



September 17, 2010

Kirsten Walli
Board Secretary
Ontario Energy Board,
2300 Yonge St.
Suite 2700, P.O. Box 2319
Toronto, Ontario
M4P 1E4

Dear Ms. Walli:

**Re: OEB File No. EB-2010-0104
Oakville Hydro Electricity Distribution Inc.
2011 Distribution Rate Adjustment Application**

Please find accompanying this letter, two copies of Oakville Hydro's Application for Electricity and Distribution Rates and Charges effective May 1, 2011.

As part of this Application, and in accordance with the requirements of the *Ontario Energy Board: Practice Direction on Confidential Filings*, Oakville Hydro is filing a redacted version of a report entitled *Transformer Station Supply Options Study*. Certain portions of the *Transformer Station Supply Options Study* will not be placed on the public or confidential record in this proceeding and have been redacted from both the public and confidential versions of the Study. Certain other portions of the Study will not be placed on the public record in this proceeding, but will be filed in confidence.

In keeping with the requirements of the Practice Direction, Oakville Hydro is filing a confidential unredacted version of the Study, subject to redaction of information from both the public and confidential versions of the Study. The unredacted version of the Study has been placed in a sealed envelope marked "Confidential" and filed with the Board Secretary, separately from this Application.

Should there be any questions, please contact me at the number below.

Respectfully Submitted,

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Oakville Hydro Electricity Distribution Inc.
2011 Distribution Rate Adjustment Application
(EB-2010-0104)
Effective May 1, 2011

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

AND IN THE MATTER OF an Application by
Oakville Hydro Electricity Distribution Inc. to the
Ontario Energy Board for an Order or Orders
approving or fixing just and reasonable rates and
other service charges for the distribution of
electricity as of May 1, 2011.

Table of Contents

Manager's Summary	3
Incentive Regulation Rate Adjustments	3
Proposed Adjustments	5
1. Price Cap Adjustment	5
2. Smart Meter Funding Adder	5
3. Low Voltage Service Charges	5
4. Revenue and Shared Savings Mechanism Rate Riders	5
5. Retail Transmission Service Rates	5
6. Current Deferral and Variance Account Rate Riders	6
7. Disposition of the Balances of Group 1 Deferral and Variance Accounts	6
8. Tax Changes	8
9. Incremental Capital Claim	9
10. Revenue to Cost Ratio Adjustments	21
11. Specific Service Charges and Loss Factors	21
12. Recovery of Late Payment Penalty Litigation Costs	22
Current Tariff Sheet	24
Proposed Tariff Sheet	28
Bill Impacts	32
Appendix A – Planning Study	47
Rate Generator and Supplemental Modules	224

Manager's Summary

Oakville Hydro Electricity Distribution Inc. (Oakville Hydro) is a corporation incorporated pursuant to the *Ontario Business Corporations Act* with its head office in the Town of Oakville. Oakville Hydro carries on the business of distributing electricity within the Town of Oakville.

Oakville Hydro hereby applies to the Ontario Energy Board (the "Board") pursuant to Section 78 of the *Ontario Energy Board Act, 1998* (the "OEB Act") for approval of its proposed adjustments to its distribution rates and other charges, effective May 1, 2011.

Oakville Hydro has followed *Chapter 3 of the Board's Filing Requirements for Transmission and Distribution Applications* dated July 9, 2010 in order to prepare this application.

Incentive Regulation Rate Adjustments

The Schedule of Rates and Charges proposed in this Application is provided on page 28. The proposed rates reflect an adjustment to the rates previously approved by the Board in the rate order issued by the Board on April 30, 2010, Board File EB-2009-0271. The proposed adjustments include:

1. A price cap adjustment;
2. The continuation of the current smart meter funding adder as approved in EB-2009-0271;

3. The continuation of the current low voltage service charges as approved in EB-2009-0271;
4. The continuation of the current lost revenue and shared savings mechanism rate riders as approved in EB-2009-0271;
5. The approval for the proposed adjustments to the current Retail Transmission Service Rates as approved in EB-2009-0271;
6. The continuation of the current deferral and variance account rate riders as approved in EB-2009-0271;
7. That the rate rider for the disposition of the balances of Group 1 deferral and variance accounts be deferred;
8. A rate rider for proposed tax changes;
9. A rate adder for the incremental capital costs associated with the design and construction of a municipal transformer station in north Oakville;
10. Revenue to cost ratio adjustments;
11. The continuation of existing specific service charges and loss factors as approved in EB-2009-0271 and;
12. Recovery of late payment penalty litigation costs.

These details of these adjustments are provided in the models that accompany this application and are summarized in the following pages.

Proposed Adjustments

1. Price Cap Adjustment

Oakville Hydro has calculated the price cap adjustment of 0.18%. This calculation is based upon a price escalator of 1.3%, an X-factor of 0.72% and the proxy stretch factor of 0.4%. Oakville Hydro acknowledges that the Board may update Oakville Hydro's Rate Generator Model with the updated price escalator and adjust the stretch factor.

2. Smart Meter Funding Adder

Pursuant to the Decision in proceeding E B-2009-0271, Oakville Hydro will continue with the current smart meter funding adder of \$1.69 per metered customer.

3. Low Voltage Service Charges

Pursuant to the Decision in proceeding E B-2009-0271, Oakville Hydro will continue with the current low voltage service charges.

4. Revenue and Shared Savings Mechanism Rate Riders

Pursuant to the Decision in proceeding E B-2009-0271, Oakville Hydro will continue with the current revenue and shared savings mechanism rate riders which have a sunset date of April 30, 2014.

5. Retail Transmission Service Rates

Oakville Hydro has calculated the adjustment to the current retail transmission service rates as approved in its 2010 Cost of Service Application, EB-2009-0271.

The detailed calculations may be found in the *2011 R TSR Adjustments Work Form* that accompanies this application.

6. Current Deferral and Variance Account Rate Riders

Pursuant to the Decision in proceeding E B-2009-0271, Oakville Hydro will continue with the deferral and variance account rate riders which have a sunset date of April 30, 2013.

