Capital	345,824	-	-	345,824
07UG01	Operations Underground Capital	263,593	-	-	263,593
06PS01	Furniture & Equipment Purchasing/Stores	2,700	-	-	2,700
06SN02	TS Building	506,829	90,753	-	597,582
06SN03	MS Building	109,954	-	-	109,954
06SN04	TS Equipment	4,662,588	1,571,727	-	6,234,315
06SN05	SCADA	176,216	12,827	(87,273)	101,771
06SN07	Furniture & Equipment Stations	1,700	-	-	1,700
06SS02	Systems Hardware	137,041	-	-	137,041
06SS03	Systems Software	426,641	2,608	-	429,249
09GM03	New Service Centre	9,800,000	2,848,824	(12,648,824)	0
<b>Total before Contributed Capital</b>		<b>31,593,293</b>	<b>6,151,497</b>	<b>(14,099,380)</b>	<b>23,645,411</b>
<b>Contributed Capital</b>					<b>(2,596,000)</b>
<b>Total after Contributed Capital</b>					<b>21,049,411</b>

Board Staff Interrogatories

- ii. Accepting that there may be some “lumpiness” due to major projects like the TS rebuild and the administration and operations centre build, what prioritization did WN Hydro do to consider deferring capital projects from 2010 and 2011 to try to stabilize the level of capital expenditures?**

WNH has provided its high level prioritization criteria, as detailed in its Asset Management Strategy, for capital projects below.

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

In conjunction with the Asset Management Strategy as guidance, WNH reviews the age & condition of assets and this condition assessment will determine if a project can be deferred. WNH performed this assessment for 2010 and 2011 and WNH did defer some projects. The proposed capital expenditures in the application reflect the result of this review and deferral. WNH also reviews and addresses where system performance is an issue and determines if deferral is possible.

The construction of the new administration offices and service centre building, and the smart meter deployment are views as work in addition o our necessary distribution system work. These projects are primarily completed by external resources.

**7. Ref: Exhibit 2/page 90/Table 2-31.45 –**

***Costs of New Administration and Operations Centre***

***Table 2-31.45 shows projected costs for the new administration and operationscentre as \$26,476,961, comprised of \$2.038 million for land, \$22,738,961 for the building and fixtures, and \$1.7 million for furniture and equipment.***

***\$26.5 million is about double what WN Hydro has typically incurred as average annual capex for its whole distribution system, or forecasts as capex in 2012 and 2013.***



**Board Staff Interrogatories**

**a) Please provide details on and justification for the \$1.7 million in furniture and equipment for the new centre in 2011.**

WNH has provided details on the \$1.7 million in furniture and equipment for the new centre in 2011 in the table below.

**Table IR# 7 (a) - Furniture and Equipment for New Centre in 2011**

<i>Furniture and Equipment Breakdown as follows<sup>1</sup> :</i>	
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
<b>Total</b>	<b>1,700,000</b>
<i>1 WNH has had an assessment performed and is retaining any furniture and equipment that is suitable and has remaining useful life.</i>	

As demonstrated in Table IR# 4 (a), the majority of the contents (furniture) is fully depreciated, as well, much of the furniture and equipment is original to the construction period of the building. Much of this furniture does not lend itself to modern working practices, and does not provide adequate work space and efficient storage. The remaining equipment is required in the new building as the existing equipment is not transferable due to technological changes.

**b) Please explain what is happening to existing furniture and equipment in the Northfield Drive building. Is WN Hydro keeping the furniture, or is it disposing it? If the latter, what is WN Hydro proposing regarding treatment of net proceeds from such disposition?**

WNH will retain existing furniture and equipment from the Northfield Drive Building that is suitable for the new centre and has remaining useful life. WNH has had an assessment performed to identify such assets. The assets that are not to be retained have very little value and is not considered material. WNH proposes to treat any gain from the net proceeds of such disposition on a sharing basis with 50% being returned to the customers.

Board Staff Interrogatories

**Working Capital Allowance**

**8. Ref: Exhibit 2/page 58 and Table 2-24 – Working Capital Allowance**

***WN Hydro has used the standard formula of 15% of the sum of cost of power and controllable expenses to determine its working capital allowance.***

- a) Please update Table 2-24 based on the latest Regulated Price Plan Report issued by the Board on October 18, 2010 and available at [http://www.oeb.gov.on.ca/OEB/Documents/EB-2004-0205/RPP\\_Price\\_Report\\_20101018.pdf](http://www.oeb.gov.on.ca/OEB/Documents/EB-2004-0205/RPP_Price_Report_20101018.pdf).***

Table 2-24 has been updated below to reflect the Power and Global Adjustment Pricing in the *Regulated Price Plan Price Report* of October 18, 2010. WNH has also revised the accounts 4714 Network and 4716 Connection Cost of Power accounts to reflect changes detailed in IR# 8 (b).

Board Staff Interrogatories

IR # 8 (a) - Table 2-24 Revised  
Updated Working Capital Allowance

											Updated	Revised
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	97,453,149	14,617,972	92,473,892	13,871,084
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	7,749,811	1,162,472	7,744,156	1,161,623
4716-CN	3,812,819	571,923	2,707,083	406,063	2,383,435	357,515	2,615,293	392,294	2,730,622	409,593	2,728,683	409,302
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	117,418,470	17,612,771	112,401,418	16,860,213
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	58,858
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

**Board Staff Interrogatories**

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
<b>Billing and Collections</b>												
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
<b>Subtotal - Billing and Collections</b>	<b>1,362,238</b>	<b>204,336</b>	<b>1,472,667</b>	<b>220,900</b>	<b>1,595,556</b>	<b>239,333</b>	<b>1,599,224</b>	<b>239,884</b>	<b>2,179,495</b>	<b>326,924</b>	<b>2,188,939</b>	<b>328,341</b>
<b>Community Relations</b>												
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
<b>Subtotal - Community Relations</b>	<b>582,943</b>	<b>87,441</b>	<b>310,784</b>	<b>46,618</b>	<b>119,696</b>	<b>17,954</b>	<b>121,619</b>	<b>18,243</b>	<b>221,160</b>	<b>33,174</b>	<b>246,777</b>	<b>37,017</b>
<b>Administrative and General Expenses</b>												
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
<b>Subtotal - Administrative and General Expenses</b>	<b>1,780,756</b>	<b>267,113</b>	<b>2,006,595</b>	<b>300,989</b>	<b>1,857,875</b>	<b>278,681</b>	<b>2,223,826</b>	<b>333,574</b>	<b>2,363,101</b>	<b>354,465</b>	<b>2,311,407</b>	<b>346,711</b>
<b>Taxes Other than Income Taxes</b>												
6105-Taxes Other Than Income Taxes	-	-	-	-	-	-	-	-	-	-	-	-
<b>Subtotal - Taxes Other than Income Taxes</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total</b>	<b>102,692,215</b>	<b>15,403,832</b>	<b>102,519,646</b>	<b>15,377,947</b>	<b>101,936,330</b>	<b>15,290,450</b>	<b>88,782,187</b>	<b>13,317,328</b>	<b>127,226,553</b>	<b>19,083,983</b>	<b>122,585,255</b>	<b>18,387,788</b>

Board Staff Interrogatories

- b) Please provide the derivation of the Cost of Power components shown in Table 2-24, showing the commodity prices, wholesale market service rates, transmission charges and LV rates used to derive the cost of power components, by account, for each of the 2010 bridge and 2011 test years.***

WNH has provided its Initial August 27, 2010 Submission calculations of the Cost of Power components in "Table IR # 8 (b) – Initial August 27, 2010 Submission".

WNH has presented its calculation of the account 4705 based on the October 18, 2010 *Regulated Price Plan Price Report* in its table "Table IR #8 (b) - USoA 4705 Power Updated to October 18, 2010 *Regulated Price Plan Price Report*."

WNH has presented its calculation of revised calculations of the accounts 4714 Network (NW) and 4716 Connection (CN) in its table "Table IR #8 (b) - Update to USoA 4714 Network and USoA 4716 Connection". In its initial submission, WNH captured only the kW associated with the IESO Network and Line Connection and Transformation Charges, however, WNH is embedded to Hydro One Networks Inc., Kitchener-Wilmot Hydro Inc. and Cambridge and North Dumfries Hydro Inc. and WNH makes payment to these Host Distributors for Network and Connection Charges. This has resulted in a revised Cost of Power USoA 4714 and 4716, which is reflected in the Revised Table 2-24 in IR # 8 (a). WNH also notes that it has reduced the kW for Adjusted OPA Savings in 2010 and 2011, as detailed in Energy Probe IR # 19 (a) and has reflected WNH's 2011 CDM Target Savings as originally proposed in its August 27, 2010 Submission.

In addition, these above noted changes have necessitated a recalculation of WNH's proposed Retail Transmission Network and Connection Rates, thus, WNH has provided a detailed schedule in the table "Table IR # 8 (b) Update to Proposed Retail Transmission Rates."

Board Staff Interrogatories

Table IR # 8 (b) - Initial August 27, 2010 Submission

Cost of Power	2010 Bridge	2011 Test
4705-Power Purchased	97,756,591	96,243,729
4708-WMS	9,331,888	9,289,687
4714-NW	7,343,286	7,285,670
4716-CN	2,449,480	2,430,261
4750-LV Charges	153,000	165,000
<b>Subtotal - Cost of Power</b>	<b>117,034,245</b>	<b>115,414,347</b>

4705-Power Purchased		
	2010 Bridge	2011 Test
kWh Purchased Weather Adjusted per Regression Model	1,435,675,075	1,429,182,624
Spot	627,810,366	624,971,264
RPP	807,864,709	804,211,360
	1,435,675,075	1,429,182,624
RPP Split		
1st block	432,734,190	430,777,267
2nd block	375,130,519	373,434,093
	807,864,709	804,211,360
RPP Split - Prices effective May 1, 2010		
1st block	\$ 0.065	\$ 0.065
2nd block	\$ 0.075	\$ 0.075
<b>RPP</b>	<b>\$</b>	<b>\$</b>
1st block	\$ 28,127,722	\$ 28,000,522
2nd block	\$ 28,134,789	\$ 28,007,557
Total	<b>\$ 56,262,511</b>	<b>\$ 56,008,079</b>
<b>Spot</b>	<b># kWh</b>	
	627,810,366	624,971,264
	Average HOEP + GA <sup>1</sup>	0.06609
		0.06438
	<b>41,494,080</b>	<b>40,235,650</b>
<b>Total 4705-Power Purchased</b>	<b>97,756,591</b>	<b>96,243,729</b>

<sup>1</sup> Per April 15/10 RPP Navigant Forecast, Regulated Price Plan Price Report

Power	0.03666
Global Adjustment	0.02772
Total	0.06438

Board Staff Interrogatories

4708-WMS		
	<b>2010 Bridge</b>	<b>2011 Test</b>
kWh Purchased Weather Adjusted per Regression Model	1,435,675,075	1,429,182,624
WMS	\$ 0.0065	\$ 0.0065
<b>Total 4708-WMS</b>	<b>9,331,888</b>	<b>9,289,687</b>

**4714-Network & 4716-Connection**

	2010		
	NW	CN	CN
kW Purchases	2,472,487	2,544,556	346,172
EB-2008-0272 Transmission Rates	\$ 2.97	\$ 0.73	\$ 1.71
		1,857,526	591,954
<b>Total 4714-NW &amp; 4716-CN</b>	<b>7,343,286</b>	<b>2,449,480</b>	

	2011		
	NW	CN	CN
kW Purchases	2,453,087	2,524,591	343,456
EB-2008-0272 Transmission Rates	\$ 2.97	\$ 0.73	\$ 1.71
		1,842,951	587,310
<b>Total 4714-NW &amp; 4716-CN</b>	<b>7,285,670</b>	<b>2,430,261</b>	

USoA 4750 LV Charges

Distributor	2009 kW	Current LV Charge / kW	Low Voltage Charge \$/kW	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
<b>Total</b>	<b>238,656</b>		<b>\$ 165,399</b>	

Rounded Estimate

**165,000**

Board Staff Interrogatories

Table IR #8 (b) - USoA 4705 Power Updated to October 18, 2010  
Regulated Price Plan Price

4705-Power Purchased			
		2010 Bridge	2011 Test
kWh Purchased Weather Adjusted per Regression Model		1,435,675,075	1,429,182,624
Spot		627,810,366	624,971,264
RPP		807,864,709	804,211,360
		1,435,675,075	1,429,182,624
RPP Split			
1st block		432,734,190	430,777,267
2nd block		375,130,519	373,434,093
		807,864,709	804,211,360
RPP Split - Prices effective November 1, 2010			
1st block		\$ 0.065	\$ 0.064
2nd block		\$ 0.075	\$ 0.074
RPP		\$	\$
1st block		\$ 28,127,722	\$ 27,569,745
2nd block		\$ 28,134,789	\$ 23,899,782
Total		\$ 56,262,511	\$ 51,469,527
Spot		# kWh	627,810,366
		Average HOEP + GA <sup>1</sup>	0.06561
		41,190,638	41,004,365
Total 4705-Power Purchased		97,453,149	92,473,892

<sup>1</sup> Per October 18/10 RPP Navigant Forecast, Regulated Price Plan Price Report

Power	0.03923
Global Adjustment	0.02638
Total	0.06561



Board Staff Interrogatories

Table IR #8 (b) - Update to USoA 4714 Network and USoA 4716 Connection

2009 - Revised															
Month	Network					CN - Line Connection					CN - Line Transformation				
	IESO	HONI <sup>1</sup>	KWH <sup>2</sup>	CND <sup>3</sup>	TOTAL	IESO	HONI <sup>1</sup>	KWH <sup>2</sup>	CND <sup>3</sup>	TOTAL	IESO	HONI <sup>1</sup>	KWH <sup>2</sup>	CND <sup>3</sup>	TOTAL
Jan	216,113	5,760	4,981	7,047	233,901	216,113	5,760	4,981	7,047	233,901	31,161	5,760	-	-	36,921
Feb	210,723	5,367	4,769	6,918	227,777	211,488	5,616	4,770	6,918	228,792	30,966	5,616	-	-	36,582
Mar	211,095	5,008	4,655	6,926	227,684	211,095	5,008	4,797	6,926	227,826	31,054	5,008	-	-	36,062
Apr	178,816	4,642	3,880	6,443	193,781	195,142	4,642	3,880	6,443	210,107	27,851	4,642	-	-	32,493
May	182,574	3,959	3,520	5,819	195,872	191,168	3,959	3,520	5,819	204,466	24,932	3,959	-	-	28,891
Jun	237,371	5,326	4,775	6,386	253,858	239,225	5,328	4,775	6,386	255,714	29,617	5,328	-	-	34,945
Jul	194,792	5,176	4,072	5,922	209,962	202,747	5,176	4,072	5,922	217,917	26,173	5,176	-	-	31,349
Aug	236,649	5,413	4,251	6,851	253,164	244,776	5,413	4,251	6,851	261,291	28,595	5,413	-	-	34,008
Sep	197,188	4,239	2,990	6,151	210,568	209,529	4,273	2,992	6,151	222,945	26,754	4,273	-	-	31,027
Oct	189,433	4,538	3,274	6,258	203,503	197,076	4,538	3,274	6,258	211,146	27,690	4,538	-	-	32,228
Nov	202,553	5,201	3,624	6,288	217,666	208,493	5,201	3,863	6,288	223,845	29,968	5,201	-	-	35,169
Dec	215,180	5,879	4,744	6,931	232,734	217,704	5,879	4,744	6,931	235,258	31,411	5,879	-	-	37,290
Total kW	2,472,487	60,508	49,535	77,940	2,660,470	2,544,556	60,793	49,918	77,940	2,733,207	346,172	60,793	-	-	406,965
Rate	2.9700	2.6500	2.0767	1.8616		0.7300	0.6400	0.7108	1.4788		1.7100	1.5000			
Total \$	7,343,286	160,346	102,868	145,093	7,751,594	1,857,526	38,908	35,482	115,258	2,047,173	591,954	91,190			683,144

<sup>1</sup> Per May 1, 2010 Rate Order EB-2009-0096 Hydro One Networks Inc.

<sup>2</sup> Per May 1, 2010 Rate Order EB-2009-0267 Kitchener-Wilmot Hydro Inc.

<sup>3</sup> Per May 1, 2010 Rate Order EB-2009-0260 Cambridge and North Dumfries Hydro Inc.

2010 - Revised															
Month	Network					CN - Line Connection					CN - Line Transformation				
	IESO	HONI <sup>1</sup>	KWH <sup>2</sup>	CND <sup>3</sup>	TOTAL	IESO	HONI <sup>1</sup>	KWH <sup>2</sup>	CND <sup>3</sup>	TOTAL	IESO	HONI <sup>1</sup>	KWH <sup>2</sup>	CND <sup>3</sup>	TOTAL
2009 Purchases	2,472,487	60,508	49,535	77,940	2,660,470	2,544,556	60,793	49,918	77,940	2,733,207	346,172	60,793	-	-	406,965
Less CDM Adjustment <sup>4</sup>	(569)	(14)	(11)	(18)	(612)	570	14	11	17	612	(78)	(14)	-	-	(91)
2010 Forecast	2,471,918	60,494	49,523	77,922	2,659,858	2,545,126	60,807	49,929	77,957	2,733,819	346,094	60,779	-	-	406,874
Rate	2.9700	2.6500	2.0767	1.8616		0.7300	0.6400	0.7108	1.4788		1.7100	1.5000			
Total \$	7,341,597	160,309	102,845	145,060	7,749,811	1,857,942	38,916	35,490	115,283	2,047,631	591,822	91,169			682,991
															2,730,622

<sup>4</sup> Revised CDM Adjustment, please refer to Energy Probe IR # 19 (a) of 5,366,065 kWh / 8760 hours = 612 kW in 2010, CN - Line Transformation Prorated 612 kW x 406,965/2,733,207; Saving allocated to each entity by their prorata share of the total

2011 - Revised															
Month	Network					CN - Line Connection					CN - Line Transformation				
	IESO	HONI <sup>1</sup>	KWH <sup>2</sup>	CND <sup>3</sup>	TOTAL	IESO	HONI <sup>1</sup>	KWH <sup>2</sup>	CND <sup>3</sup>	TOTAL	IESO	HONI <sup>1</sup>	KWH <sup>2</sup>	CND <sup>3</sup>	TOTAL
2010 Forecast	2,471,918	60,494	49,523	77,922	2,659,858	2,545,126	60,807	49,929	77,957	2,733,819	346,094	60,779	-	-	406,874
Less CDM Adjustment <sup>5</sup>	(1,804)	(44)	(36)	(57)	(1,941)	(1,807)	(43)	(35)	(55)	(1,941)	(246)	(43)	-	-	(289)
2010 Forecast	2,470,114	60,450	49,487	77,865	2,657,917	2,543,319	60,763	49,894	77,902	2,731,878	345,849	60,736	-	-	406,585
Rate	2.9700	2.6500	2.0767	1.8616		0.7300	0.6400	0.7108	1.4788		1.7100	1.5000			
Total \$	7,336,240	160,192	102,770	144,954	7,744,156	1,856,623	38,889	35,465	115,202	2,046,177	591,401	91,104			682,506
															2,728,683

<sup>5</sup> Original CDM Target Adjustment of 17,000 MWh / 8760 hours = 1,941 kW in 2011, CN - Line Transformation Prorated 1,941 kW x 406,965/2,733,207

Board Staff Interrogatories

Table 1R #8 (b) Update to Proposed Retail Transmission Rates

2011												
Purchase Cost Estimated					Billings Estimated - revised							Estimated Variance
kW - estimate 2011 - revised				Total Billings	Res kWh	<50 kWh	>50 kW	LU kW	St Lt kW	USL kWh		
NW	CN	CN	Total CN									
Estimated Purchase Cost	\$ 7,744,156	\$ 2,046,177	\$ 682,506	\$ 2,728,683								
Weather Normalized Billing Units						386,864,023	177,292,483	1,649,836	150,108	21,547	1,648,666	
Apply Loss Factor						1.0404	1.0404				1.0404	
Billing Units Network and Connection						402,493,330	184,455,100	1,649,836	150,108	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						\$ 2,334,461	\$ 977,612	\$ 3,779,115	\$ 380,690	\$ 35,048	\$ 9,091	
Estimated Purchase Cost / Billings Network	\$ 7,744,156				\$ 7,516,016							228,139
Variance Overcollection Network %												3.04%
Apply Variance % to Existing Rates to Reduce to Cost						\$ 0.0060	\$ 0.0055	\$ 2.3601	\$ 2.6131	\$ 1.6760	\$ 0.0055	
Apply Proposed Rates to Billing Quantities					\$ 7,744,156	\$ 2,405,321	\$ 1,007,286	\$ 3,893,825	\$ 392,245	\$ 36,112	\$ 9,367	\$ 7,744,156
Transmission Connection												
Current Rates (EB-2009-0210) Transmission						\$ 0.0020	\$ 0.0018	\$ 0.8934	\$ 0.8964	\$ 0.5528	\$ 0.0018	
Estimated Billings Connection						\$ 804,987	\$ 332,019	\$ 1,473,964	\$ 134,557	\$ 11,911	\$ 3,087	
Estimated Purchase Cost / Billings Connection				\$ 2,728,683	\$ 2,760,525							(31,842)
Variance Overcollection Connection%												-1.15%
Apply Variance % to Existing Rates to Reduce to Cost						\$ 0.0020	\$ 0.0018	\$ 0.8831	\$ 0.8861	\$ 0.5464	\$ 0.0018	
Apply Proposed Rates to Billing Quantities					\$ 2,728,683	\$ 795,701	\$ 328,189	\$ 1,456,962	\$ 133,005	\$ 11,774	\$ 3,052	
Proposed Rates - Revised												
					Res	<50	>50	LU	St Lt	USL		
Per					kWh	kWh	kW	kW	kW	kWh		
Transmission Network					\$ 0.0060	\$ 0.0055		\$ 2.6131	\$ 1.6760	\$ 0.0055		
Less than 1,000 kW							\$ 2.2221					
Interval Metered (less than 1,000 kW)							\$ 2.3601					
Interval Metered (1,000 to 4,999 kW)							\$ 2.3571					
Transmission Connection					\$ 0.0020	\$ 0.0018		\$ 0.8861	\$ 0.5464	\$ 0.0018		
Less than 1,000 kW							\$ 0.7070					
Interval Metered (less than 1,000 kW)							\$ 0.8831					
Interval Metered (1,000 to 4,999 kW)							\$ 0.8820					

Board Staff Interrogatories

**Service Reliability**

**9. Ref: Exhibit 2/page 2 – Service Reliability**

**WN Hydro states:**

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

***a) Please provide reliability performance for the period 2006 to 2009 actual for SAIDI, SAIFI and CAIDI, with and without Loss of Supply interruptions, by filling out the following table.***

	All Service Interruptions			Service Interruptions excluding Loss of Supply (Cause Code2)		
	SAIDI	SAIFI	CAIDI	SAIDI	SAIFI	CAIDI
<b>2006</b>						
<b>2007</b>						
<b>2008</b>						
<b>2009</b>						

WNH provides its reliability performance for the period 2006 to 2009 actual in the table below.

Board Staff Interrogatories

Table IR # 9 (a) - SAIDI, SAIFI, CAIDA 2006 to 2009

YEAR	ALL SERVICE INTERRUPTIONS			EXCLUDING LOSS OF SUPPLY		
	SAIDI	SAIFI	CAIDI	SAIDI	SAIFI	CAIDI
2006	1.06	1.23	0.86	NA	NA	NA
2007	0.91	1.32	0.69	0.66	1.24	0.53
2008	1.01	1.10	0.92	0.76	1.00	0.76
2009	1.23	1.03	1.19	1.11	0.95	1.18
Note: WNH's interruption report data used for 2006 to 2008 statistics did not include planned interruptions.						
This was corrected and all planned interruptions were included in our reporting for 2009.						

WNH notes that the requirement to track distribution system reliability performance data, with and without Loss of Supply interruptions, was introduced by the OEB on January 2, 2008 for interruptions occurring in calendar year 2007.

WNH's distribution system reliability performance data recorded in the years 2006 to 2008 did not include outages related to planned interruptions. This internal process was corrected and all planned interruptions were included in WNH's reporting beginning with the data for calendar year 2009.

***b) For any instances where reliability performance is worse than the historical performance of at least three prior years, please identify the cause of degraded service reliability, actions taken by WN Hydro to remedy such service degradation, and any outcomes.***

The historical performance of WNH's distribution system between 2006 and 2009 has not materially changed; however, the manner in which WNH records the statistics for the performance in 2009 have changed from the previous three years. The greatest contributing factors of this change in recorded outage minutes are related to the fact WNH began to include the impact of planned outages in these statistics as of January 1, 2009. Other fluctuations occurred as a result of major outages due to severe weather events.

Board Staff Interrogatories

**Exhibit 3 – Operating Revenues and Customer and Load Forecast**

**9. Ref: Exhibit 3/page 2/Table 3-1**

***In Table 3-1: Summary of Operating Revenue, the column “2007 Actual vs. 2006 Actual” appears to be calculated as the variance between “2007 Actual” versus “2006 Actual vs. 2006 Board Approved”. Please confirm this. If confirmed, please provide an updated Table 3-1 to correctly show the variance between 2007 Actuals over 2006 Actuals.***

WNH confirms the calculation as noted above. Table 3-1: Summary of Operating Revenue has been corrected and provided below. In addition, columns “2008 Actual vs. 2007 Actual”, “2009 Actual vs. 2008 Actual” and “2010 Bridge vs. 2009 Actual” have also been corrected.

WNH also notes that it has been updated to also reflect the changes as noted in Board Staff IR# 35 (a) and Energy Probe IR # 23 (c). WNH has provided an updated Table 3-1 below.

Board Staff Interrogatories

IR # 10 - Table 3-1 Revised - 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
<b>Throughput Revenue</b>													
Residential	12,584,541	12,474,198	(110,342)	13,161,992	687,793	13,269,383	107,391	13,405,234	135,852	13,085,005	(320,229)	15,705,681	2,620,676
GS<50	3,879,492	3,838,382	(41,110)	3,853,585	15,202	3,843,387	(10,197)	3,837,056	(6,331)	3,827,123	(9,933)	4,581,871	754,748
GS>50	6,879,858	7,031,351	151,493	7,370,276	338,925	7,461,869	91,593	7,368,609	(93,260)	7,343,079	(25,530)	8,391,936	1,048,856
Large User	699,447	695,052	(4,395)	646,219	(48,833)	607,186	(39,033)	714,805	107,619	481,496	(233,310)	581,384	99,889
Street Lighting	184,240	185,522	1,282	193,998	8,477	195,567	1,569	196,902	1,335	194,982	(1,920)	259,710	64,727
Unmetered Scattered Load	138,158	76,352	(61,806)	105,665	29,312	117,730	12,065	120,883	3,153	117,351	(3,532)	131,840	14,489
Embedded Distributor			-		-		-		-		-	846	846
<b>Transformer Ownership Allowance</b>	(744,464)	(759,210)	(14,746)	(776,514)	(17,304)	(776,374)	140	(776,628)	(254)	(776,628)	0	(672,628)	104,000
<b>Other Distribution Charges</b>													
<b>Other Revenue</b>													
Late Payment Charges	160,296	187,406	27,110	186,505	(901)	168,746	(17,759)	180,266	11,520	180,000	(266)	180,000	-
Specific Service Charges	304,646	140,903	(163,743)	386,267	245,364	279,258	(107,008)	244,566	(34,692)	244,155	(411)	245,845	1,690
Other Distribution Revenue	91,451	304,576	213,125	282,082	(22,494)	281,083	(998)	268,081	(13,002)	277,719	9,638	278,819	1,100
Other Income and Deductions	323,902	813,011	489,109	1,016,119	203,108	904,858	(111,261)	419,515	(485,343)	355,047	(64,468)	346,994	(8,053)
SSS Administration Charge	121,602	125,369	3,767	125,369	-	130,942	5,573	132,653	1,712	135,000	2,347	135,000	-
Low Voltage 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
<b>Total Operating Revenue</b>	<b>24,718,896</b>	<b>25,188,028</b>	<b>469,132</b>	<b>26,663,282</b>	<b>1,475,254</b>	<b>26,600,834</b>	<b>(62,448)</b>	<b>26,226,260</b>	<b>(374,574)</b>	<b>25,617,330</b>	<b>(608,930)</b>	<b>30,332,298</b>	<b>4,714,968</b>

Board Staff Interrogatories

**Exhibit 4 – Operating Expenses**

**Operating Expenses**

**11. Exhibit 4/page 5 – Donations**

***WN Hydro has identified an annual donation of \$10,000 which is paid to Waterloo Regional Energy Assistance, an organization that assists customers pay their energy bills. This expense is reflected in USoA 5410.***

***a) Is 2011 the first year that Waterloo North is making this donation?***

WNH has been providing funds to the Waterloo Region Energy Assistance Program for many years, a program which is administered by the Region of Waterloo, Social Services – Social Planning, Policy and Program Administration (ROW). This program has provided emergency energy financial assistance to our customers.

ROW also delivers the Winter Warmth Program for Union Gas in Waterloo.

***b) If no, please provide the actual amounts for each year from 2006 to 2010.***

2006	\$6,000
2007	\$6,000
2008	\$8,000
2009	\$9,000
2010	\$9,000

**12. Donations**

***Please identify whether or not the applicant has included any other charitable or political donations as part of its forecast OM&A expense for the Test Year. If yes, please identify the amounts and the account in which the donations are recorded, and whether the amounts are compliant with Section 2.5.2 of the Filing Requirements.***

WNH did not include any other charitable or political donations as part of its OM&A expense for the 2011 Test Year.

Board Staff Interrogatories

**13. Ref: Exhibit 4/page 14 – Inflation on Non-Labour OM&A Expenses**

***Please provide the source for the 2.0% estimate for inflation in 2011 for OM&A costs other than labour.***

WNH uses the Conference Board of Canada Economic Forecasts, as well as Economic Forecasts from the major Canadian banks.

**14. Ref: Exhibit 4/page 17 – Meter Expense**

***WN Hydro has identified an increase of \$192,081 to OM&A in 2011 for the maintenance of its non-smart meters.***

***a) Please provide an explanation of how the increase was determined.***

WNH has returned to normalized maintenance levels, as demonstrated in Exhibit 4, Table 4-5, and Account 5065.

***b) Please explain why this amount would not be classified as a one-time cost as opposed to an ongoing expense.***

Inspection and maintenance of meter assets is an ongoing cost, the amount included in 2011 is representative of an ongoing annual amount.

**15. Ref: Exhibit 4/page 21 – Regulatory Expense**

***WN Hydro shows the following for regulatory expenses in Table 4-5:***

	<b><i>2006 Actual (Rebasing Year)</i></b>	<b><i>2007</i></b>	<b><i>2008</i></b>	<b><i>2009</i></b>	<b><i>2010</i></b>	<b><i>2011 Forecast (Rebasing Year)</i></b>
<b><i>5655 – Regulatory Expenses</i></b>	<b><i>\$ 312,703</i></b>	<b><i>\$ 398,610</i></b>	<b><i>\$ 377,610</i></b>	<b><i>\$ 393,922</i></b>	<b><i>\$ 431,430</i></b>	<b><i>\$ 471,686</i></b>



Board Staff Interrogatories

- a) *Please provide an itemized breakdown, with explanations, of account 5655 for each of the years 2007 to 2010.*

An itemized breakdown, in the Format of Appendix 2-H is detailed below. WNH notes that the 2007 actual cost is \$398,144, as reflected in Table 4-5 of WNH's August 27, 2010 submission.

**Table IR # 15 (a) - Regulatory Costs**

Regulatory Cost Category	USoA Account	USoA Account Balance	Ongoing or One-time Cost	2007 Actual	2008 Actual	2009 Actual	2010 Bridge
1 OEB Annual Assessment	5655	All costs are included in USoA 5655 as detailed in these schedules	Ongoing	165,488	157,423	173,915	180,000
2 OEB Hearing Assessments (applicant initiated)	5655		One-time			-	-
3 OEB Section 30 Costs (OEB initiated)	5655		Ongoing	2,393	3,204	11,311	10,000
4 Expert Witness Cost for Regulatory Matters	5655						
5 Legal Costs for Regulatory Matters	5655		Ongoing			-	5,000
6 Consultants Costs for Regulatory Matters	5655		Ongoing	106,546	140,771	119,821	143,000
7 Operating Expenses Associated with Staff Resources Allocated to Regulatory Matters	5655		Ongoing	123,717	76,212	81,676	83,430
8 Operating Expenses Associated with Other Resources Allocated to Regulatory Matters	5655		One-time			-	-
9 Other Regulatory Agency Fees or Assessments	5655						
10 Any Other Costs for Regulatory Matters	5655						
11 Intervenor Costs	5655		Ongoing			7,199	10,000
12 Sub-total - Ongoing Costs				398,144	377,610	393,922	431,430
13 Sub-total - One-time Costs				-	-	-	-
14 Total				398,144	377,610	393,922	431,430

Board Staff Interrogatories

- b) Waterloo North has identified a one-time cost of \$160,000 for the preparation its 2011 cost of service application. Please provide a breakdown of the expense (e.g., legal, intervenors, consultants, Board costs).***

WNH has provided a breakdown of the \$160,000 for the preparation of its 2011 cost of service application in the table below.

**Table IR # 15 (b) - Cost of Service Application Costs**

Type of Cost	\$
Intervenors	40,000
Board Costs	15,000
Legal Costs	35,000
Consulting Costs	70,000
<b>Total</b>	<b>160,000</b>

**16. Ref: Exhibit 4/page 68 – Expense Capitalization**

***WN Hydro is proposing to capitalize approximately 36% of its compensation costs for 2011. This is about 7% lower than its 2009 approach.***

- a) Please explain the change in capitalization from 2009 to 2011.***

WNH's labour capitalization percentage has decreased in 2011 reflecting the fact that more staff resources were being devoted to major capital work in 2009 than what we forecast for in 2011. The major capital work activities include Transformer Station Rebuild activity and installation of smart meters. Subsequent to 2009 these staff resources will be deployed on operating and maintenance projects.

- b) Please confirm that WN Hydro has not made changes to the company's accounting policies in respect to capitalization of operation expenses and/or has not made any significant changes to accounting estimates used in allocation of costs between operations and capital expenses post fiscal year end 2008. If any accounting policy changes or any significant changes in accounting estimates have been made post 2008 fiscal year end, please provide all supporting documentation and a discussion highlighting the impact of the changes***

WNH confirms that it has not made changes to the company's accounting policies in respect to capitalization of operation expenses and/or has not made any significant changes to accounting estimates used in allocation of costs between operations and capital expenses post fiscal year end 2008.

Board Staff Interrogatories

**17. Low Income Energy Assistance Program (LEAP)**

***Please state whether or not WN Hydro has included an amount in its 2011 Test year revenue requirement for the emergency financial assistance component of the Low Income Energy Assistance Program.***

***a) If yes, please identify the amount included for LEAP emergency financial assistance, and identify the percentage of total distribution rates.***

In IR# 11 a) it is noted that WNH has included \$10,000 for Emergency Energy Assistance, however, this amount is less than 0.12% of the total distribution revenue. The incremental increase is reflected in the response to IR 17 b) below.

***b) If no, please provide the following calculation: 0.12% of the total distribution revenue proposed by the applicant for the 2011 Test Year.***

WNH has complied with the direction of the Board's LEAP Emergency Financial Assistance, EB-2008-0150 letter, as stated *"For greater clarity, Board-approved total distribution revenue means a distributor's forecasted service revenue requirement as approved by the Board. The relevant LEAP amount proposed would be adjusted in distributors' draft rate orders to account for any changes resulting from the Board's decision on the final service revenue requirement."*

WNH has thus, calculated the additional LEAP amount below with reference to the service revenue requirement as filed on August 27, 2010 in its initial submission, with the understanding that the Board will adjust WNH's LEAP amount in its draft rate order to account for any changes resulting from the Board's decision on the final service revenue requirement.

**Table IR # 17 (b) - LEAP Calculation**

Service Revenue Requirement as per Initial August 27, 2010 Submission	30,036,603
LEAP Amount .12%	36,044
Amount included previously for Emergency Energy Assistance in USoA 5410	(10,000)
<b>Additional LEAP amount to include in the 2011 Test Year</b>	<b>26,044</b>

Board Staff Interrogatories

- c) *Please state whether or not WN Hydro has included an amount in its 2011 Test year revenue requirement for any legacy program(s), such as Winter Warmth. If so, please identify the amount and provide a breakdown identifying the cost of each program along with a description of each program.*

WNH has identified an annual amount of \$10,000 which is paid to Waterloo Regional Energy Assistance, an organization that assists WNH's customers pay their energy bills. This expense is reflected in USoA 5410 and is addressed in IR # 11 above.

**18. Harmonized Sales Tax (HST) – Exhibit 4/pages 8-9**

*The PST and GST were harmonized effective July 1, 2010. Historically, unlike the GST, the PST was included as an OM&A expense and was also included in capital expenditures. Due to the harmonization of the PST and GST, regulated utilities may benefit from a reduction in OM&A expenses and capital expenditures on an actual basis.*

*The Board's decision on the WN Hydro's 2010 IRM application established a deferral account and directed the applicant to record the incremental input tax credits it receives on distribution revenue requirement items that were previously subject to PST and which become subject to HST. Tracking of these amounts would continue in the deferral account until the effective date of the applicant's next cost of service rate order.*

- a) *Has WN Hydro recorded any HST Input Tax Credits ("ITCs") or other HST-related items in PILs account 1592?*

*If yes, please describe what has been recorded and provide supporting evidence showing how the tracking was done.*

*If not, please explain why not.*

WNH has tracked HST-related items, however, WNH has not yet recorded the amount in the PILs account 1592, and WNH will record the entry in Q4 2010. WNH has provided the amount accumulated to November 30, 2010 in the table below.

Board Staff Interrogatories

Table IR # 18 (a) - Breakdown of HST/PILs July – November 2010

Type of Cost	HST/PST Items at Nov 30/10 <sup>1</sup>
Material - Capital	161,629
Material - OM&A	4,774
Trucking - Capital	9,720
Trucking - OM&A	3,949
Direct Acquisitions - Capital	147,304
Direct Acquisitions - OM&A	41,418
<b>Total</b>	<b>368,794</b>

<sup>1</sup> Full amount, not reduced by 50%

The Board's Decision, EB-2009-0210, states *"The Board therefore directs that, beginning July 1, 2010, Waterloo North shall record in deferral account 1592, (PILs and Tax Variances, Sub-account HST / OVAT Input Tax Credits (ITCs)), the incremental ITC it receives on distribution revenue requirement items that were previously subject to PST and become subject to HST. Tracking of these amounts will continue in the deferral account until the effective date of Waterloo North's next cost of service rate order. 50 % of the confirmed balances in the account shall be returnable to the ratepayers."* WNH has determined the amounts to be included in account 1592 for HST/PST related items as follows:

- Material – as material is purchased and recorded as inventory until it is issued out of the stockroom to either a capital or operating work order, it was necessary to determine when the material being issued had been purchased. WNH examined each issue to determine if the item had been purchased prior to July 1, 2010, thus, PST had been paid on the item, or after July 1, 2010 for which HST was paid and recovered as an input tax credit (ITC). Costing of the items for which an HST ITC was claimed was performed and the avoided PST was calculated and recorded in the deferral account.
- Trucking – Trucking costs allocated to capital or operating work orders were accumulated from July 1, 2010 onwards, a factor was applied which represented the percentage of trucking costs previously subject to PST, the avoided PST was calculated and recorded in the deferral account
- Direct Acquisitions – Direct capital and operating purchases from July 1, 2010 onward were individually scrutinized to determine if PST had previously been paid on these types of items, and whether ITC is recoverable, and if items were not previously subject to PST, whether ITC is now recoverable. PST avoided on applicable purchases are accumulated included in the deferral account.

Board Staff Interrogatories

**b) WN Hydro states that it has reviewed each line item in its 2011 Rate Base and OM&A Test Year Costs and adjusted for impacts of the HST. It further states that, since it will have gross revenues exceeding \$10 million, it is subject to restrictions on ITCs, and that the HST increases its costs.**

**i. Please identify the adjustments to each of the 2011 test year rate base and OM&A expenses due to the impact of the HST.**

WNH reviewed each OM&A and Capital Expenditure budgeted in the 2011 test year to determine if PST had been included, and if so, the appropriate treatment. The tables below reflect the removal of PST.