7. Disposition of the Balances of Group 1 Deferral and Variance Accounts

In its decision on Oakville Hydro's 2010 COS application the Board approved the disposition of Oakville Hydro's deferral and variance account balances as at December 31, 2008. The rate rider, effective May 1, 2010 has a sunset date of April 30, 2013.

The *2011 IRM Deferral and Variance Account Work Form* that accompanies this application calculates the balances of the Group 1 variance accounts that have accumulated in 2009 since the last disposition of balances. Oakville Hydro has given consideration to the disposal of the balance of Group 1 Deferral and Variance accounts of \$ (3,807,145) and is not proposing that the balances be disposed of at this time for two reasons:

- i. The Report of the Board on Electricity Distributors' Deferral and Variance Account Review Report (the "EDDVAR Report") provides that during the IRM plan term, a distributor's Group 1 audited account balances will be reviewed and disposed if the preset disposition threshold of \$0.001 per

kWh (debit or credit) is exceeded." Although the Group 1 balance of \$(3,807,145) owing at the end of 2009, exceeds the Threshold Test, Oakville Hydro has looked at its most recent Group 1 balances as at August 31, 2010 which yield an amount owing of only \$(1,186,618). This is a significant change in the balance in Group 1 accounts. The major contributors to this change are the Global Adjustment, Power and Network Service Charges.

Since the current balances do not exceed the preset disposition threshold of \$0.001 per kWh, Oakville Hydro does not believe that it is prudent to dispose of the balances of the Group 1 accounts at this time.

Threshold Test

Rate Class	Billed kWh
Residential	557,127,208
General Service 50 to 499 kW	173,390,609
General Service 50 to 999 kW	594,844,951
General Service Greater Than 1,000 kW	147,132,426
Unmetered Scattered Load	3,881,044
Sentinel Lighting	135,511
Street Lighting	11,730,313
Total	1,488,242,062
Total Claim - December 31, 2009 Balances	(3,807,145)
Total Claim per kWh	-0.0026
Total Claim - August 31, 2010 Balances	(1,186,618)
Total Claim per kWh	-0.0008

- ii. Should this trend continue, Oakville Hydro may be in a debit position and may be required to request approval for a rate rider to recover the debit

balance in its next IRM application. Oakville Hydro wishes to minimize rate instability for its customers to stabilize rates and minimize customer confusion.

Oakville Hydro has entered the 2005 opening balance of the Group 1 accounts in the *2011 IRM Deferral and Variance Account Work Form, Tab D1.1, Column L* and the amounts approved for disposition in its 2006 EDR in *Tab D1.2, Column L*.

8. Tax Changes

The Board has determined that currently known legislated tax changes will be reflected in IRM adjustments and that a 50/50 sharing of those tax changes between Oakville Hydro and its rate payers is appropriate. Based upon Oakville Hydro's taxable income of \$4,922,783 from its 2010 Cost of Service Application, Oakville Hydro hereby requests approval of a rate rider with a sunset date of April 30, 2012 to share incremental tax savings of \$359,000 with ratepayers. This reflects a 50% share of the incremental tax savings of \$179,500 that have arisen as a result of the elimination of the capital tax and a reduction in corporate tax rates in the year 2011.

Tax Calculations		2010 COS
Deemed Utility Income		5,156,347
Tax Adjustments to Accounting Income		(233,563)
Taxable Income prior to adjusting revenue to PILs		4,922,783

9. Incremental Capital Claim

Oakville Hydro requests the approval of a rate adder to recover amounts through rates related to non-discretionary, incremental capital investments.

Chapter 3 of the *Filing Requirements for Transmission and Distribution Applications* requires that incremental capital expenditures satisfy the eligibility criteria in order to be considered for recovery prior to rebasing. Applicants must demonstrate that amounts exceed the Board-defined materiality threshold and clearly have a significant influence on the operation of the distributor, must be clearly non-discretionary and the amounts must be clearly outside of the base upon which rates were derived. In addition, the decision to incur the amounts must represent the most cost-effective option for ratepayers.

Oakville Hydro submits that its claim for the recovery of incremental capital expenditures related to the design and construction of a municipal transformer station to provide relief for the critical shortage of supply to Oakville and to meet the requirements of the Town of Oakville's planned development in North East Oakville (the area is bounded by Highway 407 to the north, Ninth Line to the east, Dundas Street to the south and Sixteen Mile Creek to the west) exceeds the materiality threshold, is clearly non-discretionary and that the expenditures have not previously been included in Oakville Hydro's Board approved rate base.

The municipal transformer station has an in-service date of June 2011. If there is a failure of a single critical component at one of the local Hydro One stations prior to that date, the Town of Oakville could experience wide-scale blackouts.

a. ICM Threshold

The *2011 IRM3 Incremental Capital Work Form* issued by the OEB on April 10, 2010 calculates the Board-defined materiality threshold. This calculation is based upon Oakville Hydro's 2010 Cost of Service application. *Tab E2.1* of the *2011 IRM3 Incremental Capital Work Form* is reproduced below and provides the threshold for capital expenditures of \$13,633,026.