**Table IR #18 (b) (i) - OM&A Adjustments due to Impact of HST**

OM&A Adjustment re: PST/HST		
USoA	Description	\$ Reduction
4380	Expenses of Non-Utility Operations	\$ 273
5010	Load Dispatching	4,404
5012	Station Buildings and Fixtures Expense	358
5015	Transformer Station Equipment - Operation Supplies and Expenses	1,575
5017	Distribution Station Equipment - Operation Supplies and Expenses	2,281
5025	Overhead Distribution Lines and Feeders - Operation Supplies and Expenses	7,638
5035	Overhead Distribution Transformers - Operation	189
5045	Underground Distribution Lines and Feeders - Operation Supplies and Expenses	1,073
5055	Underground Distribution Transformers - Operation	329
5065	Meter Expense	2,475
5085	Miscellaneous Distribution Expense	799
5110	Maintenance of Structures	265
5112	Maintenance of Transformer Station Equipment	240
5114	Maint Dist Stn Equip	1,939
5120	Maintenance of Poles, Towers and Fixtures	4,639
5125	Maintenance of Overhead Conductors and Devices	5,783
5130	Maintenance of Overhead Services	383
5135	Overhead Distribution Lines and Feeders - Right of Way	2,417
5150	Maintenance of Underground Conductors and Devices	39
5155	Maintenance of Underground Services	2,512
5160	Maintenance of Line Transformers	1,213
5175	Maintenance of Meters	32
5310	Meter Reading Expense	580
5315	Customer Billing	9,832
5320	Collecting	2,231
5410	Community Relations - Sundry	321
5420	Community Safety Program	111
5605	Executive Salaries and Expenses	635
5615	General Administrative Salaries and Expenses	20,936
5655	Regulatory Expenses	512
5665	Miscellaneous Expenses	677
<b>Total</b>		<b>\$ 76,691</b>

WNH notes that in Exhibit 4, page 4, line 2, it stated that the reduction in OM&A for PST/HST treatment was \$72,970. A further review has revealed that the reduction in OM&A is in fact \$76,691, as detailed in the table above.

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Table IR #18 (b) (i) - Rate Base Adjustments due to Impact of HST

Capital Adjustments re: PST/HST	
Type of Expenditure	\$ Reduction
Trucking	\$ 26,319
Material / Inventory	576,071
Direct Purchases	226,752
<b>Total Reduction</b>	<b>\$ 829,141</b>

Contributed Capital Adjustment re: PST/HST	
Type of Expenditure	\$ Reduction
Contributed Capital	\$ 95,170
<b>Total Reduction</b>	<b>\$ 95,170</b>

- ii. ***Please provide WN Hydro's estimate of the increase to costs due to the ITC restrictions, including a comparison to the amounts of OM&A and capital that would have been subject to PST in the past (i.e. if no restrictions applied). Please provide further explanation and support for your response.***

WNH increased OM&A \$163 directly, and identified an additional \$10,193 in the Building costs, however, as these costs impact capital and OM&A, an adjustment was not made.

**19. International Financial Reporting Standards (IFRS)**

- a) ***Please identify the fiscal year in which WN Hydro intends to begin reporting its audited actual results on an IFRS basis.***

WNH intends to begin reporting its audited actual results on an IFRS basis in 2012.

- b) ***Please state whether or not WN Hydro has included an amount for IFRS transition costs in its Test Year revenue requirement.***

WNH has not included an amount for IFRS transition costs in the Test Year revenue requirement.

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- i. *If yes, please identify the amount and provide a breakdown with a detailed explanation of each cost item.*

Not Applicable

- ii. **If no, has WN Hydro recorded IFRS transition costs in the deferral account established by the Board in October 2009?**

WNH has recorded IFRS transition costs in the deferral account established by the Board in October 2009.

**20. Exhibit 4/ Pages 98 - 101 – Purchases of Products and Services from Non-Affiliates**

***Board staff notes that Waterloo North has not provided the requested information for the 2010 bridge and 2011 test years, as identified in section 2.5.6 of the Filing Requirements.***

***Subject to the Board's determination on WN Hydro's claim for confidentiality, for 2010 and 2011, please provide the following information:***

- a) identity of each company transacting with WN Hydro subject to the applicable materiality threshold;***
- b) summary of the nature of the product/service that is the subject of the transaction;***
- c) annual dollar amount related to each company (by transaction); and***
- d) A description of the specific methodology used in determining the vendor (including a summary of the tendering process/cost approach, etc.)***

Please refer to Table IR # 20 below.

WNH is able to provide the information for amounts paid from January to November 23, 2010, the remaining amounts for 2010 will not be available until January 2011. Amounts for 2011 are not available as WNH will be issuing tenders and renegotiating pricing in 2011, thus, specific identification of vendors is not available.



Board Staff Interrogatories

Table IR# 20 - Supplier Listing January to November 23, 2010

Supplier	Service Product	Procurement Method	\$
A & W High Voltage Contracting Ltd.	Construction Services	Tender	426,004
ABB Inc.	Transformers	Quote	528,022
Able One	Computer Equipment/Repairs & Maintenance	Quote	156,137
Aecom Canada Ltd.	Construction Services	Tender	161,693
AESI Inc.	Consulting Services	Quote	150,774
Bel Volt Sales Ltd.	Line Hardware	Quote	126,509
Bethlehem Trenching	Construction Services	Tender	585,574
C W Tweed & Son Ltd.	Insurance	Quote	126,479
Canada Post	Postage, Rental	Sole Source	196,383
Chris Amos, CA	Consulting Services	Contract	156,562
Daffron Systems	Billing System Maintenance Fees & Programming	Contractural	111,353
Down Under Pipe and Cable Locating	Contracted Services - Locates	Quote	127,083
Dyna-Construction Ltd.	Construction Services	Tender	269,754
Eptcon Ltd	Transformer Services	Tender	311,369
Erb Electric	Construction Services	Tender	103,510
Greely Construction Inc.	Construction Services	Tender	197,967
Guelph Utility Pole Company	Poles	Annual Pricing	363,268
HD (Grafton) Supply Utilities	Pole Line Hardware	Annual Pricing	1,047,462
Itron Canada Inc.	Meters	Tender	141,135
Jomar Softcorp Services Inc.	Software Services	Quote	155,442
Kieswetter Demolition Inc.	Demolition Contractor	Tender	109,725
K-Line Maintenance & Construction	Construction Services	Tender	307,565
KTI Ltd.	Meters	Tender	1,638,183
McCallum Sather	Building Engineering Consulting Services	Tender	627,089
MEARIE Management Inc.	Insurance	Tender	126,777
Melloul-Blamey Construction Inc.	General Contractor	Tender	2,539,048
Moloney Electric Inc.	Transformers	Quote	768,237
Network Site Services Ltd.	Construction Services	Tender	188,584
Nexans Canada Inc.	Wire	Annual Pricing	1,261,707
Nith Valley Construction Ltd.	Construction Services	Tender	222,615
Olameter Inc.	Meter Reading Services	Quote	468,948
Peerless Secuity Systems Inc.	Meter Seals	Quote	105,502
Petro-Canada	Fuel	Tender	130,100
Prysmian Cables and Systems	Cable	Tender	699,366
S & C Electric Canada Ltd.	Line Hardware	Quote	346,543
Sensus Metering Systems Canada Inc.	Meters	Tender	138,227
Siemens Canada Ltd.	TS Equipment/Parts	Quote	2,497,846
Sonepar Canada Inc.	OPA CDM Programs	Quote	679,392
Southern States	Line Hardware	Quote	141,106
Tavrida Electric North America Inc.	Station Equipment	Quote	175,871
Top View Industries and Service	Contracted Services	Quote	123,203
Util Assist	OPA CDM Programs	Quote	391,573
Utilismart Corporation	Billing Settlement Services	Quote	114,848
Wajax Industries Ltd.	Vehicles	Tender	308,789
Waycon International Trucks	Vehicles	Tender	107,152
Westburne Ruddy Electric	Line Hardware	Annual Pricing	279,808

Board Staff Interrogatories

**21. Ontario Municipal Employees Retirement System Pension Costs**

**OMERS have announced a three-year contribution rate increase for its members and employers for the years 2011, 2012, and 2013. Please state whether or not WN Hydro's proposed pension costs include this increase. If so, please provide the forecasted increase by years and the documentation to support the increases. If not, please state how WN Hydro proposes to deal with this increase.**

WNH forecasted the contribution rate increase for 2011; however, it did not forecast the increase for 2012 and 2013. WNH would submit that an alternative would be to normalize 2012 and 2013 as one-time costs. Normalization of the amount for 2012 and 2013 calculations are provided below under the "One-time Costs" section. WNH has provided a table below detailing the amount included in the 2011 test year and the proposed calculation for inclusion in 2011 for 2012 and 2013.

**Table IR # 21 - OMERS Pension Costs – Original Submission**

Original Submission		
2011	85,000	Forecasted Increase Included in 2011 Test Year
2012	-	Forecasted Increase Included in 2011 Test Year
2013	-	Forecasted Increase Included in 2011 Test Year
	85,000	

WNH has provided a table below to revise its proposed OMERS Pension Cost.

**Table IR # 21 - OMERS Pension Costs – Revised Proposal**

Proposed Total Costs for Inclusion in 2011		
	85,000	Proposed in Initial Submission
	126,250	Proposed Additional for 2012 & 2013
	211,250	Revised Proposed OMERS Costs in 2011 Test Year

WNH has provided the breakdown of the revised proposed costs in the tables below.

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Table IR # 21 - OMERS Pension Costs – Revised Proposal - Details

2011	85,000	Forecasted Increase Included in 2011 Test Year
<b>One-time Normalized Costs</b>		
2012	74,250	See calculation below <sup>1</sup>
2013	52,000	See calculation below <sup>2</sup>
	126,250	Inclusion in 2011 Test Year

<sup>1</sup> 2012	99,000	Forecast increase for 2012
	3	Number of years until next Cost of Service
	297,000	Total \$ 2012 - 2014
	74,250	Divide over 4 years
<sup>2</sup> 2013	104,000	Forecast increase for 2012
	2	Number of years until next Cost of Service
	208,000	Total \$ 2012 - 2014
	52,000	Divide over 4 years

**Taxes/PILs**

**22. Ref: Exhibit 1/page 81/Table 1-8 and Exhibit 4/page 90/Table 4-26 – Taxes/PILs**

***In Table 1-8, providing WN Hydro's 2010 pro forma Income Statement, the utility documents \$1,035,086 as its 2010 Income Taxes. In Table 4-26, WN Hydro documents an estimated PILs expense for 2010 of \$198,809. Please provide an explanation of the variance between the two tables.***

The primary reason for the difference is the 2010 Pro Forma Income Statement reflects Accounting 2010 Income Taxes calculated using actual interest expense and the Regulatory PILs Expense reflects 2010 Income Taxes based on Deemed Interest Expense.

**23. Ref: Exhibit 4/page 90/Table 4-26 – Taxes/PILs**

***WN Hydro documents actual taxes/PILs paid of over \$2 million per year for each of 2006 to 2009 actuals. It forecasts taxes/PILs of \$198,809 for the 2010 bridge year and \$1,212,310 for the 2011 test year. The phasing out of the Ontario Capital tax explains part of the reduction in PILs, and part may also be accounted for by reductions in tax rates over this period.***

***Please provide a detailed discussion of the drivers for the reduced taxes/PILs estimates for 2010 and 2011 compared to previous historical actuals.***

**Board Staff Interrogatories**

The primary driver for the reduced taxes/PILs estimates for 2010 and 2011 compared to previous historical actuals is that actual interest expense is used in its actual taxes and PILs are calculated based on Deemed Interest Expense.

**Exhibit 5 – Cost of Capital**

**24. Ref: Exhibit 5/page 9/Table 5-4 – Long-term Debt Cost**

*In Table 5-4, WN Hydro documents its existing and forecasted long-term debt in the 2011 test year. WN Hydro calculates a weighted average cost of long-term debt of 5.47% (based on the January 2010 deemed long-term debt rate of 5.87%, and subject to updating at the time of the Board's decision on this application).*

*However, the Infrastructure Ontario loan for \$26,300,000 @ 4.95% is documented as being issued on December 31, 2011, and so will incur interest expense for only one day during the 2011 test year.*

*Board staff has prepared the following table based on Table 5-4 which calculates the weighted cost of long-term debt based also on the duration of the debt in the test year, and have calculated a weighted average long-term debt rate of 5.76%, subject to updating of the Cost of Capital parameters at the time of the Board's decision.*

**Long-term Debt Instruments (based on Table 5-4)**

<i>Debt Holder</i>	<i>Is Debt Holder Affiliated ?</i>	<i>Date of Issuance of Debt</i>	<i>Principal (\$)</i>	<i>Term (Years)</i>	<i>Actual Rate in 2009</i>	<i>Actual Rate in 2011</i>	<i>Rate Filing</i>	<i>Interest Expense in 2011</i>
<i>Waterloo North Hydro Holding Company</i>	<i>Y</i>	<i>01-Jul-09</i>	<i>\$ 17,266,271</i>	<i>N/A</i>	<i>6%</i>	<i>6%</i>	<i>5.87%</i>	<i>\$ 1,013,530</i>
<i>Waterloo North Hydro Holding Company</i>	<i>Y</i>	<i>01-May-00</i>	<i>\$ 16,246,940</i>	<i>N/A</i>	<i>8.38%</i>	<i>8.38%</i>	<i>5.87%</i>	<i>\$ 953,695</i>
<i>Infrastructure Ontario</i>	<i>N</i>	<i>31-Dec-11</i>	<i>\$ 26,300,000</i>	<i>25</i>	<i>N/A</i>	<i>4.95%</i>	<i>4.95</i>	<i>\$ 3,567</i>

*Average daily Debt*

*\$ 34,243,767*

*5.47%*

*\$1,970,792*

*5.76%*

**Board Staff Interrogatories**

**a) Please confirm or correct the calculations shown above.**

WNH confirms the calculation of the 5.47% above; however, WNH submits that based on the methodology above, the 5.76% calculates to 5.87%. In calculating the average daily debt, WNH has determined that the \$26,300,000 was divided by 30 above, rather than 365, a division by 365 results in an average daily debt of \$33,585,266. Division of the interest expense by the average daily debt results in a weighed average long-term debt rate of 5.87%, subject to updating of the Cost of Capital parameters at the time of the Board's decision.

**b) Please explain the rationale for WN Hydro's weighted average cost of long term debt as documented in its application, including the proposed treatment of the Infrastructure Ontario debt.**

WNH concurs with the Board's methodology resulting in a rate calculated in IR # 24 (a) above.

**25. Exhibit 5/page 7 and Exhibit 5/Appendix A**

***In Exhibit 5, WN Hydro documents that the promissory note of \$17,266,271 @ 6.0% payable to its shareholder, Waterloo North Hydro Holding Company, was a recommencement or replacement of an earlier note, effective January 1, 2009. In Exhibit 5/Appendix A, the copy of the Senior Promissory Note for that principal and rate is dated July 1, 2009.***

**a) Please confirm the date of issuance of the replacement or recommenced note.**

***The date of recommencement on Exhibit 5, page 7, line 17, should have read July 1, 2009.***

**b) Please explain why the previous note was replaced or recommenced.**

The previous note was recommenced as a portion of the original note was redeemed by the shareholder.

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- c) *What terms and conditions changed between the earlier note and the replaced or recommenced note?***

The items that changed were the dollar amount of the note and the interest rate. The terms and conditions remained the same.

- d) *Please provide further explanation or support for the interest rate of 6.0% for this note at the time of issuance.***

The negotiated interest rate of 6.0% was based on current interest rates in the market at the time of the reissuance.

**26. *Exhibit 5/page 7 and page 10 – Actual return and long-term debt rates***

***On page 10, WN Hydro documents that its earned ROE was 8.24% in 2006, 8.83% in 2007, 9.28% in 2008 and 7.78% in 2009. It states that it underearned below the allowed deemed ROE of 9%, except in 2008 and that the major item affecting earned returns was a growing rate base.***

***From 2007 to 2010, WN Hydro has had distribution rates adjusted by the 2nd Generation Incentive Regulation Mechanism price cap formula of GDP-IPI – X.***

***The Report of the Board on Cost of Capital and 2nd Generation Incentive Regulation for Ontario's Electricity Distributors (the "2006 Board Report"), issued December 20, 2006 states, at page 30:***

***For 2nd Generation IRM, the Board is satisfied that during the term of the plan changes in GDP-IPI will implicitly recognize changes in the ROE and debt rates, and that therefore no further adjustment will be required.***

- a) *Please confirm whether WN Hydro believes that GDP-IPI, used as the measure of input price inflation in the price cap adjustment under IRM, is affected by changes in the cost of capital in the Canadian economy.***

WNH cannot confirm the statement above as it does not have the expertise or experience to address this issue. WNH presented Table 5-5 in order to demonstrate ROE earned.

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- i. ***If yes, please explain how the actual ROE earned in 2007 to 2009 can be compared to the allowed ROE of 9.00% from the 2006 EDR process. Please provide further support that WN Hydro actually under earned in each of these years.***

Please refer to a) above.

- ii. ***If no, please explain why WH Hydro does not believe that the price cap formula adjusts for changes in the cost of capital in the market.***

Please refer to a) above.

- b) ***WN Hydro has an unsecured promissory note payable to its shareholder, Waterloo North Hydro Holding Corporation, issued May 1, 2000 for a principal of \$16,246,940 at a rate of 8.38%, calculated as 1/8 (1.125%) above the deemed long-term debt rate of 7.25% allowed in the 2000 Distribution Rate Handbook. While the actual rate of 8.28% is thus above a market-based rate of 7.25% at the time of issuance, the deemed rate of 6.0% was used for establishing WN Hydro's revenue requirement and distribution rates in its 2006 EDR application (RP-2005-0020/EB-2007-448). Please comment on the extent to which paying interest expense at above a market-based rate contributes to under earning the allowed ROE.***

WNH notes that in its 2006 EDR application, the rate used for this note was 7.25% in the calculation establishing WNH's revenue requirement. WNH calculated the impact on ROE of adjusting the junior debt rate to the deemed long-term rate of 7.25% from the 8.38% actual rate (including the impact on income taxes), and the impact is as follows:

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Table IR # 26 (b) - Impact of Junior Debt Rate on ROE

	2006 Actual	2007 Actual	2008 Actual	2009 Actual
ROE with 8.38% debt rate <sup>1</sup>	8.24%	8.83%	9.28%	7.78%
ROE with 7.25% debt rate	8.46%	9.03%	9.47%	7.96%

<sup>1</sup> Per Table 5-5 in WNH's August 27, 2010 Submission

As is demonstrated above, 2006 and 2009 ROE are at a lower than the allowable ROE of 9.0% after the above noted adjustment.

- c) *In Exhibit 5/Appendix A/page 17, the terms of the promissory note referred to in b) is stated as:*

***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 which changes in the Debt Rate approved by the Ontario Energy Board.***

***The terms state that the rate shall change in accordance with the debt rate approved by the Board. Please explain why WN Hydro documents the rate as 8.38%, or 7.25% (from the 2000 Distribution Rate Handbook) + 1.125%, when the Board has published updated deemed long-term debt rates in 2006 and annually beginning in 2008.***

The debt rate that the promissory note interest rate is based upon is the debt rate included in WNH's approved revenue requirement which was last established in its May 1, 2006 Decision, EB-2005-0448. The debt rate will change only at the time the Board approves a new debt rate for WNH.

- d) ***Since the unsecured promissory note referred to in b) is callable on 270 days notice, and is payable by WN Hydro without notice or bonus, and attracts a rate higher than a market-based rate, please explain whether WN Hydro has investigated replacing this note with one based on terms reflective of current market conditions. If WN Hydro has not considered or investigated note replacement, please explain.***



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In 2009 WNH had investigated and reviewed both promissory notes and negotiated a reduction to the Senior Debt interest rate, which reflected market conditions at that time. WNH has not revisited this item since this time; however, WNH will reconsider this matter in the future.

**Exhibit 7 – Cost Allocation**

**27. Ref: Exhibit 7/page 5/Table 7-3 – Revenue-to-Cost Ratios - Residential**

***In Table 7-3, WN Hydro shows the revenue-to-cost (“R/C”) ratio for the residential class increasing from 98.58% in the 2007 Informational Filing, after adjustments to remove the Transformer Allowance, to 108.24 for the 2011 Cost Allocation study. WN Hydro is proposing an R/C ratio of 108.17% for the residential class.***

***Please explain the increase in the R/C ratio for the residential class from the 2007 Informational Filing to the updated Cost Allocation study.***

The increase in the revenue-to-cost ratio in the residential class resulted from an incorrect input equation in 2007 on Sheet I8 in assigning the load to Primary NCP, Line Transformer NCP and Secondary NCP. The corresponding amounts in 2011 Sheet I8 are model driven (please refer to the Cost Allocation Model filed with the Board on August 27, 2010) and correctly stated. The correction of these equations resulted in an increase in the residential class revenue-to-cost ratio.