Materiality Threshold Test

Year	2010
Status	Re-Basing
Price Cap Index	0.18%
Growth	1.24%
Dead Band	20%
Average Net Fixed Assets	
Gross Fixed Assets Opening	\$ 187,960,573
Add: CWIP Opening	\$ 7,285,640
Capital Additions	\$ 14,721,227
Capital Disposals	\$ -
Capital Retirements	\$ -
Deduct: CWIP Closing	-\$ 7,285,640
Gross Fixed Assets - Closing	\$ 202,681,800
Average Gross Fixed Assets	<u>\$ 195,321,187</u>
Accumulated Depreciation - Opening	\$ 79,297,219
Depreciation Expense	\$ 9,807,682
Disposals	\$ -
Retirements	\$ -
Accumulated Depreciation - Closing	\$ 89,104,901
Average Accumulated Depreciation	<u>\$ 84,201,060</u>
Average Net Fixed Assets	<u>\$ 111,120,127</u>
Working Capital Allowance	
Working Capital Allowance Base	\$ 131,677,443
Working Capital Allowance Rate	15%
Working Capital Allowance	<u>\$ 19,751,616</u>
Rate Base	<u>\$ 130,871,743</u>
Depreciation	D \$ 9,807,682
Threshold Test	139.00%
Threshold CAPEX	\$ 13,633,026

In its decision on Oakville Hydro's 2010 Cost of Service Application, EB-2009-0271, the Board approved 2010 capital expenditures of \$14,721,227. Oakville Hydro's 2011 forecasted capital expenditures are \$32,228,000, including the forecasted cost of \$20,488,000 (rounded) to design and construct

a municipal transformer station. These costs clearly exceed the Board-defined threshold of \$13,633,026.

Oakville Hydro Electricity Distribution Inc.
2011 Preliminary Budget

Category	2011
Substations	750,000
Transformer Stations	20,488,000
Rebuild for Road Widening / Railway Work	165,000
Alterations & Improvements for Load Transfer & Sys Sec.	300,000
Voltage Conversion	280,000
Transformer Replacements	150,000
27.6 kV Additions	2,000,000
Rebuild Underground Distribution System	1,500,000
Rebuild Overhead Distribution System	3,500,000
Services	600,000
Supervisory Control & Communications	300,000
Metering	500,000
Vehicles	500,000
Tools	150,000
Information Technology	930,000
Buildings	115,000
Total Budget	32,228,000

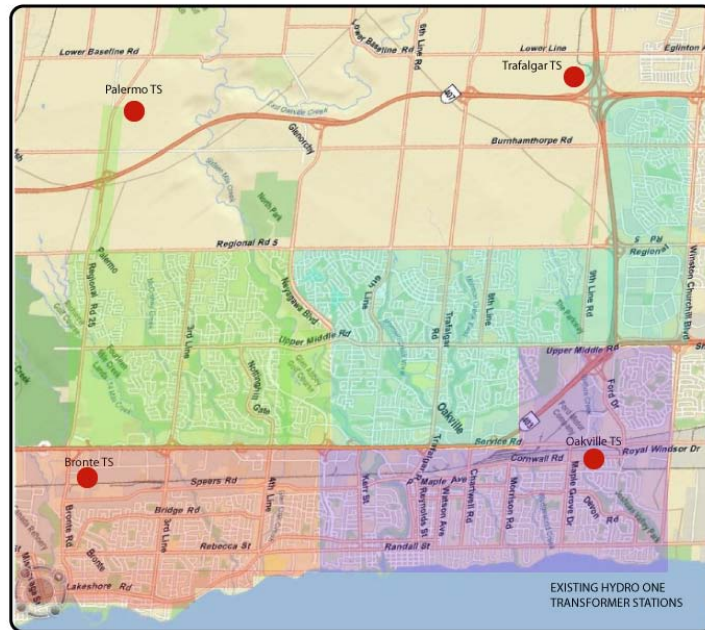
b. Project Details

Oakville Hydro's distribution system, serving Oakville, is currently connected to, and served by four transformer stations, all owned and operated by Hydro One. In 2008, Oakville Hydro retained an independent consultant to conduct a study of capacity alternatives required to meet forecasted load growth and to address shortfalls of supply from existing Hydro One transformer stations. This work included a load forecast review, preparation of preliminary budgets, a assessment of operational

impacts, development of project schedules, coordination of financial and regulatory impact analysis performed by others, and recommendations for the supply of new capacity. As part of this application, Oakville Hydro is filing a redacted version of the consultant's report, the Transformer Station Supply Options Study, for the reasons outlined on page 47.

The Transformer Station Supply Options Study includes an engineering load forecast. The load forecast was based on the best information available at the time developed, which included the most recent best planning estimates of population and employment provided by the Region of Halton and Town of Oakville, and is subject to change. As such, the load forecast should not be used for purposes other than assessing the need for the new transformer station.

Existing Hydro One Transformer Stations



Originally, the load forecast indicated that new capacity would be required by 2012 to meet planned development in the North Oakville area. It was also known that one of the local Hydro One transformer stations was overloaded under certain operating conditions. At the time, this was not considered a critical concern, as it was believed that there was sufficient capacity to move this overload to adjacent stations if necessary.

By the end of 2008, additional problems with other Hydro One stations were uncovered, and it became evident that there was a critical shortage of supply to Oakville. Before factoring in the impact of new load in North Oakville, there was a shortfall of supply capacity in the range of 28 MW

due to the equipment problems at several local Hydro One stations. Hydro One indicated that necessary repairs and upgrades would be completed by the end of 2012. If there was a failure of a single critical component at one of the local Hydro One stations prior to that, Oakville could experience wide-scale blackouts. New transformer station capacity was urgently required to provide relief for reduced capacity from Hydro One stations and to accommodate new load growth.

Electricity Capacity and Demand - Oakville				
Transformer Stations				
	Bronte	Palermo	Trafalgar	Oakville
Allocated Capacity (MW)	81	70	89	82
Total Allocated Capacity	322			
2007 Peak Demand (MW)	91	68	84	107
Total 2007 Peak Demand	350			
Remaining Capacity	-10	2	5	-25
Total Remaining Capacity	-28			
North Oakville (MW)	133			
Total Forecasted Demand (MW)	483			
Capacity (MW)	-161			

c. Supply Options

In their Transformer Station Supply Options Study, the independent consultant proposed three options that would provide sufficient transformer station capacity for Oakville Hydro for the next 25 years, based on current load forecasts.

- **Oakville Hydro Self Build**

Oakville Hydro would design and construct a 170 MVA (153 MW) municipal transformer station, to be owned by Oakville Hydro or jointly owned with Milton Hydro. The municipal transformer station would be in-service by summer 2011.

The preliminary budget for this project was \$20.5M. If owned by Oakville Hydro this option would provide enough capacity to service all of the forecasted growth in the north Oakville area. If the capacity was shared with Milton Hydro, it would provide local capacity for about ten years.

- **Oakville – Milton Co-ownership Option**

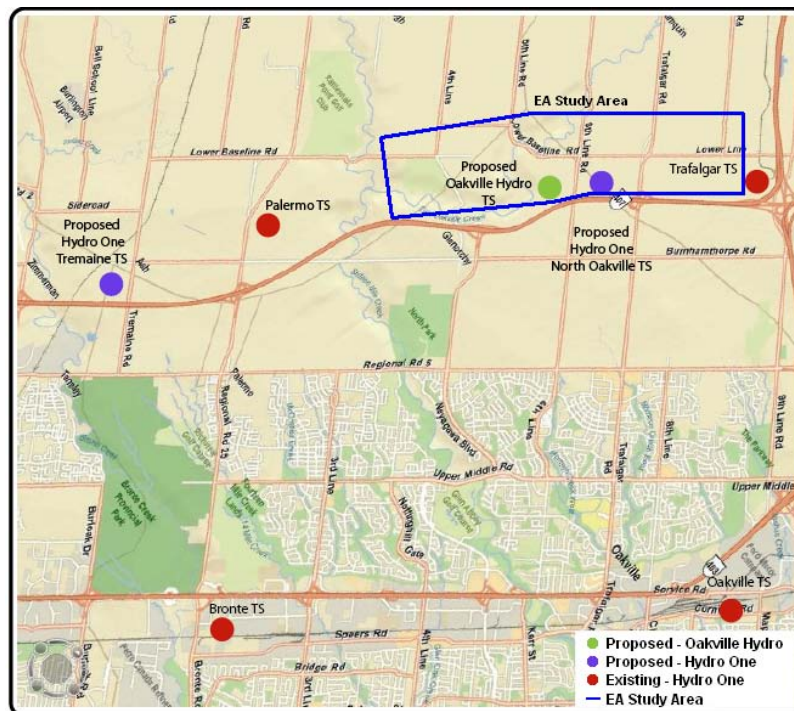
If Oakville Hydro elected to co-own the transformer station a second municipal transformer station would be necessary in 2022. Co-operation with Milton Hydro would allow for the construction of the second station to be scheduled according to the load requirements at that time.

- **Hydro One Options**

Hydro One proposed two options. The first option was for the construction of a transformer station, Tremaine TS, to be ready for service in 2012 that would provide new capacity for Oakville Hydro, Burlington Hydro and Milton Hydro. The proposed location of the transformer station would be located west of Oakville Hydro's service territory.

Oakville Hydro requested a second estimate for the construction of a transformer station in the north central area of Oakville. Oakville Hydro requested a proposal for this facility since Hydro One's first proposal provided capacity for only a small portion of the planned growth in North-Oakville. This proposal provides a direct comparison of the costs of the Oakville Hydro self-build option. Hydro One's preliminary budget was significantly higher than Oakville Hydro's self-build preliminary budgetary estimate of \$20.5M.

Proposed Location of New Transformer Stations



d. Updated Budget

Oakville Hydro's updated budget, excluding the Harmonized Sales Tax, is provided in the following table. The capital contribution represents the amount payable to Hydro One to design, construct and operate a new double circuit line to Oakville Hydro's new transformer station in North Oakville. These costs include an estimate of capitalized interest expense of \$710,667. This estimate is based upon a proposed financing agreement with Infrastructure Ontario for a loan in the amount of \$20M to be financed at a rate of 5.33% over 20 years. This rate is subject to change as it is updated daily.

**Capital Spending
North Oakville Transformer Station**

Component	2009 Actual	2010 Bridge Year	2011 Test Year	Total
Substation Equipment	41,318	1,153,895	953,200	2,148,412
TS Switchgear - Gas	105,695	2,881,682	138,277	3,125,654
TS Transformer	279,321	3,713,203	4,323,241	8,315,765
Revenue Meters	14,828	288,960	159,148	462,936
SCADA & DC Systems	4,542	100,722	29,108	134,371
UG Cable	-	193,930	93,198	287,128
Duct & Civil	-	1,150,275	552,791	1,703,066
Building	-	1,792,250	861,221	2,653,470
Land	-	1,367,700	49,786	1,417,486
Capital Contribution	-	120,200	120,000	240,200
Total	445,703	12,762,816	7,279,970	20,488,489

e. Recommendations

In its report, the independent consultant recommended that Oakville Hydro fully explore the co-ownership of the transformer station with Milton Hydro. However, the economic downturn had delayed Milton Hydro's requirement for additional capacity and co-ownership was no longer an option. It was recommended that Oakville Hydro should design, construct, and operate its own municipal transformer station. This was the lowest cost option for Oakville Hydro. Oakville Hydro began design in 2009 and the transformer station will be in service in June 2011.

f. Incremental Capital Rate Adder

Oakville Hydro requests the approval of an incremental rate adder to recover the incremental revenue requirement of \$1,887,890. The incremental capital adjustment is calculated in Tab E4.1 of the *2011 IRM3 Incremental Capital Work Form* and is reproduced below. Oakville Hydro is proposing that it recover the incremental revenue requirement through a variable rate adder effective May 1, 2011 with a sunset date of April 30, 2014.