**28. Ref: Exhibit 7/page 5/Table 7-3 – Revenue-to-Cost Ratios – Streetlighting**

***In Table 7-3, WN Hydro shows the revenue-to-cost (“R/C”) ratio for the streetlighting class decreasing from 89.02% in the 2007 Informational Filing, after adjustments to remove the Transformer Allowance, to 55.92 for the 2011 Cost Allocation study. WN Hydro is proposing an R/C ratio of 60.60% for the streetlighting class for 2011, and migrating to the lower threshold of 70% by 2013.***

***Please explain the decrease in the R/C ratio for the streetlighting class from the 2007 Informational Filing to the updated Cost Allocation study.***

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As a result of preparing to answer IRs, further investigation by WNH revealed that the number of Street Light Connections was overstated. Details of the revised numbers, revenue-to-cost ratios, rates and rate impacts are detailed in IR # 29.

**29. Ref: Exhibit 7/page 10 – Streetlighting Cost Allocation**

***WN Hydro notes, in its 2007 Informational Cost Allocation Filing, that streetlighting connections were reflected as relay-controlled streetlights. The number of streetlighting connections was estimated as 1,032 (12,091 street light connections divided by an average ratio of 11.7 street light connections per relay-controlled street light).***

***WN Hydro notes that it has shifted its focus to solely installing streetlights individually controlled by photo-sensors. For the updated 2011 Cost Allocation study, WN Hydro has used 2,644 streetlight connections, composed of 1,357 individually controlled streetlights and 1,287 relay-controlled connections.***

***a) Please confirm that the relay-controlled arrangement constituted a “daisy-chain” whereby WN Hydro’s network connected to the relay-controlled streetlight, which in turn controlled a series of streetlights. Each relay-controlled streetlight series was then either all on or all off at a time.***

WNH confirms that relay controlled lights constitute a “daisy chain” as described, however, other connection configurations exist which are detailed in IR# 29( d) below.

***b) Who owns and operates the wires and other facilities connecting the relay-controlled streetlight to other streetlights in its daisy-chain? How are these assets treated in the Cost Allocation study methodology?***

The streetlight owner owns and operates the wires/facilities between lights.

***c) When did WN Hydro commence installation of individually photo sensor controlled streetlights, and why is it converting to individually controlled streetlights? Is there any change in ownership of assets such as wires when installing or converting to individually-controlled streetlights?***

As noted above, WNH has revised the number of street light connections and please refer to IR# 29 (e) for details of WNH's street light connection configurations, which are the basis of calculating the number of street light connections. It was incorrectly stated in the original submission that WNH had commenced installation of individual photo sensor controlled

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street lights, this practice has been ongoing, however, as stated in IR# 29 (e) that all new installations since 2004 are service entrance connected and individually controlled . There is no change in ownership of assets such as wires associated with this move to individual light control.

**d) *Does the installation of individually controlled streetlights involve the conversion of existing relay-controlled daisy-chains to individually-controlled streetlights? Please explain your response.***

The installation of individually controlled streetlights does not involve the conversion of existing relay-controlled daisy-chains to individually-controlled streetlights. Areas with existing lighting would not be converted to individual lights; only areas where overhead lines are rebuilt for other reasons would have the associated streetlighting changed to the current standard of service entrance connected and individual control as part of the rebuild.

**e) *The number of relay-controlled connections used in the 2011 Cost Allocation study is higher (1,287 versus 1,032) than in the 2007 Informational Filing. Please explain and provide the derivation (total number of streetlights in relay-controlled daisy-chains and average series length).***

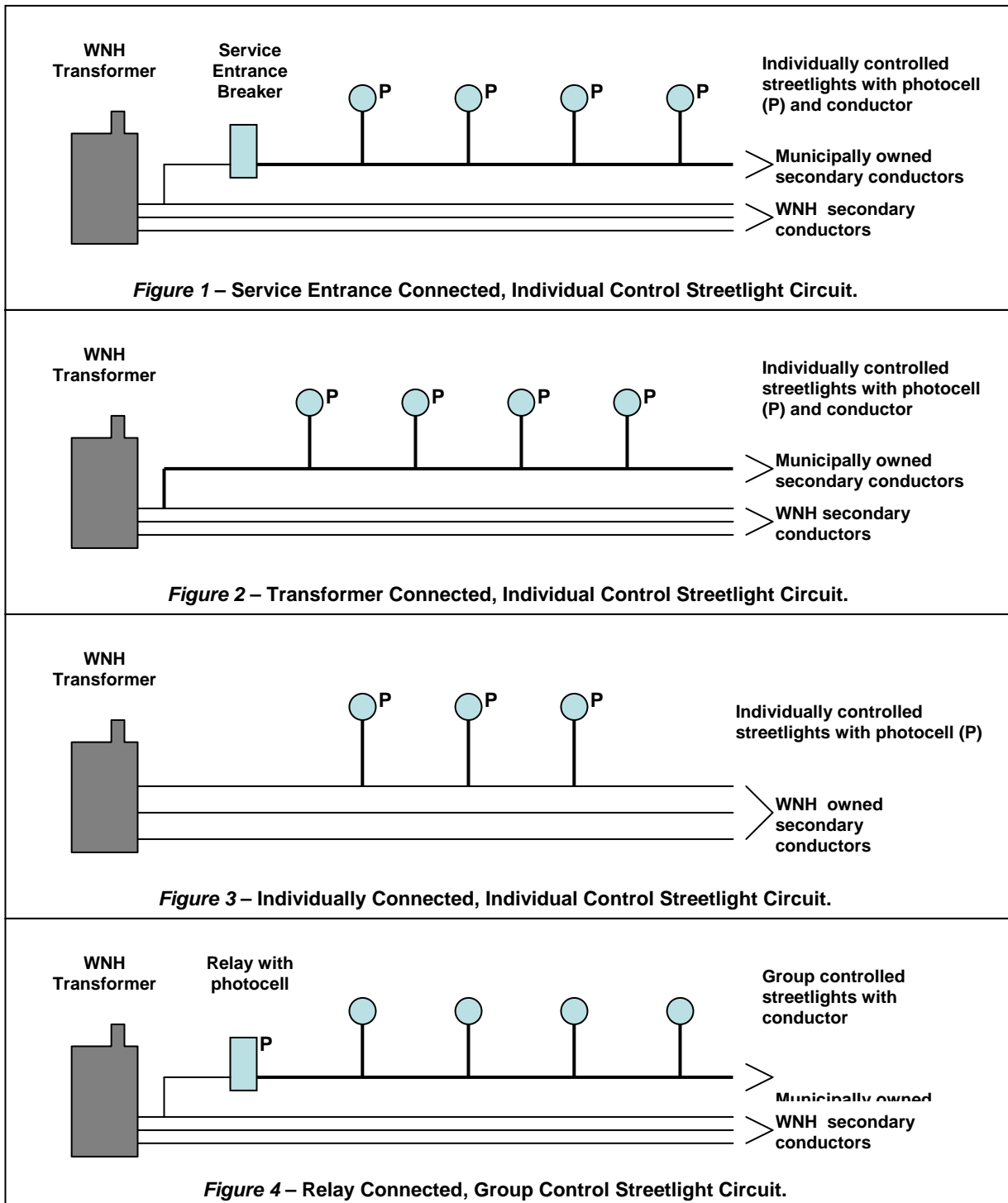
As noted above, during the investigation process for answering IRs, WNH has determined that the number of street light connections has been revised. As WNH continues to enter streetlighting assets into our GIS system, the numbers of certain types of connections have been changing as they become more accurate. All streetlight circuit types have had to be defined to clarify the various possible connection vs control configurations, as listed below:

- i. Service entrance connected, individually controlled,
- ii. Transformer connected, individually controlled,
- iii. Individually connected, individually controlled, and
- iv. Relay connected, group controlled.

All new installations since 2004 are service entrance connected and individually controlled. Table IR # 29 (e) Street Light Configurations demonstrates Figures 1 – 4, a single line diagram of all connection types.

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Table IR # 29 (e) Street Light Connection Configurations



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The Revised Streetlight Connection Details are as detailed in the table below.

**Table IR # 29 (e) - Number of 2011 Street Light Connections**

<b>Streetlight Circuit Type</b>	<b># Lights</b>	<b># Connections</b>	<b>Ratio</b>
Service entrance connected, individual control	1,925	165	11.70
Transformer connected, individual control	3,009	257	11.71
Individually connected, individual control	250	250	1.00
Relay connected, group control	8,190	700	11.70
<b>Total</b>	<b>13,374</b>	<b>1,372</b>	

WNH has provided the following tables to reflect the change in the Revised Streetlight Connections:

- O1 Revenue to Cost Ratio
- Revised Proposed Adjustments in 2012 and 2013
- Revised Proposed Distribution Fixed and Variable Rates
- Rate Impacts for Street Light and USL Rate Classifications based on the proposed change in distribution rates, all other rates as originally filed (no proposed rate changes for the other rate classifications)

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Table IR # 29 (e) O1 Revenue to Cost Ratio – Revised

Sheet O1 Revenue to Cost Summary Worksheet - Second Run PUBLIC

Class Revenue, Cost Analysis, and Return on Rate Base

			1	2	3	6	7	9	10
Rate Base Assets		Total	Residential	GS <50	GS>50-Regular	Large Use >5MW	Street Light	Unmetered Scattered Load	Embedded Distributor
crev mi	Distribution Revenue (sale)	\$28,980,640	\$15,716,344	\$4,507,259	\$7,794,398	\$581,384	\$239,207	\$142,049	\$0
	Miscellaneous Revenue (mi)	\$1,055,963	\$627,570	\$179,418	\$232,451	\$9,669	\$3,783	\$3,045	\$27
	Total Revenue	\$30,036,603	\$16,343,914	\$4,686,677	\$8,026,849	\$591,053	\$242,990	\$145,093	\$27
Expenses									
di cu ad dep INPUT INT	Distribution Costs (di)	\$5,020,748	\$2,422,426	\$833,219	\$1,548,144	\$139,907	\$55,730	\$21,227	\$96
	Customer Related Costs (cu)	\$2,604,906	\$1,701,692	\$432,769	\$464,352	\$2,119	\$329	\$3,568	\$76
	General and Administration (ad)	\$2,558,184	\$1,381,693	\$424,737	\$676,633	\$47,809	\$18,906	\$8,348	\$58
	Depreciation and Amortization (dep)	\$7,816,331	\$4,020,959	\$1,283,686	\$2,232,324	\$155,299	\$88,795	\$35,010	\$259
	PILs (INPUT)	\$1,212,310	\$575,064	\$204,201	\$384,495	\$31,409	\$12,277	\$4,824	\$39
	Interest	\$4,803,477	\$2,278,549	\$809,097	\$1,523,467	\$124,451	\$48,646	\$19,113	\$153
Total Expenses		\$24,015,955	\$12,380,383	\$3,987,710	\$6,829,414	\$500,994	\$224,684	\$92,089	\$681
NI	Direct Allocation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Allocated Net Income (NI)	\$6,020,648	\$2,855,919	\$1,014,118	\$1,909,504	\$155,986	\$60,973	\$23,956	\$192
	Revenue Requirement (includes NI)	\$30,036,603	\$15,236,301	\$5,001,828	\$8,738,919	\$656,980	\$285,657	\$116,045	\$873
	Revenue Requirement Input equals Output								
Rate Base Calculation									
dp gp accum dep co	Net Assets								
	Distribution Plant - Gross	\$245,115,843	\$122,195,533	\$40,621,241	\$73,289,072	\$5,337,460	\$2,613,593	\$1,045,729	\$13,216
	General Plant - Gross	\$23,329,876	\$11,329,244	\$3,897,856	\$7,213,597	\$549,676	\$241,995	\$96,888	\$620
	Accumulated Depreciation	(\$109,118,578)	(\$56,153,769)	(\$17,899,399)	(\$31,238,721)	(\$2,133,223)	(\$1,202,929)	(\$480,936)	(\$9,600)
	Capital Contribution	(\$25,358,551)	(\$13,749,117)	(\$4,062,920)	(\$6,826,429)	(\$298,275)	(\$294,322)	(\$127,489)	\$0
	Total Net Plant	\$133,968,590	\$63,621,891	\$22,556,777	\$42,437,519	\$3,455,638	\$1,358,336	\$534,192	\$4,236
COP	Directly Allocated Net Fixed Assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	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	\$5,505,811	\$1,690,726	\$2,689,128	\$189,834	\$74,966	\$33,142	\$230
	Directly Allocated Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Subtotal	\$125,598,185	\$38,274,295	\$16,707,904	\$62,571,114	\$6,925,479	\$742,391	\$174,359	\$202,642
	Working Capital	\$18,839,728	\$5,741,144	\$2,506,186	\$9,385,667	\$1,038,822	\$111,359	\$26,154	\$30,396
Total Rate Base		\$152,808,318	\$69,363,036	\$25,062,963	\$51,823,186	\$4,494,460	\$1,469,694	\$560,346	\$34,633
Rate Base Input equals Output									
Equity Component of Rate Base		\$61,123,327	\$27,745,214	\$10,025,185	\$20,729,274	\$1,797,784	\$587,878	\$224,138	\$13,853
Net Income on Allocated Assets		\$6,020,648	\$3,963,531	\$698,967	\$1,197,434	\$90,059	\$18,305	\$53,004	(\$654)
Net Income on Direct Allocation Assets		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Income		\$6,020,648	\$3,963,531	\$698,967	\$1,197,434	\$90,059	\$18,305	\$53,004	(\$654)
RATIOS ANALYSIS									
REVENUE TO EXPENSES %		100.00%	107.27%	93.70%	91.85%	89.97%	85.06%	125.03%	3.09%
EXISTING REVENUE MINUS ALLOCATED COSTS		\$0	\$1,107,612	(\$315,151)	(\$712,070)	(\$65,927)	(\$42,667)	\$29,048	(\$846)
RETURN ON EQUITY COMPONENT OF RATE BASE		9.85%	14.29%	6.97%	5.78%	5.01%	3.11%	23.65%	-4.72%

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Class	Revenue-to-Cost Ratio		
	Results from Original Proposed 2011 Cost Allocation Study	Results from Revised Proposed 2011 Cost Allocation Study	2007 Filing with Transformer Allowance Removed
Residential	108.17%	107.27%	98.58%
GS<50kW	94.76%	93.70%	93.15%
GS >50kW	86.89%	91.85%	108.02%
Large User	115.00%	89.97%	95.47%
Streetlights	62.90%	87.11%	89.02%
USL	120.00%	119.27%	114.72%
Embedded Distributor	100.00%	100.00%	0.00%

Classes	Original 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%			

Classes	Revised Proposed Revenue-to-Cost Ratios			Policy Range
	2011	2012 <sup>1</sup>	2013 <sup>1</sup>	
	%	%	%	
Residential	107.27%			85 - 115
GS<50kW	93.70%			80 - 120
GS >50kW	91.85%			80 - 180
Large User	89.97%			85 - 115
Streetlights	87.11%			70 - 120
USL	119.27%			80 - 120
Embedded Distributor	100.00%			

<sup>1</sup> No further adjustment proposed

Table IR # 29 (e) Distribution Fixed and Variable Proposed Rates – Revised

Customer Class	Original Proposed Rates		Revised Proposed Rates	
	Proposed Fixed Rate	Resulting Variable Rate	Proposed Fixed Rate	Resulting Variable Rate
Residential	14.56	\$0.0202	14.56	\$0.0202
GS<50kW	30.63	\$0.0148	30.63	\$0.0148
GS >50kW	187.01	\$4.4027	187.01	\$4.4027
Large User	6,686.47	\$3.3726	6,686.47	\$3.3726
Streetlights	0.33	\$9.6165	0.33	\$8.9359
USL	15.31	\$0.0190	15.31	\$0.0211
Embedded Distributor	0.00	\$0.0118	0.00	\$0.0118

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As demonstrated above, the only two rate classes that had a change in proposed variable distribution rates, as a result of the change in the number of street light connections, and the resulting adjustment of proposed revenue-to-cost ratios, are the Streetlight and USL rate classifications.

In the original submission, USL had been proposed to decrease further than is now proposed in order to offset the proposed rate increase in the street light rate classification (to raise it towards the 70% revenue-to-cost ratio floor). The change in the number of street light connections has resulted in the street light revenue-to-cost ratio falling within the Board Policy Range. In order to decrease USL to the Board Policy range, WNH adjusted the Street Light rate classification as it was the rate class that had the lowest revenue-to-cost ratio.

**Table IR # 29 (e) Street Lighting Rate Impacts – Originally Filed Version**

Street Lighting - Originally Filed									
Billing Determinants		2010 BILL			2011 BILL			IMPACT	
		Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	Change \$	Change %
<b>1 Connections</b> <b>150 kWh</b> <b>1.00 kW</b>	Monthly Service Charge	1	0.3300	0.33	1	0.3300	0.33	0.00	0.00%
	Distribution (kW)	1	6.7448	6.74	1	9.6165	9.62	2.87	42.58%
	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%)
	<b>Distribution Sub-Total</b>			<b>6.13</b>			<b>9.28</b>	<b>3.16</b>	<b>51.54%</b>
	Retail Transmission (kW)	1	2.1794	2.18	1	2.0784	2.08	(0.10)	(4.63%)
	<b>Delivery Sub-Total</b>			<b>8.31</b>			<b>11.36</b>	<b>3.04</b>	<b>36.34%</b>
	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%)
	<b>Total Bill Before Taxes</b>			<b>28.88</b>			<b>34.88</b>	<b>6.00</b>	<b>20.78%</b>
	HST		13.00%			13.00%	4.53	0.78	20.76%
	<b>Total Bill</b>			<b>32.64</b>			<b>39.41</b>	<b>6.77</b>	<b>20.74%</b>

Street Lighting - Originally Filed									
Billing Determinants		2010 BILL			2011 BILL			IMPACT	
		Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	Change \$	Change %
<b>1 Connections</b> <b>50.00 kWh</b> <b>0.14 kW</b>	Monthly Service Charge	1	0.3300	0.33	1	0.3300	0.33	0.00	0.00%
	Distribution (kW)	0	6.7448	0.94	0	9.6165	1.35	0.40	42.58%
	Low Voltage Rider (kW)	0	0.0228	0.00	0	0.0347	0.00	0.00	0.00%
	LRAM & SSM Rider (kW)	0		0.00	0	0.2330	0.03	0.03	100.00%
	Deferral & Variance Acct (kW)	0	(0.9707)	(0.14)	0	(0.9297)	(0.13)	0.01	(4.22%)
	<b>Distribution Sub-Total</b>			<b>1.14</b>			<b>1.58</b>	<b>0.44</b>	<b>38.72%</b>
	Retail Transmission (kW)	0	2.1794	0.31	0	2.0784	0.29	(0.01)	(4.63%)
	<b>Delivery Sub-Total</b>			<b>1.45</b>			<b>1.87</b>	<b>0.42</b>	<b>29.03%</b>
	Other Charges (kWh)	53	0.0135	0.71	52	0.0135	0.70	(0.01)	(0.96%)
	SSS Administration Charge			0.25			0.25	0.00	0.00%
	Special Purpose Charge	53	0.0003725	0.02	52	0.0003725	0.02	(0.00)	(0.96%)
	Cost of Power Commodity (kWh)	53	0.0644	3.38	52	0.0644	3.35	(0.03)	(0.96%)
	<b>Total Bill Before Taxes</b>			<b>7.25</b>			<b>8.07</b>	<b>0.82</b>	<b>11.31%</b>
	HST		13.00%	0.94		13.00%	1.05	0.11	11.25%
	<b>Total Bill</b>			<b>8.20</b>			<b>9.12</b>	<b>0.92</b>	<b>11.21%</b>



Board Staff Interrogatories

Table IR # 29 (e) Street Lighting Rate Impacts –Revised due to a change in # of Street Light Connections Version

Street Lighting - Revised due to Change in # of Street Light Connections										
Billing Determinants		2010 BILL			2011 BILL			IMPACT		
		Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	Change \$	Change %	% of Total Bill
1 Connections	Monthly Service Charge	1	0.3300	0.33	1	0.3300	0.33	0.00	0.00%	0.87%
150 kWh	Distribution (kW)	1	6.7448	6.74	1	8.9359	8.94	2.19	32.49%	23.59%
1.00 kW	Low Voltage Rider (kW)	1	0.0228	0.02	1	0.0347	0.03	0.01	52.19%	0.09%
	LRAM & SSM Rider (kW)	1		0.00	1	0.2330	0.23	0.23	100.00%	0.62%
	Deferral & Variance Acct (kW)	1	(0.9707)	(0.97)	1	(0.9297)	(0.93)	0.04	(4.22%)	(2.45%)
	<b>Distribution Sub-Total</b>			<b>6.13</b>			<b>8.60</b>	<b>2.48</b>	<b>40.43%</b>	<b>22.72%</b>
	Retail Transmission (kW)	1	2.1794	2.18	1	2.0784	2.08	(0.10)	(4.63%)	5.49%
	<b>Delivery Sub-Total</b>			<b>8.31</b>			<b>10.68</b>	<b>2.66</b>	<b>32.05%</b>	<b>28.20%</b>
	Other Charges (kWh)	158	0.0135	2.13	156	0.0135	2.11	(0.02)	(0.96%)	5.56%
	Cost of Power Commodity (kWh)	158	0.0644	10.14	156	0.0644	10.05	(0.10)	(0.96%)	26.53%
	<b>Total Bill Before Taxes</b>			<b>28.88</b>			<b>33.52</b>	<b>4.92</b>	<b>17.03%</b>	<b>88.50%</b>
	HST		13.00%	3.75		13.00%	4.36	0.60	16.04%	11.50%
	<b>Total Bill</b>			<b>32.64</b>			<b>37.88</b>	<b>5.52</b>	<b>16.92%</b>	<b>100.00%</b>

Street Lighting - Revised due to Change in # of Street Light Connections										
Billing Determinants		2010 BILL			2011 BILL			IMPACT		
		Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	Change \$	Change %	% of Total Bill
1 Connections	Monthly Service Charge	1	0.3300	0.33	1	0.3300	0.33	0.00	0.00%	3.71%
50.00 kWh	Distribution (kW)	0	6.7448	0.94	0	8.9359	1.25	0.31	32.49%	14.05%
0.14 kW	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%	0.37%
	Deferral & Variance Acct (kW)	0	(0.9707)	(0.14)	0	(0.9297)	(0.13)	0.01	(4.22%)	(1.46%)
	<b>Distribution Sub-Total</b>			<b>1.14</b>			<b>1.49</b>	<b>0.35</b>	<b>30.38%</b>	<b>16.72%</b>
	Retail Transmission (kW)	0	2.1794	0.31	0	2.0784	0.29	(0.01)	(4.63%)	3.27%
	<b>Delivery Sub-Total</b>			<b>1.45</b>			<b>1.78</b>	<b>0.37</b>	<b>25.76%</b>	<b>19.98%</b>
	Other Charges (kWh)	53	0.0135	0.71	52	0.0135	0.70	(0.01)	(0.96%)	7.89%
	SSS Administration Charge			0.25			0.25	0.00	0.00%	2.81%
	Special Purpose Charge	53	0.0003725	0.02	52	0.0003725	0.02	(0.00)	(0.96%)	0.22%
	Cost of Power Commodity (kWh)	53	0.0644	3.38	52	0.0644	3.35	(0.03)	(0.96%)	37.61%
	<b>Total Bill Before Taxes</b>			<b>7.25</b>			<b>7.88</b>	<b>0.67</b>	<b>9.18%</b>	<b>88.50%</b>
	HST		13.00%	0.94		13.00%	1.02	0.08	8.63%	11.50%
	<b>Total Bill</b>			<b>8.20</b>			<b>8.90</b>	<b>0.75</b>	<b>9.12%</b>	<b>100.00%</b>

### Unmetered Scattered Load - Originally Filed

### Unmetered Scattered Load - Originally Filed

			2010 BILL			2011 BILL			IMPACT		
			Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	Change \$	Change %	% of Total Bill
Consumption  150 kWh	Monthly Service Charge			15.31			15.31	0.00	0.00%	43.96%	
	Distribution (kWh)	150	0.0103	1.55	150	0.0190	2.85	1.31	84.47%	8.18%	
	Low Voltage Rider (kWh)	150	0.0001	0.02	150	0.0001	0.02	0.00	0.00%	0.04%	
	LRAM & SSM Rider (kWh)	150		0.00	150	0.0044	0.66	0.66	100.00%	1.91%	
	Deferrral & Variance Acct (kWh)	150	(0.0024)	(0.36)	150	(0.0018)	(0.27)	0.09	(25.00%)	(0.78%)	
	Distribution Sub-Total			16.51			18.57	2.06	12.48%	53.32%	
	Retail Transmission (kWh)	158	0.0071	1.12	156	0.0068	1.06	(0.06)	(5.15%)	3.05%	
	Delivery Sub-Total			17.63			19.63	2.76	15.64%	56.37%	
	Other Charges (kWh)	158	0.0135	2.13	156	0.0135	2.11	(0.02)	(0.96%)	6.05%	
	Cost of Power Commodity (kWh)	158	0.0650	10.24	156	0.0650	10.14	(0.10)	(0.96%)	29.13%	
	Total Bill Before Taxes			28.88			30.82	1.94	6.72%	88.50%	
	HST		13.00%	3.75		13.00%	4.01	0.25	6.72%	11.50%	
	Total Bill			32.63			34.83	2.19	6.72%	100.00%	

Board Staff Interrogatories

Table IR # 29 (e) USL Rate Impacts –Revised due to a change in # of Street Light Connections  
Version

Unmetered Scattered Load - Revised due to Change in # of Street Light Connections										
		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%	32.50%
	Distribution (kWh)	250	0.0103	2.58	250	0.0211	5.28	2.70	104.85%	11.20%
	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%	2.35%
	Deferrral & Variance Acct (kWh)	250	(0.0024)	(0.60)	250	(0.0018)	(0.45)	0.15	(25.00%)	(0.96%)
	Distribution Sub-Total			17.31			21.27	3.96	22.87%	45.15%
	Retail Transmission (kWh)	263	0.0071	1.86	260	0.0068	1.77	(0.10)	(5.15%)	3.75%
	Delivery Sub-Total			19.17			23.04	5.12	26.70%	48.90%
	Other Charges (kWh)	263	0.0135	3.55	260	0.0135	3.51	(0.03)	(0.96%)	7.45%
	SSS Administration Charge			0.25			0.25	0.00	0.00%	0.53%
	Special Purpose Charge	263	0.0003725	0.10	260	0.0003725	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%)	35.89%
	Total Bill Before Taxes			37.93			41.69	3.76	9.91%	88.50%
	HST		13.00%	4.93		13.00%	5.42	0.49	9.91%	11.50%
	Total Bill			42.86			47.10	4.25	9.91%	100.00%

Unmetered Scattered Load - Revised due to Change in # of Street Light Connections										
Consumption  150 kWh		2010 BILL			2011 BILL			IMPACT		
		Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	Change \$	Change %	% of Total Bill
	Monthly Service Charge			15.31			15.31	0.00	0.00%	43.52%
	Distribution (kWh)	150	0.0103	1.55	150	0.0211	3.17	1.62	104.85%	9.00%
	Low Voltage Rider (kWh)	150	0.0001	0.02	150	0.0001	0.02	0.00	0.00%	0.04%
	LRAM & SSM Rider (kWh)	150		0.00	150	0.0044	0.66	0.66	100.00%	1.89%
	Deferrral & Variance Acct (kWh)	150	(0.0024)	(0.36)	150	(0.0018)	(0.27)	0.09	(25.00%)	(0.77%)
	Distribution Sub-Total			16.51			18.88	2.37	14.38%	53.68%
	Retail Transmission (kWh)	158	0.0071	1.12	156	0.0068	1.06	(0.06)	(5.15%)	3.02%
	Delivery Sub-Total			17.63			19.95	3.07	17.43%	56.69%
	Other Charges (kWh)	158	0.0135	2.13	156	0.0135	2.11	(0.02)	(0.96%)	5.99%
	Cost of Power Commodity (kWh)	158	0.0650	10.24	156	0.0650	10.14	(0.10)	(0.96%)	28.83%
	Total Bill Before Taxes			28.88			31.14	2.26	7.81%	88.50%
HST		13.00%	3.75		13.00%	4.05	0.29	7.81%	11.50%	
Total Bill			32.63			35.18	2.55	7.81%	100.00%	

Board Staff Interrogatories

**Embedded Distributor**

**30. Ref: Exhibit 1/page 52, Exhibit 7/page 2 and Exhibit 8/pages 15/Table 8-15**

***In Exhibit 7/page 2, WN Hydro states:***

***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***

***In Exhibit 8/page 16/Table 8-15, WN Hydro documents its proposed rates for the new Embedded Distributor class, as follows:***

EMBEDDED DISTRIBUTOR SERVICE CLASSIFICATION		
<b>MONTHLY RATES AND CHARGES – Delivery Component</b>		
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)
<b>MONTHLY RATES AND CHARGES – Regulatory Component</b>		
Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

***In Tables 8-2, 8-3 and 8-4, WN Hydro documents a 2011 base revenue requirement for the embedded distributor class of \$846 dollars.***

***In Exhibit 7/page 10, under the discussion of its 2011 Cost Allocation Model, WN Hydro states:***

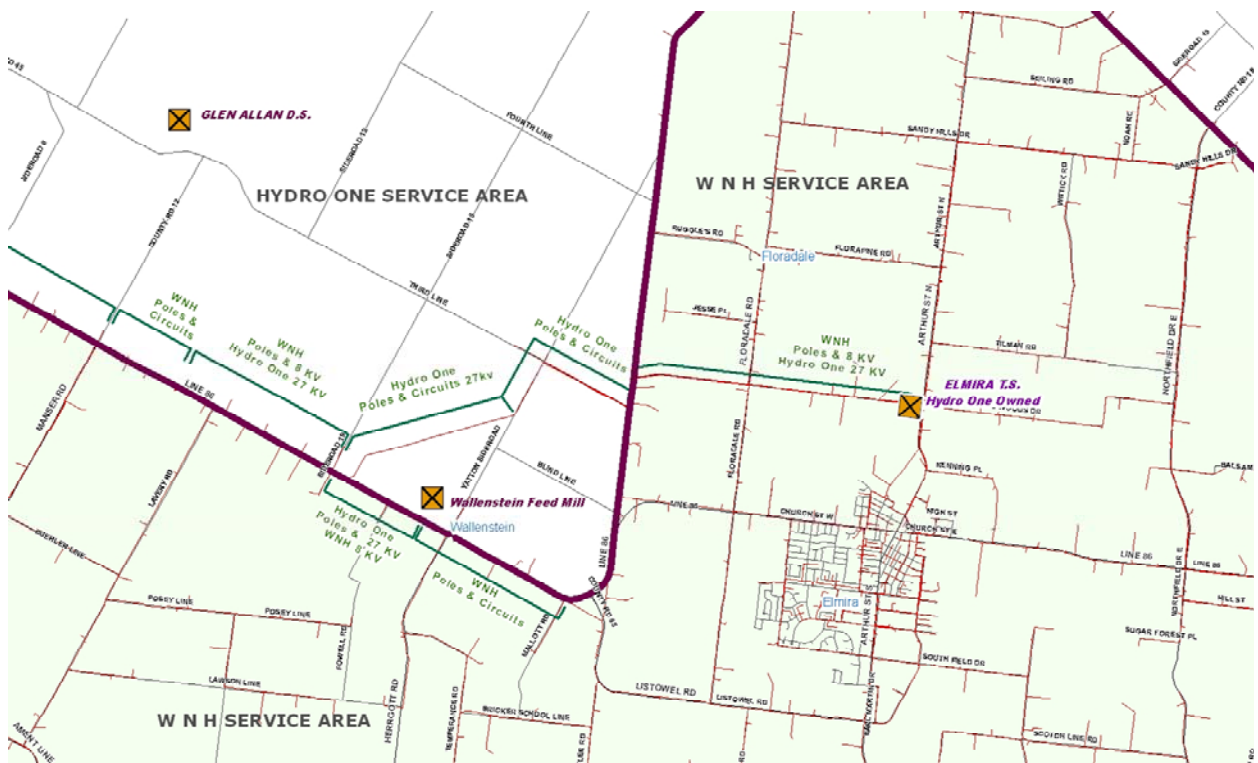
***WNH became a Host Distributor in May 2006, however, WNH's costs are extremely minimal. WNH does not have any capital costs as the Embedded Distributor owns its own circuits. WNH, thus, did not include load data in I-8 for this customer, as no plant capital costs or O&M costs were to be assigned to this class. The Embedded Distributor's wires are attached to WNH poles and the Embedded Distributor pays pole rental revenue to WNH. WNH reads and bills this one account monthly.***

Board Staff Interrogatories

***a) If the Embedded Distributor, Hydro One Networks, Inc., owns its own circuits and power is not supplied through any distribution assets of WN Hydro, please explain how this is a host distributor/embedded distributor relationship.***

WNH has ownership of the wholesale metering (total station) at Elmira TS. Prior to 2006, there were two subtraction points registered in the wholesale market, Wallenstein Feeds (Hydro One Customer) and Glen Allen DS (Hydro One Substation). The remainder of the energy is supplied to WNH. In 2006, Hydro One elected to deregister the subtraction points from the wholesale market and register them in the retail market. As a result, WNH became a Host Distributor to Hydro One for these two loads. WNH has provided a detailed map to explain the relationship below.

**Table IR # 30 (a) Host and Embedded Distributor Relationship**



Board Staff Interrogatories

- b) May 1, 2006, when WN Hydro became a host distributor, coincides with the effective date for WN Hydro's 2006 EDR distribution rates. Please confirm whether WN Hydro becoming a host distributor was in evidence in its 2006 EDR application considered under Board File No. RP-2005-0020/EB-2005-0448. If this was not considered in its 2006 EDR application, please explain why not.***

WNH did not include in any evidence in its 2006 EDR application, which was filed in August 2005, as arrangements were not finalized until 2006.

- c) Why did WN Hydro not seek approval for an embedded distributor class and rates to charge the embedded distributor since 2006?***

WNH did not seek approval for an Embedded Distributor Rate Class and associated rates as it was estimated that WNH may expend more in costs to maintain the rate class, than the potential revenue. As demonstrated in the 2011 Cost Allocation Study, distribution revenue from this rate class is not material in relation to WNH's total distribution revenue.

- d) Please estimate the revenues that WN Hydro has foregone or will forego from May 1, 2006 to April 30, 2011 due to not charging the embedded distributor. Have these revenues been foregone or have they been recovered from other existing ratepayer classes, or have they been recovered as pole rental charges at the approved rate? Please explain your response.***

If WNH uses the 2011 Distribution Revenue as a proxy for the five years from May 1, 2006 to April 30, 2011, the foregone revenue would approximate \$4,200. WNH would submit that this is an immaterial amount over a five year period.

The revenues have been foregone and not recovered from existing ratepayer classes as no costs were included in WNH's 2006 EDR Approved Revenue Requirement.

WNH has charged its Embedded Distributor pole rental charges at the joint trenching rental rate. The pole rental charge revenue does not include the \$846 allocated to the Embedded Distributor Rate Class in the 2011 Cost Allocation Study.

Board Staff Interrogatories

- e) In Exhibit 1/page 52, WN Hydro explains that it receives pole rental charges from the embedded distributor for the Embedded Distributor's circuits residing on WN Hydro's poles. Is the proposed Embedded Distributor charge incremental to, or a replacement for, the Pole Rental Charge. Please explain your response.***

The proposed Embedded Distributor Charge is incremental to the Pole Rental Charge.

- f) If the embedded distributor owns its own circuits and WN Hydro provides poles that the embedded distributor attaches its circuits and facilities to, please explain:***

- i. How the cost for attaching to the poles depends on kW of demand; and***

The revenue resultant from the 2011 Cost Allocation Study reflects the costs of billing & meter reading only. The Embedded Distributor has been placed in the General Service > 50 kW rate class, and thus, is billed on demand.

- ii. How the power on the embedded distributor's circuits are metered for WN Hydro to bill on a per kW basis for pole attachment services.***

The revenue resultant from the 2011 Cost Allocation Study reflects the costs of billing & meter reading only. The Embedded Distributor has been placed in the General Service > 50 kW rate class, and thus, is billed on demand. WNH bills Power, Wholesale Market Service Charge, Rural Rate Protection Charge and Global Adjustment to the Embedded Distributor on an uplifted kWh basis.

- g) Please provide the derivation and reasonableness of the proposed volumetric rate of \$0.0118/kW.***

The revenue allocated from the 2011 Cost Allocation Study of \$846 was divided by the 2011 forecast demand of 71,600 kW to equal \$0.0118/kW.

Board Staff Interrogatories

***h) If all proposed rate riders shown in Table 8-15 apply, the aggregate distribution charge applicable to the embedded distributor from May 1, 2011 to April 30, 2014 would work out to (\$1.0219)/kW and (\$0.03)/kW from May 1, 2014 to April 30, 2015.***

***i. Please identify which rate riders would apply to the embedded distributor.***

In its submission WNH had reflected the following rate riders that would be applicable to the embedded distributor:

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 (2011) - effective until April 30, 2015	\$/kW	(0.0458)

***ii. If the embedded distributor did not exist prior to May 1, 2006 and has not been charged for distribution services to date, please explain the appropriateness of negative rate riders to refund credit balances for deferral and variance accounts, when the embedded customer has not paid (or overpaid).***

Since May 1, 2010, WNH has been applying the Rate Rider for Global Adjustment Sub-Account Disposition - effective until April 30, 2014 and Rate Rider for Deferral/Variance Account Disposition (2010) – effective until April 30, 2014. WNH has been billing the embedded distributor for Global Adjustment, Wholesale Market Service Charges, Rural Rate Protection Charge and Power through the General Service >50kW rate class, and, thus, has either billed them or credited them with these rate riders.

WNH has proposed to apply the Rate Rider for Global Adjustment Sub-Account Disposition - effective until April 30, 2015 and Rate Rider for Deferral/Variance Account Disposition (2011) – effective until April 30, 2015 to this rate class as the Deferral/Variance account balances being requested for disposition in this application capture revenues and costs up until December 31, 2009 (principal balances), and the embedded distributor has contributed to the majority of the variances (through billing in the GS>50 kW rate class).



Board Staff Interrogatories

***iii. If all rate riders would apply, please comment on the reasonableness of the situation of an overall “negative” tariff applying to this customer.***

The proposed rate schedule does not reflect the Power and Global Adjustment charges that are billed to the embedded distributor, although it does reflect the Wholesale Service Market Rates and Rural Rate Protection Charge, thus, it is not readily apparent that this customer contributes to the variances. In the interest of fairness, if a customer contributes to a variance, WNH submits they should also have the rate rider applied.

***Exhibit 8 – Rate Design***

**Distribution Rates**

***31. Ref: Exhibit 8/page 15/Table 8-15 – microFIT Generator***

***In Table 8-15 “2011 Proposed Rate Schedule”, WN Hydro shows a rate of \$6.25 per month for the microFIT Generator Service Classification. WN Hydro’s existing approved rate for the microFIT Generator Service Classification is \$5.25 per month, pursuant to the Board’s Rate Order under File No. EB-2009-0326, located at [http://www.oeb.gov.on.ca/OEB/Documents/EB-20090326/Rate\\_Order\\_microFIT\\_20100317.pdf](http://www.oeb.gov.on.ca/OEB/Documents/EB-20090326/Rate_Order_microFIT_20100317.pdf)***

***Please explain in detail WN Hydro’s proposal to increase the microFIT Generator Service monthly rate. Please include all supporting rationale for this request.***

WNH incorrectly entered \$6.25 per month for the microFIT Generator Service Classification, WNH should have entered \$5.25, thus, WNH is not proposing to increase this monthly rate.

Board Staff Interrogatories

**Loss Factors**

**32. Ref: Exhibit 8/page 10 – Supply Facility Loss Factor**

***On Exhibit 8/page 10, WN Hydro states:***

***The actual SFLF [Supply Facility Loss Factor] 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.***

***Please confirm that the SFLF used is 1.0050 as shown in Table 8-12 and not 1.050 as shown on page 10 of this exhibit.***

WNH confirms that the SFLF used is 1.0050 as shown in Table 8-12 and not 1.050 which was incorrectly shown on page 10 of Exhibit 8.

**33. Ref: Exhibit 8/page 11/Table 8-12 and Exhibit 8/page 16/Table 8-15**

***In Table 8-12, WN Hydro calculates a Total Loss Factor of 1.0151 for a Secondary Metered Customer > 5,000 kW. However, the proposed tariff documented in Table 8-15 shows a Total Loss Factor of 1.0150 for a Secondary Metered Customer > 5,000 kW. Please confirm the proposed Total Loss Factor for a Secondary Metered Customer > 5,000 kW.***

An amended Table 8-12, showing a Total Loss Factor of 1.0150 for a Secondary Metered Customer >5,000 kW is shown below.

Board Staff Interrogatories

IR# 33 - Table 8-12 - Revised Loss Factor Schedule

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	1.0150
Total Loss Factor - Primary Metered Customer < 5,000 kW	1.0300
Total Loss Factor - Primary Metered Customer > 5,000 kW	1.0050

**34. Ref: Exhibit 1/page 60 and Exhibit 3/pp. 34-35 – Specific Service Charges**

***WN Hydro proposes to include two new Specific Service Charges***

- ***Duplicate Invoice Charge (\$15); and***
- ***Income Tax Letter (\$15).***

***In Exhibit 3/pages 34-35, WN Hydro states that the proposed charge \$15 is taken from the standard charge as documented in the 2006 Electricity Distribution Rate Handbook. Given that the 2006 Electricity Distribution Rate Handbook is five years old at this time, and the default rates have not been updated to reflect inflation or technological or operation productivity improvements, does WN Hydro have any evidence (i.e. time and materials) to support the proposed rates of \$15?***

WNH has adopted the Board's standard charge as it has determined that it is reflective of WNH's costs to provide the service, thus, WNH has not provided additional evidence (time and materials).