Current Revenue Requirement	
Current Revenue Requirement - Total	\$ 31,250,204

Return on Rate Base	
Incremental Capital CAPEX	\$ 19,919,131
Depreciation Expense	\$ 569,357
Incremental Capital CAPEX to be included in Rate Base	\$ 19,349,773
Deemed ShortTerm Debt %	4.0% E \$ 773,991
Deemed Long Term Debt %	56.0% F \$ 10,835,873
Short Term Interest	2.07% I \$ 16,022
Long Term Interest	5.87% J \$ 636,066
Return on Rate Base - Interest	\$ 652,087
Deemed Equity %	40.0% N \$ 7,739,909
Return on Rate Base -Equity	9.85% O \$ 762,381
Return on Rate Base - Total	\$ 1,414,468

Amortization Expense	
Amortization Expense - Incremental	C \$ 569,357

Grossed up PIL's	
Regulatory Taxable Income	O \$ 762,381
Add Back Amortization Expense	S \$ 569,357
Deduct CCA	\$ 1,575,397
Incremental Taxable Income	-\$ 243,659
Current Tax Rate (F1.1 Z-Factor Tax Changes)	28.3% X
PIL's Before Gross Up	-\$ 68,834
Incremental Grossed Up PIL's	-\$ 95,935

Ontario Capital Tax	
Incremental Capital CAPEX	\$ 19,919,131
Less : Available Capital Exemption (if any)	\$ -
Incremental Capital CAPEX subject to OCT	\$ 19,919,131
Ontario Capital Tax Rate (F1.1 Z-Factor Tax Changes)	0.000% AD
Incremental Ontario Capital Tax	\$ -

Incremental Revenue Requirement	
Return on Rate Base - Total	Q \$ 1,414,468
Amortization Expense - Total	S \$ 569,357
Incremental Grossed Up PIL's	Z \$ 95,935
Incremental Ontario Capital Tax	AE \$ -
Incremental Revenue Requirement	\$ 1,887,890

10. Revenue to Cost Ratio Adjustments

In its 2010 Cost of Service Application, EB-2009-0271, Oakville Hydro proposed that its revenue to cost ratios for the Sentinel Lighting and Street Lighting rate classes move half way to the target level of 70% in 2010 and then move the rest of the way over the following two years. Oakville Hydro proposes that the upward adjustment to the Sentinel Lighting and Street Lighting rate classes be distributed proportionately between the Residential and General Service Greater Than 50 kW rate classes to mitigate rate impact for residential customers and to bring the revenue to cost ratios closer to the mid-point of the target range.

Revenue to Cost Ratio Adjustments

Rate Class	2010 Rebasing	2011 Proposed	Target Range	Distribution Revenue Adjustment
Residential	109.1	107.6	85 - 115	(\$251,688.18)
General Service Less Than 50 kW	114.3	114.3	80 - 120	-
General Service 50 to 999 kW	85.0	85.0	80 - 180	-
General Service Greater Than 1,000 kW	131.8	130.3	80 - 180	(\$16,899.58)
Unmetered Scattered Load	120.0	120.0	80 - 120	-
Sentinel Lighting	36.8	53.4	70 - 120	\$28,172.76
Street Lighting	40.6	55.3	70 - 120	\$240,414.90

11. Specific Service Charges and Loss Factors

Pursuant to the Decision in proceeding EB-2009-0271, Oakville Hydro will continue with the current Specific Service Charges and loss factors.

12. Recovery of Late Payment Penalty Litigation Costs

- i.** As part of this application, Oakville Hydro Electricity Distribution Inc. (Oakville Hydro) will be seeking recovery of a one-time expense in the amount of \$258,864 which is expected to be paid on June 30, 2011. If this payment is made, it will serve to resolve long-standing litigation against all former municipal electric utilities (“MEUs”) in the Province in relation to late payment penalty (“LPP”) charges collected pursuant to, first, Ontario Hydro rate schedules and, after industry restructuring, Ontario Energy Board rate orders (the “LPP Class Action”).
- ii.** On July 22, 2010, The Honourable Mr. Justice Cumming of the Ontario Superior Court of Justice approved a settlement of the LPP Class Action, the principal terms of which are the following:

 - a) Former MEUs collectively pay \$17 million in damages;
 - b) Payment is not due until June 30, 2011; and
 - c) Amounts paid, after deduction for class counsel fee, will be paid to the Winter Warmth Fund or similar charities.
- iii.** Subject to the right of the MEUs to terminate the settlement if more than 10,000 plaintiff class members opt out of the settlement by September 23, 2010, Oakville Hydro will make a payment of \$258,863.84 by June 30, 2011. This amount represents Oakville Hydro’s share of the settlement, applicable taxes and legal fees. Oakville Hydro believes that the settlement is in its best

interest and the best interest of its customers and that the payment in connection with the settlement will be a prudent one.

- iv. Oakville Hydro, along with all other electricity distributors filing for cost of service and IRM applications for 2011 electricity distribution rates (the “LDCs”), proposes that, following September 23, 2010, the Board hold a generic hearing to determine if all costs and damages incurred in this litigation and settlement are recoverable from customers and, if so, the form and timing of recovery from customers. If the Board agrees to hold this generic hearing, the LDCs will collectively file written evidence to address the prudence of the settlement, the costs incurred, the methodology of allocating total settlement costs amongst the LDCs, the proposed method of recovery, and any other matters the Board determines appropriate.
- v. If the Board determines that it will not hold a generic proceeding, Oakville Hydro asks to be advised of this fact as soon as possible so that it can file, to permit adjudication as part of this proceeding, written evidence to address the prudence of the settlement, the costs incurred, the methodology of allocating total settlement costs amongst the LDCs, the proposed method of recovery, and any other matters the Board determines appropriate.

Dated at Oakville Hydro, Ontario, this 17th day of September, 2010

Lesley Gallinger
Chief Financial Officer

Current Tariff Sheet

Oakville Hydro's current tariff sheet is provided in the following pages.

Oakville Hydro Electricity Distribution Inc.