Board Staff Interrogatories

**35. Ref: Exhibit 3/page 34 – Specific Service Charges**

**WN Hydro documents revenues in 2009 of \$57,233 for Property Tax Rebate for Previous Years.**

**a) Please explain this entry as a source of specific service charge revenues.**

WNH incorrectly included this rebate in Table 3-28 Specific Service Charges, it should have been included in Table 3-31 Other Income and Expenses. Revised Tables 3-28 and 3-31 are shown below. Please note that Table 3-31 has also been updated for Energy Probe IR # 23 (c).

**IR# 35 (a) - Table 3-28 Revised- Specific Service Charges**

Specific Service Charges - Revised							
	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
<b>Total</b>		<b>140,903</b>	<b>386,267</b>	<b>279,258</b>	<b>244,566</b>	<b>244,155</b>	<b>245,845</b>

**IR# 35 (a) - Table 3-31 Revised- Other Income and Expenses**

Other Income and Expenses - Revised							
	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	595,359	647,733
Water & Sewer Billings <sup>12</sup>	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
Property Tax Rebate for Previous Years'	4390	-	-	-	57,233	-	-
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
<b>Total</b>		<b>813,011</b>	<b>1,016,119</b>	<b>904,859</b>	<b>419,515</b>	<b>355,047</b>	<b>346,994</b>

Board Staff Interrogatories

- b) ***With which Board-approved Specific Service Charge(s) is(are) the revenues associated?***

Please refer to IR # 35 (a).

- c) ***Please explain why no revenues are recorded in the 2006 to 2008 actuals, nor forecasted for the 2010 bridge and 2011 test years for this line item.***

The property tax rebate was a one-time rebate, a result of an appeal of WNH's property taxes, thus, no revenues were recorded prior to 2009 and no revenue has been forecasted for 2010 or 2011.

***Exhibit 9 – Deferral and Variance Accounts***

***36. Ref: Exhibit 9/page 8/II. 9-25***

***WN Hydro has proposed that the Global Adjustment sub-account balance and other deferral and variance (“D/V”) balances be disposed over a four-year period, from May 1, 2011 to April 30, 2015. The default period per the Board’s EDDVAR report and the usual practice for the disposition period is 1 year.***

- a) ***Why does WN Hydro consider it appropriate that the proposed rate rider have a period of 4 years?***

As stated on page 8 of Exhibit 9 in WNH's August 27, 2010 Submission “The rationale supporting a four-year recovery period instead of one year as preferred by the Board (EB-2008-0046), is that a one year disposition of the total owing by the customers \$1,375,587 would create rate shock for customers both at the onset of the rate rider and upon its discontinuance. In its decision of March 25, 2010, EB-2009-0210, the Board approved the repayment of WNH's Group 1 Accounts over a four-year period and thus, and in order to be fair and equitable to its customers, WNH is proposing that a four-year recovery period is also applied to balances in this filing.”

Board Staff Interrogatories

- b) ***Please re-estimate the rate riders to dispose of the Global Adjustment and D/V account balances assuming a one-year disposition period (i.e. from May 1, 2011 to April 30, 2012).***

WNH has re-estimated the rate riders to dispose of the Global Adjustment and D/V account balances assuming a one-year disposition period in the table below.

**Table IR# 36 (b)**  
**Rate Riders – Global Adjustment and D/V Account Balances**  
**One-Year Disposition Period**

Rate Class	Volmetric	Rate Rider GA	Rate Rider Deferral/ Variance (no GA)
Residential	kWh	0.0004	0.0001
General Service Less Than 50 kW	kWh	0.0000	(0.0000)
General Service 50 to 4,999 kW	kW	0.0019	(0.1832)
Large Use	kW	0.0020	(0.2824)
Street Lighting	kW	0.0008	0.0408
USL	kWh	0.0001	0.0022

- c) ***Please re-estimate the rate riders to dispose of the Global Adjustment and D/V account balances assuming a two-year disposition period (i.e. from May 1, 2011 to April 30, 2013).***

WNH has re-estimated the rate riders to dispose of the Global Adjustment and D/V account balances assuming a two-year disposition period in the table below.

Board Staff Interrogatories

**Table IR# 36 (c)**  
**Rate Riders – Global Adjustment and D/V Account Balances**  
**Two-Year Disposition Period**

Rate Class	Volmetric	Rate Rider GA	Rate Rider Deferral/ Variance (no GA)
Residential	kWh	0.0002	0.0000
General Service Less Than 50 kW	kWh	0.0000	(0.0000)
General Service 50 to 4,999 kW	kW	0.0009	(0.0916)
Large Use	kW	0.0010	(0.1412)
Street Lighting	kW	0.0004	0.0408
USL	kWh	0.0000	0.0011

**37. Ref: Exhibit 9/page 3/II. 8-9**

***WN Hydro has indicated that an adjustment was made to the 2009 balance of USoA Account 1508 Other Regulatory Assets to reallocate costs to the proper account, and that this account balance differs from the 2009 RRR Section 2.1.7 filing.***

- a) ***Please state the amount reported to the Board for the account in WN Hydro's 2009 annual filing pursuant to RRR section 2.1.7.***

The amount reported in 1508 in WNH's 2009 21.7 annual filing was \$174,349.

- b) ***Please identify the components of any differences between the amount in a) and the amount reported in Exhibit 3 of this rate application. Please explain each component of any difference identified in b).***

The adjustment in IR # 37 a) did not impact the amount reported in Exhibit 3 of this rate application.

Board Staff Interrogatories

**38. Account 1592 – PILs and Tax Variances for 2006 and Subsequent Years**

**a) Please identify whether WN Hydro has posted any amounts to account 1592 since April 2006.**

WNH has posted amounts to account 1592 since April 2006.

**b) If yes, please provide the following:**

**i. Please revise the deferral and variance account continuity schedule to include Account 1592 as a Group 2 account and enter all the relevant information for transactions, adjustments, etc. for all the relevant years.**

WNH has revised the deferral account continuity schedule to include Account 1592 as a Group 2 account below.



Board Staff Interrogatories

Table IR # 38 (b) (i) - Revised Deferral and Variance Account Continuity Schedule

SHEET 1 - Regulatory Assets - Continuity Schedule

NAME OF UTILITY  
NAME OF CONTACT  
E-mail Address  
VERSION NUMBER  
Date

Waterloo North Hydro Inc.  
Albert P. Singh  
asingh@wrhydro.com  
v8.0  
9-Dec-10

LICENCE NUMBER  
DOCID NUMBER  
PHONE NUMBER  
(extension)

ED-2002-0545  
EB-2010-0144  
519-888-5541

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	Transactions (additions) during 2005, excluding interest and	Transactions (reductions) during 2005, excluding interest and	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 Dec-31-05	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 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	\$ 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	
2006 PILs & Taxes Variance	1592										
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 Balances10	1595										

see PILs reconciliation requested

Board Staff Interrogatories

SHEET 1 - Regulatory Assets - Continuity Schedule

NAME OF UTILITY **Waterloo North Hydro Inc.**  
NAME OF CONTACT **Albert P. Singh**  
E-mail Address **asingh@wnhydro.com**  
VERSION NUMBER **v8.0**  
Date **9-Dec-10**

\*\* Account Disposed of for balances at December 31, 2008 +  
projected interest in 2010 Application, EB-2009-0210

		2006										
Account Description	Account Number	Opening Principal Amounts as of Jan-1-06	Transactions (additions) during 2006, excluding interest and adjustments <sup>6</sup>	Transactions (reductions) during 2006, excluding interest and adjustments <sup>6</sup>	Adjustments during 2006 - instructed by Board <sup>2, 2A</sup>	Adjustments during 2006 - other <sup>3</sup>	Transfer of Board-approved amounts to 1590 as per 2006 FNR	Closing Principal Balance as of Dec-31-06	Opening Interest Amounts as of Jan-1-06	Interest Jan-1 to Dec-31-06	Transfer of Board-approved amounts to 1590 as per 2006 FNR	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	\$ -	\$ 68,029					\$ 355,186	\$ -	\$ 10,602		\$ 10,602
Other Regulatory Assets - Sub-Account - Pension Contributions	1508	\$ -	\$ 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	\$ -	\$ 6,000	\$ (76,462)				\$ (87,347)	\$ (245)	\$ (2,626)		\$ (2,871)
Retail Cost Variance Account - STR	1548	\$ -		\$ (3,635)				\$ (4,887)	\$ (31)	\$ (142)		\$ (173)
Misc. Deferred Debits	1525	\$ -		\$ (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 Cos	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	\$ -	\$ (2,509)					\$ 68,855	\$ 1,567	\$ 3,836		\$ 5,403
2006 PILs & Taxes Variance	1592	\$ -	\$ (6,113)					\$ (6,113)	\$ -	\$ (51)		\$ (51)
Other Deferred Credits	2425	\$ -						\$ -	\$ -			\$ -
Group 2 Sub-Total		\$ -	\$ 168,939	\$ (80,462)	\$ -	\$ -	\$ -	\$ 841,833	\$ 1,315	\$ 28,817	\$ -	\$ 30,132
Deferred Payments in Lieu of Taxes	1562							see PILs reconciliation requested				
2006 PILs & Taxes Variance	1592							see PILs reconciliation requested				
Sub-total								see PILs reconciliation requested				
Total		\$ -	\$ 168,939	\$ (80,462)	\$ -	\$ -	\$ -	\$ 841,833	\$ 1,315	\$ 28,817	\$ -	\$ 30,132
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											

Board Staff Interrogatories

NAME OF CONTACT Albert P. Singh  
E-mail Address asingh@wnhydro.com  
VERSION NUMBER v8.0  
Date 9-Dec-10

\*\* Account Disposed of for balances at December 31, 2008 +  
projected interest in 2010 Application, EB-2009-0210

Revised

2007										
Account Number	Opening Principal Amounts as of Jan-1-07	Transactions (additions) during 2007, excluding interest and adjustments <sup>5</sup>	Transactions (reductions) during 2007, excluding interest and adjustments <sup>6</sup>	Adjustments during 2007 - instructed by Board <sup>2, 2A</sup>	Adjustments during 2007 - other <sup>3</sup>	Closing Principal Balance as of Dec-31-07	Opening Interest Amounts as of Jan-1-07	Interest Jan-1 to Dec-31-07	Closing Interest Amounts as of Dec-31-07	
<b>Group 1 Accounts</b>										
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 <sup>10</sup>	1595	\$ -				\$ -	\$ -		\$ -	
<b>Group 1 Sub-Total (including Account 1588 - Global Adjustment)</b>		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>Group 1 Sub-Total (excluding Account 1588 - Global Adjustment)</b>		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>RSVA - Power - Sub-Account - Global Adjustment</b>	<b>1588</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>Group 2 Accounts</b>										
Other Regulatory Assets - Sub-Account - OEB Cost Assessments	1508	\$ -				\$ 355,186	\$ 10,602	\$ 16,791	\$ 27,393	
Other Regulatory Assets - Sub-Account - Pension Contributions	1508	\$ -				\$ 613,095	\$ 18,301	\$ 28,984	\$ 47,285	
Other Regulatory Assets - Sub-Account Deferred IFRS Transition Costs	1508	\$ -				\$ -	\$ -		\$ -	
Other Regulatory Assets - Sub-Account - Incremental Capital (HONI) <sup>7</sup>	1508	\$ -				\$ -	\$ -		\$ -	
Other Regulatory Assets - Sub-Account - Other <sup>7</sup>	1508	\$ -				\$ -	\$ -		\$ -	
Retail Cost Variance Account - Retail	1518	\$ -	\$ 16,500	\$ (82,412)		\$ (153,259)	\$ (2,871)	\$ (5,649)	\$ (8,520)	
Retail Cost Variance Account - STR	1548	\$ -		\$ (5,144)		\$ (10,031)	\$ (173)	\$ (329)	\$ (502)	
Misc. Deferred Debits	1525	\$ -				\$ 3,455	\$ 225	\$ 163	\$ 388	
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	\$ -	\$ (152,810)			\$ (253,220)	\$ (1,304)	\$ (8,136)	\$ (9,440)	
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 <sup>5</sup>	1570	\$ -	n/a	n/a		\$ -	\$ -		\$ -	
Pre-Market Opening Energy Variances Total <sup>5</sup>	1571	\$ -	n/a	n/a		\$ -	\$ -		\$ -	
Extra-Ordinary Event Costs	1572	\$ -				\$ -	\$ -		\$ -	
Deferred Rate Impact Amounts	1574	\$ -				\$ -	\$ -		\$ -	
RSVA - One-time Wholesale Market Service	1582	\$ -				\$ 68,855	\$ 5,403	\$ 3,256	\$ 8,659	
2006 PILs & Taxes Variance	1592	\$ -	\$ (3,034)			\$ (9,147)	\$ (51)	\$ (382)	\$ (433)	
Other Deferred Credits	2425	\$ -				\$ -	\$ -		\$ -	
<b>Group 2 Sub-Total</b>		\$ -	\$ (139,344)	\$ (87,556)	\$ -	\$ 614,933	\$ 30,132	\$ 34,698	\$ 64,830	
Deferred Payments in Lieu of Taxes	1562					see PILs reconciliation requested				
2006 PILs & Taxes Variance	1592					see PILs reconciliation requested				
<b>Sub-total</b>						see PILs reconciliation requested				
<b>Total</b>		\$ -	\$ (139,344)	\$ (87,556)	\$ -	\$ 614,933	\$ 30,132	\$ 34,698	\$ 64,830	
<b>The following is not included in the total claim but are included on a memo basis:</b>										
Deferred PILs Contra Account <sup>8</sup>	1563					see PILs reconciliation requested				
Disposition and Recovery of Regulatory Balances <sup>10</sup>	1595									

NAME OF UTILITY	Waterloo North Hydro Inc.
NAME OF CONTACT	Albert P. Singh
E-mail Address	<a href="mailto:asingh@wnhydro.com">asingh@wnhydro.com</a>
VERSION NUMBER	v8.0
Date	9-Dec-10

Revised

Projected Interest in 2010 Application, EB-2009-02-10											
		2008									
Revised	Account Number	Account Description	Opening Principal Amounts as of Jan-1-08	Transactions (additions) during 2008, excluding interest and adjustments <sup>6</sup>	Transactions (reductions) during 2008, excluding interest and adjustments <sup>6</sup>	Adjustments during 2008 - instructed by Board <sup>2, 2A</sup>	Adjustments during 2008 - other <sup>3</sup>	Closing Principal Balance as of Dec-31-08	Opening Interest Amounts as of Jan-1-08	Interest Jan-1 to Dec-31-08	Closing Interest Amounts as of Dec-31-08
Group 1 Accounts											
	1550**	Low Voltage Account	\$ -					\$ -	\$ -		\$ -
	1580**	RSVA - Wholesale Market Service Charge	\$ -					\$ -	\$ -		\$ -
	1584**	RSVA - Retail Transmission Network Charge	\$ -					\$ -	\$ -		\$ -
	1586**	RSVA - Retail Transmission Connection Charge	\$ -					\$ -	\$ -		\$ -
	1588**	RSVA - Power (excluding Global Adjustment)	\$ -					\$ -	\$ -		\$ -
	1588**	RSVA - Power - Sub-Account - Global Adjustment	\$ -					\$ -	\$ -		\$ -
	1590**	Recovery of Regulatory Asset Balances	\$ -					\$ -	\$ -		\$ -
	1595	Disposition and Recovery of Regulatory Balances10	\$ -					\$ -	\$ -		\$ -
		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											
	1508	Other Regulatory Assets - Sub-Account - OEB Cost Assessments	\$ -					\$ 355,186	\$ 27,393	\$ 14,136	\$ 41,529
	1508	Other Regulatory Assets - Sub-Account - Pension Contributions	\$ -					\$ 613,095	\$ 47,285	\$ 24,401	\$ 71,686
	1508	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	\$ -					\$ -	\$ -		\$ -
	1518	Retail Cost Variance Account - Retail	\$ -	\$ 17,842	\$ (70,223)			\$ (205,640)	\$ (8,520)	\$ (6,989)	\$ (15,509)
	1548	Retail Cost Variance Account - STR	\$ -		\$ (2,219)			\$ (12,250)	\$ (502)	\$ (438)	\$ (940)
	1525	Misc. Deferred Debits	\$ -					\$ 3,455	\$ 388	\$ 137	\$ 525
	1550	LV Variance Account	\$ -					\$ -	\$ -		\$ -
	1531	Renewable Connection Capital Deferral Account									
	1532	Renewable Connection OM&A Deferral Account									
	1534	Smart Grid Capital Deferral Account									
	1535	Smart Grid OM&A Deferral Account									
	1555	Smart Meter Capital and Recovery Offset Variance - Sub-Account - Capital	\$ -	\$ 609,112				\$ 609,112	\$ -	\$ 1,377	\$ 1,377
	1555	Smart Meter Capital and Recovery Offset Variance - Sub-Account - Recoveries	\$ -	\$ (155,648)				\$ (408,868)	\$ (9,440)	\$ (12,609)	\$ (22,049)
	1555	Smart Meter Capital and Recovery Offset Variance - Sub-Account - Stranded Meter Costs	\$ -					\$ -	\$ -		\$ -
	1556	Smart Meter OM&A Variance	\$ -	\$ 24,155				\$ 24,155	\$ -	\$ 91	\$ 91
	1565	Conservation and Demand Management Expenditures and Recoveries	\$ -					\$ -	\$ 158		\$ 158
	1566	CDM Contra	\$ -					\$ -	\$ (158)		\$ (158)
	1570	Qualifying Transition Costs 5	\$ -	n/a	n/a			\$ -	\$ -		\$ -
	1571	Pre-Market Opening Energy Variances Total 5	\$ -	n/a	n/a			\$ -	\$ -		\$ -
	1572	Extra-Ordinary Event Costs	\$ -					\$ -	\$ -		\$ -
	1574	Deferred Rate Impact Amounts	\$ -					\$ -	\$ -		\$ -
	1582	RSVA - One-time Wholesale Market Service	\$ -					\$ 68,855	\$ 8,659	\$ 2,746	\$ 11,405
	1592	2006 PILs & Taxes Variance	\$ -	\$ (41,936)				\$ (51,083)	\$ (433)	\$ (1,066)	\$ (1,499)
	2425	Other Deferred Credits	\$ -					\$ -	\$ -		\$ -
		Group 2 Sub-Total	\$ -	\$ 453,526	\$ (72,442)	\$ -	\$ -	\$ 996,017	\$ 64,830	\$ 21,786	\$ 86,616
	1562	Deferred Payments in Lieu of Taxes				see PILs reconciliation requested					
	1592	2006 PILs & Taxes Variance				see PILs reconciliation requested					
		Sub-total				see PILs reconciliation requested					
		Total	\$ -	\$ 453,526	\$ (72,442)	\$ -	\$ -	\$ 996,017	\$ 64,830	\$ 21,786	\$ 86,616
The following is not included in the total claim but are included on a memo basis:											
	1563	Deferred PILs Contra Account 8									
	1595	Disposition and Recovery of Regulatory Balances10									

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SHEET 1 - Regulatory Assets - Continuity Schedule

NAME OF UTILITY: Waterloo North Hydro Inc.  
NAME OF CONTACT: Albert P. Singh  
E-mail Address: asingh@wrhydro.com  
VERSION NUMBER: v8.0  
Date: 9-Dec-10

\*\* Account Disposed of for balances at December 31, 2008 +  
projected interest in 2010 Application, EB-2009-0210

														2009				Total Claim before Forecasted Transactions in 2010 and 2011
Account Description	Account Number	Opening Principal Amounts as of Jan-1-09	Transactions (additions) during 2009, excluding interest and adjustments <sup>6</sup>	Transactions (reductions) during 2009, excluding interest and adjustments <sup>6</sup>	Adjustments during 2009 - instructed by Board <sup>2, 2A</sup>	Adjustments during 2009 - other <sup>3</sup>	Closing Principal Balance as of Dec-31-09	Opening Interest Amounts as of Jan-1-09	Interest Jan-1 to Dec-31-09	Closing Interest Amounts as of Dec-31-09	Projected Interest on Dec 31 -09 balance from Jan 1, 2010 to Dec 31, 2010 <sup>9</sup>	Projected Interest on Dec 31 -09 balance from Jan 1, 2011 to April 30, 2011 <sup>9, 10</sup>						
Group 1 Accounts																		
Low Voltage Account	1550**	\$ -	\$ 5,480				\$ 5,480	\$ -	\$ (17)	(17)	\$ 40	\$ 16	\$ 5,519					
RSVA - Wholesale Market Service Charge	1580**	\$ -	\$ (450,123)				\$ (450,123)	\$ -	\$ (1,076)	(1,076)	\$ (3,241)	\$ (1,335)	\$ (455,775)					
RSVA - Retail Transmission Network Charge	1584**	\$ -	\$ 290,198				\$ 290,198	\$ -	\$ 1,285	1,285	\$ 2,089	\$ 861	\$ 294,433					
RSVA - Retail Transmission Connection Charge	1586**	\$ -	\$ (6,300)				\$ (6,300)	\$ -	\$ 27	27	\$ (45)	\$ (19)	\$ (6,337)					
RSVA - Power (excluding Global Adjustment)	1588**	\$ -	\$ (1,023,433)				\$ (1,023,433)	\$ -	\$ (5,143)	(5,143)	\$ (7,369)	\$ (3,036)	\$ (1,038,981)					
RSVA - Power - Sub-Account - Global Adjustment	1588**	\$ -	\$ 1,656,502				\$ 1,656,502	\$ -	\$ 5,781	5,781	\$ 11,927	\$ 4,914	\$ 1,679,124					
Recovery of Regulatory Asset Balances	1590**	\$ -					\$ -	\$ -					\$ -					
Disposition and Recovery of Regulatory Balances <sup>10</sup>	1595	\$ -					\$ -	\$ -					\$ -					
Group 1 Sub-Total (including Account 1588 - Global Adjustment)		\$ -	\$ 472,324		\$ -	\$ -	\$ 472,324	\$ -	\$ 857	857	\$ 3,401	\$ 1,401	\$ 477,983					
Group 1 Sub-Total (excluding Account 1588 - Global Adjustment)		\$ -	\$ (1,184,178)		\$ -	\$ -	\$ (1,184,178)	\$ -	\$ (4,924)	(4,924)	\$ (8,526)	\$ (3,513)	\$ (1,201,141)					
RSVA - Power - Sub-Account - Global Adjustment	1588	\$ -	\$ 1,656,502		\$ -	\$ -	\$ 1,656,502	\$ -	\$ 5,781	5,781	\$ 11,927	\$ 4,914	\$ 1,679,124					
Group 2 Accounts																		
Other Regulatory Assets - Sub-Account - OEB Cost Assessments	1508	\$ -					\$ 355,186	\$ 41,529	\$ 4,040	\$ 45,569	\$ 2,557	\$ 1,054	\$ 404,366					
Other Regulatory Assets - Sub-Account - Pension Contributions	1508	\$ -					\$ 613,095	\$ 71,686	\$ 6,974	\$ 78,660	\$ 4,414	\$ 1,819	\$ 697,988					
Other Regulatory Assets - Sub-Account Deferred IFRS Transition Costs	1508	\$ -	\$ 44,170				\$ 44,170	\$ -	\$ 161	161	\$ 318	\$ 131	\$ 44,780					
Other Regulatory Assets - Sub-Account - Incremental Capital (HONI) <sup>7</sup>	1508	\$ -	\$ 750				\$ 750	\$ -	\$ 1	1	\$ 5	\$ 2	\$ 758					
Other Regulatory Assets - Sub-Account - Other <sup>7</sup>	1508	\$ -					\$ -	\$ -					\$ -					
Retail Cost Variance Account - Retail	1518	\$ -	\$ 19,464	\$ (69,966)			\$ (256,142)	\$ (15,509)	\$ (2,507)	\$ (18,016)	\$ (1,844)	\$ (760)	\$ (276,762)					
Retail Cost Variance Account - STR	1548	\$ -	\$ 4	\$ (1,228)			\$ (13,478)	\$ (940)	\$ (143)	\$ (1,083)	\$ (97)	\$ (40)	\$ (14,698)					
Misc. Deferred Debits	1525	\$ -					\$ 3,455	\$ 525	\$ 39	\$ 564	\$ 25	\$ 10	\$ 4,054					
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	\$ -	\$ 4,119,455				\$ 4,728,567	\$ 1,377	\$ 13,229	\$ 14,606	\$ 34,046	\$ 14,028	\$ 4,791,247					
Smart Meter Capital and Recovery Offset Variance - Sub-Account - Recoveries	1555	\$ -	\$ (457,478)				\$ (866,345)	\$ (22,049)	\$ (5,633)	\$ (27,682)	\$ (6,238)	\$ (2,570)	\$ (902,835)					
Smart Meter Capital and Recovery Offset Variance - Sub-Account - Stranded Meter Costs	1555	\$ -					\$ -	\$ -					\$ -					
Smart Meter OM&A Variance	1556	\$ -	\$ 206,702				\$ 230,857	\$ 91	\$ 673	\$ 764	\$ 1,662	\$ 685	\$ 233,968					
Conservation and Demand Management Expenditures and Recoveries	1565	\$ -					\$ -	\$ 158	\$ 158	\$ 158	\$ 1		\$ 159					
CDM Contra	1566	\$ -					\$ -	\$ (158)	\$ (158)	\$ (158)	\$ (1)		\$ (159)					
Qualifying Transition Costs <sup>5</sup>	1570	\$ -	n/a	n/a			\$ -	\$ -					\$ -					
Pre-Market Opening Energy Variances Total <sup>5</sup>	1571	\$ -	n/a	n/a			\$ -	\$ -					\$ -					
Extra-Ordinary Event Costs	1572	\$ -					\$ -	\$ -					\$ -					
Deferred Rate Impact Amounts	1574	\$ -					\$ -	\$ -					\$ -					
RSVA - One-time Wholesale Market Service	1582	\$ -					\$ 68,855	\$ 11,405	\$ 779	\$ 12,184	\$ 496	\$ 204	\$ 81,739					
2006 PILs & Taxes Variance	1592	\$ -	\$ (41,847)				\$ (92,930)	\$ (1,499)	\$ (699)	\$ (2,199)	\$ (827)	\$ (551)	\$ (96,506)					
Other Deferred Credits	2425	\$ -					\$ -	\$ -					\$ -					
Group 2 Sub-Total		\$ -	\$ 3,891,217	\$ (71,194)	\$ -	\$ -	\$ 4,816,039	\$ 86,616	\$ 16,914	\$ 103,530	\$ 34,517	\$ 14,012	\$ 4,968,098					
Deferred Payments in Lieu of Taxes	1562					see PILs reconciliation requested							\$ (1,355,850)					
2006 PILs & Taxes Variance	1592					see PILs reconciliation requested												
Sub-total						see PILs reconciliation requested							\$ (1,355,850)					
Total		\$ -	\$ 4,363,541	\$ (71,194)	\$ -	\$ -	\$ 5,288,364	\$ 86,616	\$ 17,771	\$ 104,387	\$ 37,918	\$ 15,413	\$ 5,446,081					
The following is not included in the total claim but are included on a memo basis:																		
Deferred PILs Contra Account <sup>8</sup>	1563					see PILs reconciliation requested							\$ -					
Disposition and Recovery of Regulatory Balances <sup>10</sup>	1595												\$ (13,868,829)					

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***ii. Please describe each type of tax item that has been accounted for in Account 1592.***

The amounts recorded in this account reflects the estimated impact of the change in the CCA rates used in setting the 2006 EDR rates and the recording of LCT amounts billed to customers based on the 2006 EDR rates. It is WNH's understanding that a methodology for the CCA changes has not yet been determined and WNH has calculated a proxy only at this time and would adjust any necessary calculations when a methodology had been established. WNH submits due to the absence of this methodology and the ongoing PILs proceeding (EB-2008-0381), it may be premature to clear this account balance at this time.

***iii. Please provide the calculations that show how each item was determined, and provide any pertinent supporting evidence.***

WNH calculated the principal balance in account 1592 shown in the tables below.

**Table IR# 38 (b) (iii) - Account 1592 Principal Balance**

<b>Account 1592 Principal Balance at December 31, 2009</b>	
Changes in CCA rates from 2006 Rate Application	(83,783)
LCT collected from customers based on 2006 EDR Rates	(9,147)
<b>Total Principal in Account 1592 at December 31, 2009</b>	<b>(92,930)</b>

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			2008	2009
			Class 47/1	Class 47/1
2006 EDR Amount Base Amount - test year Addition at 1/2 year rule				
Per Sched 8, Class 1 2004 Additions <sup>1</sup>	4,374,734		2,187,367	
Less: 1/2 year rule	(2,187,367)			
Add Tier 1 Addition at 1/2 year			332,500	
			2,519,867	
2007 IPI - X	0.90%		2,542,546	
2008 IPI - X	-0.70%		2,524,748	
2009 IPI - X	1.30%			2,557,570
Take 4% of Base as Difference	4.00%		100,990	102,303
Tax Rate			(33,832)	
2008 In rates	33.5%			(33,760)
2009 In rates	33.0%			
			Class 50/10	Class 50/10
2006 EDR Amount Base Amount - test year				
	2004			
	Additions			
	PerTx Return			
Split: Vehicles	397,554			
Computer Hardware	193,156		193,156	
Agrees to 2004 Schedule 8	590,709			
Apply the 1/2 year rule			96,578	
2007 IPI - X	0.90%		97,447	
2008 IPI - X	-0.70%		96,765	
2009 IPI - X	1.30%			98,023
Take 25% of Base as Difference (55% tx vs 30% rates)	25.00%		24,191	24,506
Tax Rate			(8,104)	
2008 In rates	33.5%			(8,087)
2009 In rates	33.0%			
			(41,936)	(41,847)
<b>Total</b>				(83,783)
<small>1 Class 1 additions and Class 1 UCC at Dec 31/04 agree to 'Test Year Sch 8 and 10 UCC &amp; CEC' in 2006 EDR</small>				

For the purposes of calculating the LCT amount billed to customers in its May 1, 2006 rate, WNH determined the appropriate fixed and variable amount for each rate class which was included in the approved rates, and applied these to the appropriate billing quantities to determine the amount payable to the customers. The total principal amount actually collected was \$9,147, which is higher than the \$8,722 included in 2006 EDR rates. The calculation of this amount is contained in a series of WNH's spreadsheets.

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- iv. Did WN Hydro follow the guidance provided in FAQ July 2007? If not, please explain why not.***

WNH did not have any Large Corporation Tax (LCT) included in its approved May 1, 2005 rate order; thus, no removal was required with the cessation of the tax in January 1, 2006. WNH calculated carrying charges in accordance with A5. of this FAQ. WNH, thus, followed the FAQ July 2007 guidance.

- v. Please identify the account balance for Account 1592 as of December 31, 2009 as per the 2009 audited financial statements. Please identify the account balance as of December 31, 2009 as per the April 2010 2.1.7 RRR filing to the Board. Please provide a reconciliation if the balances provided in the above documents are not identical to each other and to the total amount shown on the continuity schedule.***

The USoA Account 1592 balance at December 31, 2009 was the same amount for the 2009 audited financial statements and the April 2010 2.1.7 RRR filing, in the amount of (\$95,128, including carrying charges).

- vi. Should the Board wish to dispose of this account at this time, please identify the allocator that, in WN Hydro's view, would be most appropriate in allocating the balance to the rate classes. Please identify the disposition period for recovery or refund that WN Hydro would prefer if different from the period proposed for the remaining deferral and variance accounts. Please identify the billing determinant that, in WN Hydro's view, would be most appropriate to use.***

As stated above, WNH submits that it may not be appropriate to dispose of this account at this time, until a methodology has been set. If the Board wishes to dispose of the account, WNH would recommend allocating the account to rate classes on the basis of distribution revenues. WNH would request a four year



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disposition period, which is consistent with its proposed disposition period as discussed in IR # 36 (a). WNH would recommend using the same allocator as the distribution volumetric rate (either \$/kWh or \$/kW as appropriate).

***vii. Please complete, as applicable, the following table based on the previous answers. Add rows as required to complete the analysis in an informative manner. Where WN Hydro has no entry for a cell, please provide an explanation. If WN Hydro uses Microsoft Excel to prepare the table, please submit the live Excel workbook.***

<b>Tax Item</b>	<b>\$ Principal As of [December 31, 2009]</b>
Large Corporation Tax grossed-up proxy from 2006 EDR application PILs model for the period from May 1, 2006 to April 30, 2007	(\$ 9,147)
Large Corporation Tax from 2005 EDR application PILs model for the period from January 1, 2006 to April 30, 2006 (4 /12ths of approved grossed-up proxy) if not recorded in PILs account 1562	
Ontario Capital Tax rate decrease and increase in capital deduction for 2007	
Ontario Capital Tax rate decrease and increase in capital deduction for 2008	
Ontario Capital Tax rate decrease and increase in capital deduction for 2009	
Ontario Capital Tax rate decrease and increase in capital deduction for 2010	
Capital Cost Allowance class changes from 2006 EDR application for 2006	
Capital Cost Allowance class changes from 2006 EDR application for 2007	
Capital Cost Allowance class changes from 2006 EDR application for 2008	(\$ 41,936)
Capital Cost Allowance class changes from 2006 EDR application for 2009	(\$ 41,847)
Capital Cost Allowance class changes from 2006 EDR application for 2010	
Capital Cost Allowance class changes from any prior application not recorded above.	
Insert description of next item(s)	
Insert description of next item(s) and new rows if needed.	
<b>Total</b>	<b>(\$ 92,930)</b>

WNH did not have Large Corporations Tax (LCT) in its rates in 2005, nor after April 30, 2007 as the LCT was removed from its rates effective May 1, 2007. Any adjustments to WNH's Ontario Capital Tax rate changes were processed through the Board provided IRM rate generator models in its May 1, 2009 and May 1, 2010 approved rates. WNH commenced claiming CCA in Classes 47 and 50 in its 2008 income tax returns.

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**Smart Meters**

**39. Ref: Exhibit 9/page 17 – Smart Meters**

***WN Hydro has proposed to continue the smart meter funding adder of \$1.00 per month per metered customer. It stated that it has not provided a completed schedule per Appendix 2-R of the Filing Requirements as it is not seeking an increase in the funding adder or seeking full or partial disposition of accounts 1555 and 1556.***

***However, WN Hydro states that it plans to complete smart meter deployment by the end of 2010.***

***The purpose of the funding adder was, when first approved by the Board in 2006, two-fold: first, to provide some “seed funding” for smart meter investments; and, second, to phase-in any increases due to increased costs arising from smart meters to mitigate the increases when the smart meters are fully recognized in rate base and revenue requirement.***

***To assist the Board in understanding the quanta of smart meter costs incurred and to assess the likelihood of potential future rate increase levels upon disposition, and given that WN Hydro has largely completed its smart meter deployment, please provide a completed schedule per Appendix 2-R of the Filing Requirements.***

As stated on page 7 of Exhibit 9 of WNH's application, “WNH is not requesting disposition of accounts 1556 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, thus, was ineligible to propose disposition of its Smart Meter Accounts.

In its application, WNH stated that it expects to be fully deployed by the end of 2010, however, as WNH notified the Board in its October 2010 Smart Meter/TOU Filing, WNH will not be fully deployed in 2010. WNH stated in its October 2010 Smart Meter/TOU Filing: “Participating in the Provincial Smart Meter Initiative - Phase 2 RFP led by London Hydro, the Sensus Flexnet Smart Metering Infrastructure (SMI) was evaluated as the preferred SMI for Waterloo North Hydro Inc. (WNH). On June 22, 2009 WNH entered into a purchase agreement with Sensus for the SMI which included the supply of approximately 2,700 polyphase meters to meet the requirement for

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*Commercial and Industrial (C&I) customers <50kW. Sensus produced a conforming meter, received Measurement Canada approval and communicated plans to go into production and deliver the meters in a time frame which would allow WNH to complete installation by December 31, 2010. WNH, in good faith, relied on the assurances of Sensus and their communicated delivery dates that the meters would be available.*

*On September 17, 2010, KTI Limited, the Canadian sales agent for Sensus, communicated to WNH that Sensus was no longer committed to providing the polyphase meters. WNH has been working with KTI to provide an alternative source of meters and expedited delivery schedules. Delivery of the meters will not occur until November 2010. It is expected that installation of these meters will be complete by March 30, 2011.*

*WNH anticipates that the GS<50 customers affected by the delay in meter delivery, will meet the timelines as detailed in TOU/Smart Meter Appendix A that was e-mailed to the Board Secretary on October 7, 2010.”*

WNH has provided its estimates in the attached schedule in the format of Appendix 2-R of the Filing Requirements below:

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Table IR # 39 - Smart Meters in Appendix 2-R Format

Year	Smart Meters Installed			Percentage of applicable customers converted in year (%)	Percentage of applicable customers converted cumulative (%)	Account 1555 <sup>6</sup> Estimates				Account 1556 <sup>6</sup> Estimates	
	Residential	GS < 50 kW	Other			Funding Adder Revenues Collected in Year	Funding Adder Revenues Collected Cumulative	Capital Expenditures in Year <sup>8</sup>	Capital Expenditures Cumulative <sup>8</sup>	Operating Expenses in Year <sup>9</sup>	Operating Expenses Cumulative
2006 <sup>7</sup>				0.0%	0.0%	(101,714)	(101,714)	-	-	-	-
2007 <sup>7</sup>				0.0%	0.0%	(160,946)	(262,660)	-	-	-	-
2008	1,797	64		3.6%	3.6%	(168,257)	(430,917)	610,489	610,489	24,246	24,246
2009	18,356	571		36.9%	40.5%	(463,110)	(894,027)	4,132,684	4,743,173	207,375	231,621
2010	25,360	2,021		53.3%	93.9%	(624,114)	(1,518,141)	3,086,781	7,829,954	498,739	730,360
2011 (and beyond) (if required)	400	2,756		6.1%	100.0%	(639,901)	(2,158,042)	360,790	8,190,744	716,432	1,446,792
<b>Total</b>	<b>45,913</b>	<b>5,412</b>		<b>100.0%</b>	<b>100.0%</b>	<b>(2,158,042)</b>	<b>(2,158,042)</b>	<b>8,190,744</b>	<b>8,190,744</b>	<b>1,446,792</b>	<b>1,446,792</b>

<sup>6</sup> Includes Carrying Charges to Dec 31/09 Only and does not include MDM/R charges in 2011

<sup>7</sup> A pilot project under the Third Tranche CDM Program installed a small number of meters, however, these have been replaced as the meters used in the pilot were not selected as the vendor of choice for the full rollout

<sup>8</sup> Net of Accumulated Depreciation Change and Inclusive of Carrying Charges to Dec 31/09

<sup>9</sup> Inclusive of Annual Depreciation

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**40. Stranded Meter Costs**

*Regarding the regulatory ratemaking treatment of stranded meter costs, some distributors have transferred the cost of stranded meters from Account 1860, Meters, to “Sub-account Stranded Meter Costs” of Account 1555, while in some cases distributors have left these costs in Account 1860. Depending on which treatment the applicant has chosen, please provide the information under the two scenarios (a) and b)) below, as applicable to the applicant.*

- a) If the stranded meter costs were transferred to “Sub-account Stranded Meter Costs” of Account 1555, answer the following questions:**

Not Applicable

- i. Please describe the accounting treatment followed by the applicant on stranded meter costs for financial accounting and reporting purposes.*
- ii. Please provide the amount of the pooled residual net book value of the removed from service stranded meters, less any sale proceeds and contributed capital, which were transferred to this sub-account as of December 31, 2009.*
- iii. Since transferring the removed stranded meter costs to the sub-account, was the recording of depreciation expenses continued in order to reduce the net book value through accumulated depreciation? If so, please provide the total depreciation expense amount for the period from the time the stranded meters were transferred to the sub-account to December 31, 2009.*
- iv. If no depreciation expenses were recorded to reduce the net book value of stranded meters through accumulated depreciation, please provide the total depreciation expense amount that would have been applicable for the period from the time the stranded meters were transferred to the sub-account to December 31, 2009.*
- v. Were carrying charges recorded for the stranded meter cost balances in the sub-account, and if so, please provide the total carrying charges recorded to December 31, 2009.*
- vi. Please provide the estimated amount of the pooled residual net book value of the removed from service meters, less any sale proceeds and contributed capital, at the time when smart meters will have been fully deployed (e.g., as of December 31, 2010). If the smart meters have been fully deployed, please provide the actual amount.*
- vii. Please describe how the applicant intends to recover in rates stranded meter costs including the proposed accounting treatment, the proposed disposition period, and the associated bill impacts.*
- viii. In the outlined format of the table shown below (after b.), Summary of Stranded Meter Cost, please provide the data to derive the total “Residual Net Book Value” amounts for each year.*

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***b) If the stranded meter costs remained recorded in Account 1860, Meters, please answer the following questions:***

- i. Please describe the accounting treatment followed by the applicant on stranded meter costs for financial accounting and reporting purposes.***

WNH has not removed stranded meter costs from Account 1860, Meters, they have been treated as pooled/grouped assets and continued to depreciate.