CURRENT TARIFF OF RATES AND CHARGES

CURRENT MONTHLY RATES AND CHARGES

Residential

Monthly Rates and Charges - Electricity Component

Rate Rider for Global Adjustment Sub-Account Disposition (2010) - Effective until April 30, 2013	\$/kWh	(0.00010)
Applicable only for Non-RPP Customers		

Monthly Rates and Charges - Delivery Component

Service Charge	\$	13.25
Service Charge Smart Meters	\$	1.69
Distribution Volumetric Rate	\$/kWh	0.0145
Low Voltage Volumetric Rate	\$/kWh	0.0002
Distribution Volumetric Def Var Disp 2010 – effective until April 30, 2013	\$/kWh	(0.0015)
Distribution Volumetric Lost Revenue Adjustment Mechanism (LRAM) Recovery/Shared Savings Mechanism (SSM) Recovery – effective until April 30, 2014	\$/kWh	0.0003
Retail Transmission Rate – Network Service Rate	\$/kWh	0.0055
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0046

Monthly Rates and Charges - Regulatory Component

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

General Service Less Than 50 kW

Monthly Rates and Charges - Electricity Component

Rate Rider for Global Adjustment Sub-Account Disposition (2010) - Effective until April 30, 2013	\$/kWh	(0.00010)
Applicable only for Non-RPP Customers		

Monthly Rates and Charges - Delivery Component

Service Charge	\$	32.54
Service Charge Smart Meters	\$	1.69
Distribution Volumetric Rate	\$/kWh	0.0143
Low Voltage Volumetric Rate	\$/kWh	0.0002
Distribution Volumetric Def Var Disp 2010 – effective until April 30, 2013	\$/kWh	(0.0015)
Retail Transmission Rate – Network Service Rate	\$/kWh	0.0051
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0042

Monthly Rates and Charges - Regulatory Component

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

General Service 50 to 999 kW

Monthly Rates and Charges - Electricity Component

Rate Rider for Global Adjustment Sub-Account Disposition (2010) - Effective until April 30, 2013	\$/kWh	(0.00010)
Applicable only for Non-RPP Customers		

Monthly Rates and Charges - Delivery Component

Service Charge	\$	116.64
Service Charge Smart Meters	\$	1.69
Distribution Volumetric Rate	\$/kW	3.6216
Low Voltage Volumetric Rate	\$/kW	0.0638
Distribution Volumetric Def Var Disp 2010 – effective until April 30, 2013	\$/kW	(0.5997)
Distribution Volumetric Lost Revenue Adjustment Mechanism (LRAM) Recovery/Shared Savings Mechanism (SSM) Recovery – effective until April 30, 2014	\$/kW	0.0033
Retail Transmission Rate – Network Service Rate	\$/kW	1.9161
Retail Transmission Rate – Network Service Rate – Interval metered (if applicable)	\$/kW	1.9781
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	1.5762
Retail Transmission Rate – Line and Transformation Connection Service Rate – Interval metered (if applicable)	\$/kW	1.6273

Monthly Rates and Charges - Regulatory Component

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

General Service Greater Than 1,000 kW

Monthly Rates and Charges - Electricity Component

Rate Rider for Global Adjustment Sub-Account Disposition (2010) - Effective until April 30, 2013 Applicable only for Non-RPP Customers	\$/kWh	(0.00010)
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Monthly Rates and Charges - Delivery Component

Service Charge	\$	3,417.13
Service Charge Smart Meters	\$	1.69
Distribution Volumetric Rate	\$/kW	1.8664
Low Voltage Volumetric Rate	\$/kW	0.0638
Distribution Volumetric Def Var Disp 2010 – effective until April 30, 2013	\$/kW	(0.9410)
Distribution Volumetric Lost Revenue Adjustment Mechanism (LRAM) Recovery/Shared Savings Mechanism (SSM) Recovery – effective until April 30, 2014	\$/kW	(0.0014)
Retail Transmission Rate – Network Service Rate	\$/kW	1.9781
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	1.6273

Monthly Rates and Charges - Regulatory Component

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

Unmetered Scattered Load

Monthly Rates and Charges - Electricity Component

Rate Rider for Global Adjustment Sub-Account Disposition (2010) - Effective until April 30, 2013 Applicable only for Non-RPP Customers	\$/kWh	(0.00010)
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Monthly Rates and Charges - Delivery Component

Service Charge (per connection)	\$	11.40
Distribution Volumetric Rate	\$/kWh	0.0106
Low Voltage Volumetric Rate	\$/kWh	0.0002
Distribution Volumetric Def Var Disp 2010 – effective until April 30, 2013	\$/kWh	(0.0015)
Retail Transmission Rate – Network Service Rate	\$/kWh	0.0051
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0042

Monthly Rates and Charges - Regulatory Component

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

Sentinel Lighting

Monthly Rates and Charges - Electricity Component

Rate Rider for Global Adjustment Sub-Account Disposition (2010) - Effective until April 30, 2013 Applicable only for Non-RPP Customers	\$/kWh	(0.00010)
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Monthly Rates and Charges - Delivery Component

Service Charge (per connection)	\$	1.48
Distribution Volumetric Rate	\$/kW	25.0161
Low Voltage Volumetric Rate	\$/kW	0.0124
Distribution Volumetric Def Var Disp 2010 – effective until April 30, 2013	\$/kW	(0.7549)
Retail Transmission Rate – Network Service Rate	\$/kW	0.3841
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	0.3159

Monthly Rates and Charges - Regulatory Component

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

Street Lighting

Monthly Rates and Charges - Electricity Component

Rate Rider for Global Adjustment Sub-Account Disposition (2010) - Effective until April 30, 2013 Applicable only for Non-RPP Customers	\$/kWh	(0.00010)
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Monthly Rates and Charges - Delivery Component

Service Charge (per connection)	\$	1.70
Distribution Volumetric Rate	\$/kW	10.3987
Low Voltage Volumetric Rate	\$/kW	0.0516
Distribution Volumetric Def Var Disp 2010 – effective until April 30, 2013	\$/kW	(0.7041)
Retail Transmission Rate – Network Service Rate	\$/kW	1.5986
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	1.3150

Monthly Rates and Charges - Regulatory Component

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

microFIT Generator

Service Charge	\$	5.25
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CURRENT SPECIFIC SERVICE CHARGES**Customer Administration**