- ii. Please provide the amount of the pooled residual net book value of removed from service stranded meters, less any sale proceeds and contributed capital as of December 31, 2009.***

In the time frame allowed for IR responses, WNH was unable to complete this request for information; WNH will be providing this information in a later submission.

- iii. Was the recording of depreciation expenses continued in order to reduce the net book value through accumulated depreciation? If so, provide the total depreciation expense amount for the period from the time the meters became stranded to December 31, 2009.***

WNH continued to record depreciation on the stranded meters. In the time frame allowed for IR responses, WNH is unable to provide the total depreciation expense; WNH will be providing this information in a later submission.

- iv. If no depreciation expenses were recorded to reduce the net book value of stranded meters through accumulated depreciation, provide the total depreciation expense amount that would have been applicable for the period from the time the meters became stranded to December 31, 2009.***

Not applicable.

Board Staff Interrogatories

- v. Please provide the estimated amount of the pooled residual net book value of the removed from service meters, less any sale proceeds and contributed capital, at the time when smart meters will have been fully deployed (e.g., as of December 31, 2010). If the smart meters have been fully deployed, please provide the actual amount.**

In the time frame allowed for IR responses, WNH was unable to complete this request for information; WNH will be providing this information in a later submission.

- vi. Please describe how the applicant intends to recover in rates stranded meter costs including the proposed accounting treatment, the proposed disposition period, and the associated bill impacts.**

WNH notes that at the Society of Ontario Adjudicators and Regulators Conference on June 9 and 10, 2010, Board Staff stated that a policy regarding the treatment of stranded meters would be forthcoming shortly. WNH is awaiting this direction.

- viii. In the outlined format of the table shown below, Summary of Stranded Meter Cost, please provide the data to derive the total "Residual Net Book Value" amounts for each year.**

**Summary the Residual Net Book Value of Stranded Meter Costs**

Year	Gross Asset (A)	Accumulated Amortization (B)	Net Asset (C = A-B)	Proceeds on Disposition (D)	Contributed Capital (E)	Residual Net Book Value (F + C-D-E)
2006						
2007						
2008						
2009						
2010 (1)						
Total						

In the time frame allowed for IR responses, WNH was unable to complete this request for information; WNH will be providing this information in a later submission.

- (1) For 2010, please indicate whether the amounts provided are on a forecast or actual basis

Board Staff Interrogatories

***Exhibit 10 – LRAM and SSM Recovery***

**41. Ref: Exhibit 10/pp. 10-17 – Third Party Review of LRAM/SSM Claim**

**In support of its claim for recovery of Lost Revenue Adjustment Mechanism (“LRAM”) and Shared Savings Mechanism (“SSM”) costs for the period 2006 to 2009, WN Hydro has filed a third party review by Burman Energy Consultants Group Inc. The report filed does not include the Attachments A through E listed in the Table of Contents (Exhibit 10/page 11). Please file all attachments listed in the Table of Contents of the Burman Energy Consultants Group Inc. report.**

WNH has attached Attachments A through E with this filing.



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 \$
<b>Third Tranche</b>			
<b>RESIDENTIAL</b>	\$28,574.58	\$2,540.64	\$31,115.22
<b>GENERAL SERVICE &lt; 50kW</b>	\$6,612.25	\$9,518.27	\$16,130.52
<b>STREET LIGHTING</b>	\$10,151.78	\$9,926.55	\$20,078.33
<b>UNMETERED SCATTERED LOAD</b>	\$22,654.58	\$6,572.39	\$29,226.97
<b>OPA Programs</b>			
<b>RESIDENTIAL</b>	\$326,449.66		\$326,449.66
<b>GENERAL SERVICE &lt;50KW</b>	\$36,320.80		\$36,320.80
<b>GENERAL SERVICE &gt;50KW</b>	\$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.



**ATTACHMENT A**

### CDM Load Impacts by Class and Program

		NET		GROSS		NET		GROSS		NET		GROSS		NET		GROSS		NET		GROSS	
Class	Year	2006		2006		2007		2007		2008		2008		2009		2009		Total kWh	Total kW	Total kWh	Total kW
Program	Implemented	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW				
Third Tranche																					
RESIDENTIAL																					
Geothermal Energy Program	2006					980,674	114.31	1,400,963	163.29	980,674	114.31	1,400,963	163.29	980,674	114.31	1,400,963	163.29	2,942,023	342.92	4,202,890	489.88
Low Income Consumer Retrofit Program	2007									84,217	12.89	99,864	15.98	84,217	12.89	99,864	15.98	168,434	25.78	199,728	31.95
11W CFL										3,440	0.12	3,823	0.14	3,440	0.12	3,823	0.14	6,881	0.25	7,645	0.28
15W CFL										24,261	0.56	26,957	0.62	24,261	0.56	26,957	0.62	48,522	1.12	53,914	1.25
25W CFL										11,228	0.31	12,476	0.35	11,228	0.31	12,476	0.35	22,456	0.63	24,952	0.70
2 - T8 32W										3,175	0.68	3,969	0.85	3,175	0.68	3,969	0.85	6,350	1.36	7,938	1.70
4 - T8 32W										778	0.17	972	0.21	778	0.17	972	0.21	1,555	0.33	1,944	0.42
1 - T8 32W										6,912	1.48	8,640	1.85	6,912	1.48	8,640	1.85	13,824	2.95	17,280	3.69
15W CFL - COMMERCIAL										23,814	4.84	29,768	6.04	23,814	4.84	29,768	6.04	47,628	9.67	59,535	12.09
3W LED EXIT SIGN										1,277	0.14	1,597	0.17	1,277	0.14	1,597	0.17	2,554	0.28	3,193	0.35
100W METAL HALIDE										9,331	4.60	11,664	5.75	9,331	4.60	11,664	5.75	18,662	9.19	23,328	11.49
GENERAL SERVICE < 50kW																					
Energy Audits for Industrial, Commercial and Institutional Customers (Cool Shops)	2006					308,503	14.96	353,899	17.83	308,503	14.96	353,899	17.83	308,503	14.96	353,899	17.83	925,509	44.88	1,061,696	53.50
11W CFL						9,199	0.33	10,221	0.37	9,199	0.33	10,221	0.37	9,199	0.33	10,221	0.37	0	0.00	0	0.00
15W CFL						91,524	2.12	101,693	2.35	91,524	2.12	101,693	2.35	91,524	2.12	101,693	2.35	27,598	1.00	30,664	1.11
23W CFL						716	0.03	795	0.03	716	0.03	795	0.03	716	0.03	795	0.03	2,147	0.09	2,386	0.10
27W CFL						12,067	0.34	13,408	0.37	12,067	0.34	13,408	0.37	12,067	0.34	13,408	0.37	36,201	1.01	40,224	1.12
BR15W and 16W						26,361	0.61	29,290	0.68	26,361	0.61	29,290	0.68	26,361	0.61	29,290	0.68	79,082	1.83	87,869	2.03
LED Exit Signs						79,613	8.63	99,516	10.79	79,613	8.63	99,516	10.79	79,613	8.63	99,516	10.79	238,838	25.90	298,547	32.38
PAR 20W and 23W						88,592	2.81	98,436	3.12	88,592	2.81	98,436	3.12	88,592	2.81	98,436	3.12	265,777	8.42	295,308	9.36
T8 32W 1x4'						432	0.09	540	0.12	432	0.09	540	0.12	432	0.09	540	0.12	1,296	0.28	1,620	0.35
STREET LIGHTING																					
Street Lighting										258,957	61.44	369,939	87.77	258,957	61.44	369,939	87.77	517,915	122.88	739,878	175.54
UNMETERED SCATTERED LOAD																					
Traffic Lights		99,397	15.47	141,996	22.10	584,300	115.45	834,714	164.93	724,373	118.13	1,034,819	168.76	724,373	118.13	1,034,819	168.76	2,132,444	367.18	3,046,348	524.55
OPA Programs																					
A Copy of the Program Measures by Year, Unit kWh Savings, Useful life, # of Units can be found on "OPA MEASURES" Tab																					
Residential																					
Cool & Hot Savings Rebate Program	2006-2007	134,283	124.45	170,112	151.32	349,402	267.98	592,626	452.61	349,402	267.98	592,626	452.61	349,402	267.98	592,626	452.61	1,182,488	928.38	1,947,991	1357.82
Cool Savings Rebate	2008-2009									233,397	147.85	406,305	256.68	599,837	385.76	1,037,069	668.33				
Secondary Fridge Retirement Pilot	2006	54,397	12.33	60,441	13.70	54,397	12.33	60,441	13.70	5,440	12.33	60,441	13.70	54,397	12.33	60,441	13.70	168,630	49.32	241,763	41.10
Great Refrigerator Roundup	2007-2009					122,263	14.82	302,900	36.38	407,043	45.23	828,517	92.92	642,011	76.43	1,313,530	157.74	1,171,318	136.48	2,444,947	287.04
Every Kilowatt Counts	2006-2007	3,484,316	41.09	3,871,463	45.66	4,773,834	91.03	5,630,706	117.96	4,758,064	86.34	5,602,032	109.44	4,758,064	86.34	5,602,032	109.44	17,774,278	304.80	20,706,233	336.84
peaksaver®	2007-2009						0.00			3,083	154.14	3,425	171.27	10,563	528.17	11,737	586.85	13,646	682.31	15,162	758.12
Summer Savings	2007					646	361.61	5,383	3,013.39	109	107.84	907	898.67	41	51.92	343	432.69	796	521.37	6,633	4344.75
Social Housing – Pilot	2007					117,201	13.79	117,201	13.79	117,201	13.79	117,201	13.79	117,201	13.79	117,201	13.79	351,602	41.36	351,602	41.36
Energy Efficiency Assistance for Houses – Pilot	2007					67,035	19.72	6,703	19.72	67,035	19.72	67,035	19.72	67,035	19.72	67,035	19.72	201,104	59.15	140,773	59.15
Summer Sweepstakes	2008									96	95.65	487,309	123.28	35	54.85	175,847	70.70	130	150.50	663,156	193.98
Every Kilowatt Counts Power Savings Event	2008-2009									1,184,784	64.61	2,938,449	154.75	1,496,565	87.50	3,407,575	198.88	2,681,348	152.11	6,346,024	353.62
General Service<50kW																					
OPA Conservation Programs																					
High Performance New Construction	2008-2009									3,392	4.02	4,846	5.74	107,986	49.90	154,266	71.28	111,378	53.91	159,112	77.02
Power Savings Blitz	2008-2009									2,189	0.30	2,354	0.32	3,280,882	442.79	3,527,830	476.12	3,283,071	443.10	3,530,184	476.45
General Service>50kW to 4,999kW																					
OPA Conservation Programs																					
Demand Response 1	2006 -2008		3136.94		3,136.94		3,669.01		3,669.01		5195.19		5195.19		2071.34		2071.34	0	14072.47	0	10935.53
Demand Response 2	2009														1808.36		1808.36				
Demand Response 3	2008										1004.64		1004.64		2009.29		2009.29	0	3013.93	0	3013.93
Electricity Retrofit Incentive Program	2007-2009										35.46		723,771		101.91		175.72	0	137.37	1,559,651	317.74
Electricity Resources Demand Response	2006-2009		153.54		153.54		308.46		308.46		419,457		343.92		484,481		377.13				

**ATTACHMENT B**

### Foregone Revenue by Class and Program

Regulate Revenue by Class and Program		2006				2007				2008				2009				
Class Program	Year Implemented	Load Unit	kWh or kW	Rate per Unit	Revenue	Load Unit	kWh or kW	Rate per Unit	Revenue	Load Unit	kWh or kW	Rate per Unit	Revenue	Load Unit	kWh or kW	Rate per Unit	Revenue	Total Revenue
Third Tranche																		
RESIDENTIAL																		
Geothermal Energy Program										980,674	kWh	0.0134	\$13,173.73	980,674	kWh	0.0134	\$13,141.04	\$26,314.76
Low Income Consumer Retrofit Program										84,217	kWh	0.0134	\$1,131.31	84,217	kWh	0.0134	\$1,128.51	\$2,259.82
																		\$28,574.58
GENERAL SERVICE < 50kW																		
Energy Audits for Industrial, Commercial and Institutional Customers (Cool Shops)										308,503	kWh	0.0107	\$3,311.27	308,503	kWh	0.0107	\$3,300.98	\$6,612.25
																		\$6,612.25
STREET LIGHTING																		
Street Lighting										61.44	kW	6.8734	\$5,079.54	61.44	kW	6.8828	\$5,072.24	\$10,151.78
UNMETERED SCATTERED LOAD																		
Traffic Lights		99,397	kWh	0.0106	\$1,041.19	584,300	kWh	0.0107	\$6,232.53	724,373.39	kWh	0.0106	\$7,702.50	724,373.39	kWh	0.0106	\$7,678.36	\$22,654.58
OPA Programs																		
Residential																		
Cool & Hot Savings Rebate Program		134,283	kWh	0.0134	\$1,769.17	349,402	kWh	0.0135	\$4,705.28	349,402	kWh	0.0134	\$4,693.63	349,402	kWh	0.0134	\$4,681.99	\$15,850.07
Cool Savings Rebate		0	kWh	0.0134	\$0.00	0	kWh	0.0135	\$0.00	233,397	kWh	0.0134	\$3,135.31	599,837	kWh	0.0134	\$8,037.82	\$11,173.12
Secondary Fridge Retirement Pilot		54,397	kWh	0.0134	\$716.68	54,397	kWh	0.0135	\$732.54	5,440	kWh	0.0134	\$73.07	54,397	kWh	0.0134	\$728.92	\$2,251.21
Great Refrigerator Roundup		0	kWh	0.0134	\$0.00	122,263	kWh	0.0135	\$1,646.48	407,043	kWh	0.0134	\$5,467.95	642,011	kWh	0.0134	\$8,602.95	\$15,717.38
Every Kilowatt Counts		3,484,316	kWh	0.0134	\$45,905.87	4,773,834	kWh	0.0135	\$64,287.64	4,758,064	kWh	0.0134	\$63,916.65	4,758,064	kWh	0.0134	\$63,758.05	\$237,868.21
peaksaver®		0	kWh	0.0134	\$0.00	0	kWh	0.0135	\$0.00	3,083	kWh	0.0134	\$41.41	10,563	kWh	0.0134	\$141.55	\$182.96
Summer Savings		0	kWh	0.0134	\$0.00	646	kWh	0.0135	\$8.70	109	kWh	0.0134	\$1.46	41	kWh	0.0134	\$0.55	\$10.71
Social Housing – Pilot		0	kWh	0.0134	\$0.00	117,201	kWh	0.0135	\$1,578.30	117,201	kWh	0.0134	\$1,574.40	117,201	kWh	0.0134	\$1,570.49	\$4,723.19
Energy Efficiency Assistance for Houses – Pilot		0	kWh	0.0134	\$0.00	67,035	kWh	0.0135	\$902.73	67,035	kWh	0.0134	\$900.50	67,035	kWh	0.0134	\$898.26	\$2,701.50
Summer Sweepstakes		0	kWh	0.0134	\$0.00	0	kWh	0.0135	\$0.00	96	kWh	0.0134	\$1.28	35	kWh	0.0134	\$0.46	\$1.75
Every Kilowatt Counts Power Savings Event		0	kWh	0.0134	\$0.00	0	kWh	0.0135	\$0.00	1,184,784	kWh	0.0134	\$15,915.59	1,496,565	kWh	0.0134	\$20,053.97	\$35,969.56
																		\$326,449.66
GENERAL SERVICE Less Than 50kW																		
OPA Conservation Programs																		
High Performance New Construction										3,392	kWh	0.0107	\$36.41	107,986	kWh	0.0107	\$1,155.45	\$1,191.86
Power Savings Blitz										2,189	kWh	0.0107	\$23.50	3,280,882	kWh	0.0107	\$35,105.44	\$35,128.94
																		\$36,320.80
General Service>50kW to 4,999kW																		
OPA Conservation Programs																		
Demand Response 1		3,136.94	kW	3.6218	\$133,446.69	3,669.01	kW	3.6531	\$160,379.68	5,195.19	kW	3.6275	\$226,678.40	2,071.34	kW	3.6325	\$90,248.16	\$610,752.93
Demand Response 2														1,808.36	kW	3.6325	\$78,790.12	\$78,790.12
Demand Response 3										1,004.64	kW	3.6275	\$43,834.98	2,009.29	kW	3.6325	\$87,544.57	\$131,379.55
Electricity Retrofit Incentive Program										35.46	kW	3.6275	\$1,547.12	101.91	kW	3.6325	\$4,440.09	\$5,987.21
Electricity Resources Demand Response		153.54	kW	3.6218	\$6,531.65	308.46	kW	3.6531	\$13,483.52	343.92	kW	3.6275	\$15,006.08	377.13	kW	3.6325	\$16,431.68	\$51,452.94
																		\$878,362.74

ATTACHMENT C  
SSM Amounts by Class and Program

Class	Total Costs \$	Total Benefits \$	Net Benefits \$	Benefits/C	SSM Amount \$
Program			NPV	ost Ratio	
Third Tranche					
RESIDENTIAL					
Geothermal Energy Program	\$775,000.00	\$965,634.37	\$190,634.37	1.25	\$9,531.72
Residential Energy Efficiency Project	\$78,680.00	\$0.00	-\$78,680.00		-\$3,934.00
Low Income Consumer Retrofit Program	\$24,424.00	\$0.00	-\$24,424.00		-\$1,221.20
Energy Conservation Information for Consumers	\$31,576.00	\$0.00	-\$31,576.00		-\$1,578.80
Low Income Consumer Retrofit Program	\$41,749.60	\$36,608.05	-\$5,141.55	0.88	-\$257.08
GENERAL SERVICE < 50kW					
Energy Audits for Industrial, Commercial and Institutional Customers (Cool Shops)	\$44,785.58	\$235,150.99	\$190,365.42	0.19	\$9,518.27
STREET LIGHTING					
Street Lighting	\$50,941.00	\$249,471.99	\$198,530.99	4.90	\$9,926.55
UNMETERED SCATTERED LOAD					
Traffic Lights	\$619,559.00	\$751,006.81	\$131,447.81		\$6,572.39
TOTALS	\$1,666,715.18	\$2,237,872.21	\$571,157.04		\$28,557.85

**ATTACHMENT D**  
**LRAM & SSM Totals**

**Rate Class**

	LRAM \$	SSM \$	TOTAL \$
<b><u>Third Tranche</u></b>			
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
<b><u>OPA Programs</u></b>			
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

ATTACHMENT E  
LRAM & SSM Input Assumptions

Class		Free Rider Rate		Number of Units		Table Applied		Discount Factor		Technology Life	
		LRAM	SSM	LRAM	SSM	LRAM	SSM	LRAM	SSM	LRAM	SSM
Program											
Third Tranche											
RESIDENTIAL											
Geothermal Energy Program		30%		114		Direct Input		6.51%		20	
Low Income Consumer Retrofit Program											
11W CFL		10%		138		OPA	OEB	6.51%		8	3
15W CFL		10%		624		OPA	OEB	6.51%		8	4
25W CFL		10%		174		OPA	OEB	6.51%		8	4
2 - T8 32W		10%		9		OPA	OEB	6.51%		5	
4 - T8 32W		10%		3		OPA	OEB	6.51%		5	4
1 - T8 32W		10%		48		OPA	OEB	6.51%		5	
15W CFL - COMMERCIAL		10%		147		OPA	OEB	6.51%		5	2
3W LED EXIT SIGN		10%		6		OPA	OEB	6.51%		25	
100W METAL HALIDE		10%		96		OPA	OEB	6.51%		5	3
GENERAL SERVICE 50 TO 4,999 kW											
Energy Audits for Industrial, Commercial and Institutional Customers (Cool Shops)											
11W CFL		10%		369		OPA	OEB	6.51%		8	4
15W CFL		10%		2,354		OPA	OEB	6.51%		8	4
23W CFL		10%		16		OPA	OEB	6.51%		8	4
27W CFL		10%		187		OPA	OEB	6.51%		8	4
BR15W and 16W		10%		678		OPA	OEB	6.51%		8	4
LED Exit Signs		10%		374		OPA	OEB	6.51%		25	20
PAR 20W and 23W		10%		1,560		OPA	OEB	6.51%		8	4
T8 32W 1x4'		10%		3		OPA	OEB	6.51%		5	
UNMETERED SCATTERED LOAD											
Traffic Lights						DIRECT INPUT					
Street Lighting						DIRECT INPUT					