Statement of account	\$	15.00
Pulling post dated cheques	\$	15.00
Duplicate invoices for previous billing	\$	15.00
Easement letter	\$	15.00
Account history	\$	15.00
Credit reference/credit check (plus credit agency costs)	\$	15.00
Returned cheque charge (plus bank charges)	\$	15.00
Account set up charge/change of occupancy charge (plus credit agency costs if applicable)	\$	30.00
Special meter reads	\$	30.00
Meter dispute charge plus Measurement Canada fees (if meter found correct)	\$	30.00

Non-Payment of Account

Late Payment - per month	%	1.50
Late Payment - per annum	%	19.56
Collection of account charge - no disconnection - after regular hours	\$	30.00
Disconnect/Reconnect at meter - during regular hours	\$	65.00
Disconnect/Reconnect at meter - after regular hours	\$	185.00
Disconnect/Reconnect at pole - during regular hours	\$	185.00
Disconnect/Reconnect at pole - after regular hours	\$	415.00

Other

Temporary service install & remove - overhead - no transformer	\$	500.00
Temporary service install & remove - underground - no transformer	\$	300.00
Specific Charge for Access to the Power Poles \$/pole/year	\$	22.35

Allowances

Transformer Allowance for Ownership - per kW of billing demand/month	\$/kW	(0.50)
Primary Metering Allowance for transformer losses - applied to measured demand and energy	%	(1.00)

Current Retail Service Charges (if applicable)**Retail Service Charges (if applicable)**

Retail Service Charges refer to services provided by a distributor to retailers or customers related to the supply of competitive electricity

One-time charge, per retailer, to establish the service agreement between the distributor and the retailer	\$	100.00
Monthly Fixed Charge, per retailer	\$	20.00
Monthly Variable Charge, per customer, per retailer	\$/cust.	0.50
Distributor-consolidated billing charge, per customer, per retailer	\$/cust.	0.30
Retailer-consolidated billing credit, per customer, per retailer	\$/cust.	(0.30)

Service Transaction Requests (STR)

Request fee, per request, applied to the requesting party	\$	0.25
Processing fee, per request, applied to the requesting party	\$	0.50
Request for customer information as outlined in Section 10.6.3 and Chapter 11 of the Retail Settlement Code directly to retailers and customers, if not delivered electronically through the Electronic Business Transaction (EBT) system, applied to the requesting party		
Up to twice a year		no charge
More than twice a year, per request (plus incremental delivery costs)	\$	2.00

LOSS FACTORS

Total Loss Factor - Secondary Metered Customer < 5,000 kW	1.0377
Total Loss Factor - Secondary Metered Customer > 5,000 kW	1.0147
Total Loss Factor - Primary Metered Customer < 5,000 kW	1.0273
Total Loss Factor - Primary Metered Customer > 5,000 kW	1.0047

Proposed Tariff Sheet

Oakville Hydro requests a approval o f i ts vol umeric rates to s ix di gits. The following table provides the proposed rates to six digits. Oakville Hydro asks that the Board alter the *2011 IRM Rate Generator* to allow for the creation of a proposed tariff sheet rounded to 6 digits.

Proposed Distribution Rates Rounded to Six Digits

Rate Class	Current Rates (A)		Revenue to Cost Ratio (B)		Price Cap Adjustment (C)		Proposed Rates (A)+(B)+ (C)	
	KWH	KW	KWH	KW	KWH	KW	KWH	KW
Billing Determinant								
Residential	0.014500		-0.000212		0.000026		0.014314	
General Service <50	0.014300				0.000026		0.014326	
General Service >50		3.621600				0.006519		3.628119
General Service >1000		1.886400		-0.026761		0.003311		1.862950
Unmetered Scattered Load	0.010600				0.000019		0.010619	
Sentinel Lighting		25.016100		11.301112		0.065371		36.382583
Streetlighting		10.398700		3.821775		0.025597		14.246072

The tariff sheet generated by the *2011 IRM Rage Generator* is provided in the following pages.

Oakville Hydro Electricity Distribution Inc.
TARIFF OF RATES AND CHARGES
Effective May 1, 2011

EB-2010-0104

MONTHLY RATES AND CHARGES

Applied For Monthly Rates and Charges

Residential

Monthly Rates and Charges - Electricity Component

Rate Rider for Global Adjustment Sub-Account Disposition (2010) - Effective until April 30, 2013 Applicable only for Non-RPP Customers	\$/kWh	(0.00010)
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Monthly Rates and Charges - Delivery Component

Service Charge	\$	13.08
Service Charge Smart Meters	\$	1.69
Distribution Volumetric Rate	\$/kWh	0.0143
Low Voltage Volumetric Rate	\$/kWh	0.0002
Distribution Volumetric Def Var Disp 2010 – effective until April 30, 2013	\$/kWh	(0.0015)
Distribution Volumetric Lost Revenue Adjustment Mechanism (LRAM) Recovery/Shared Savings Mechanism (SSM) Recovery – effective until April 30, 2014	\$/kWh	0.0003
Distribution Volumetric Tax Change – effective until April 30, 2012	\$/kWh	(0.0002)
Distribution Volumetric Incremental Capital – effective until April 30, 2013	\$/kWh	0.0019
Retail Transmission Rate – Network Service Rate	\$/kWh	0.0061
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0044

Monthly Rates and Charges - Regulatory Component

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

General Service Less Than 50 kW

Monthly Rates and Charges - Electricity Component

Rate Rider for Global Adjustment Sub-Account Disposition (2010) - Effective until April 30, 2013 Applicable only for Non-RPP Customers	\$/kWh	(0.00010)
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Monthly Rates and Charges - Delivery Component

Service Charge	\$	32.60
Service Charge Smart Meters	\$	1.69
Distribution Volumetric Rate	\$/kWh	0.0143
Low Voltage Volumetric Rate	\$/kWh	0.0002
Distribution Volumetric Def Var Disp 2010 – effective until April 30, 2013	\$/kWh	(0.0015)
Distribution Volumetric Tax Change – effective until April 30, 2012	\$/kWh	(0.0001)
Distribution Volumetric Incremental Capital – effective until April 30, 2013	\$/kWh	0.0016
Retail Transmission Rate – Network Service Rate	\$/kWh	0.0056
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0040

Monthly Rates and Charges - Regulatory Component

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

General Service 50 to 999 kW

Monthly Rates and Charges - Electricity Component

Rate Rider for Global Adjustment Sub-Account Disposition (2010) - Effective until April 30, 2013 Applicable only for Non-RPP Customers	\$/kWh	(0.00010)
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Monthly Rates and Charges - Delivery Component

Service Charge	\$	116.85
Service Charge Smart Meters	\$	1.69
Distribution Volumetric Rate	\$/kW	3.6281
Low Voltage Volumetric Rate	\$/kW	0.0638
Distribution Volumetric Def Var Disp 2010 – effective until April 30, 2013	\$/kW	(0.5997)
Distribution Volumetric Lost Revenue Adjustment Mechanism (LRAM) Recovery/Shared Savings Mechanism (SSM) Recovery – effective until April 30, 2014	\$/kW	0.0033
Distribution Volumetric Tax Change – effective until April 30, 2012	\$/kW	(0.0248)
Distribution Volumetric Incremental Capital – effective until April 30, 2013	\$/kW	0.2607
Retail Transmission Rate – Network Service Rate	\$/kW	2.1184

Retail Transmission Rate – Network Service Rate – Interval metered (if applicable)	\$/kW	2.1870
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	1.4959
Retail Transmission Rate – Line and Transformation Connection Service Rate – Interval metered (if applicable)	\$/kW	1.5444

Monthly Rates and Charges - Regulatory Component

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

General Service Greater Than 1,000 kW

Monthly Rates and Charges - Electricity Component

Rate Rider for Global Adjustment Sub-Account Disposition (2010) - Effective until April 30, 2013 Applicable only for Non-RPP Customers	\$/kWh	(0.00010)
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Monthly Rates and Charges - Delivery Component

Service Charge	\$	3,374.20
Service Charge Smart Meters	\$	1.69
Distribution Volumetric Rate	\$/kW	1.8430
Low Voltage Volumetric Rate	\$/kW	0.0638
Distribution Volumetric Def Var Disp 2010 – effective until April 30, 2013	\$/kW	(0.9410)
Distribution Volumetric Lost Revenue Adjustment Mechanism (LRAM) Recovery/Shared Savings Mechanism (SSM) Recovery – effective until April 30, 2014	\$/kW	(0.0014)
Distribution Volumetric Tax Change – effective until April 30, 2012	\$/kW	(0.0221)
Distribution Volumetric Incremental Capital – effective until April 30, 2013	\$/kW	0.2316
Retail Transmission Rate – Network Service Rate	\$/kW	2.1870
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	1.5444

Monthly Rates and Charges - Regulatory Component

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

Unmetered Scattered Load

Monthly Rates and Charges - Electricity Component

Rate Rider for Global Adjustment Sub-Account Disposition (2010) - Effective until April 30, 2013 Applicable only for Non-RPP Customers	\$/kWh	(0.00010)
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Monthly Rates and Charges - Delivery Component

Service Charge (per connection)	\$	11.42
Distribution Volumetric Rate	\$/kWh	0.0106
Low Voltage Volumetric Rate	\$/kWh	0.0002
Distribution Volumetric Def Var Disp 2010 – effective until April 30, 2013	\$/kWh	(0.0015)
Distribution Volumetric Tax Change – effective until April 30, 2012	\$/kWh	(0.0002)
Distribution Volumetric Incremental Capital – effective until April 30, 2013	\$/kWh	0.0021
Retail Transmission Rate – Network Service Rate	\$/kWh	0.0056
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0040

Monthly Rates and Charges - Regulatory Component

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

Sentinel Lighting

Monthly Rates and Charges - Electricity Component

Rate Rider for Global Adjustment Sub-Account Disposition (2010) - Effective until April 30, 2013 Applicable only for Non-RPP Customers	\$/kWh	(0.00010)
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Monthly Rates and Charges - Delivery Component

Service Charge (per connection)	\$	2.15
Distribution Volumetric Rate	\$/kW	36.3826
Low Voltage Volumetric Rate	\$/kW	0.0124
Distribution Volumetric Def Var Disp 2010 – effective until April 30, 2013	\$/kW	(0.7549)
Distribution Volumetric Tax Change – effective until April 30, 2012	\$/kW	(0.2029)
Distribution Volumetric Incremental Capital – effective until April 30, 2013	\$/kW	2.1350
Retail Transmission Rate – Network Service Rate	\$/kW	0.4247
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	0.2998

Monthly Rates and Charges - Regulatory Component

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

Street Lighting

Monthly Rates and Charges - Electricity Component

Rate Rider for Global Adjustment Sub-Account Disposition (2010) - Effective until April 30, 2013 Applicable only for Non-RPP Customers	\$/kWh	(0.00010)
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Monthly Rates and Charges - Delivery Component

Service Charge (per connection)	\$	2.33
Distribution Volumetric Rate	\$/kW	14.2461
Low Voltage Volumetric Rate	\$/kW	0.0516
Distribution Volumetric Def Var Disp 2010 – effective until April 30, 2013	\$/kW	(0.7041)
Distribution Volumetric Tax Change – effective until April 30, 2012	\$/kW	(0.1185)
Distribution Volumetric Incremental Capital – effective until April 30, 2013	\$/kW	1.2470
Retail Transmission Rate – Network Service Rate	\$/kW	1.7674
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	1.2480

Monthly Rates and Charges - Regulatory Component

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

microFIT Generator

Service Charge	\$	5.25
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Specific Service Charges

Customer Administration

Statement of account	\$	15.00
Pulling post dated cheques	\$	15.00
Duplicate invoices for previous billing	\$	15.00
Easement letter	\$	15.00
Account history	\$	15.00
Credit reference/credit check (plus credit agency costs)	\$	15.00
Returned cheque charge (plus bank charges)	\$	15.00
Account set up charge/change of occupancy charge (plus credit agency costs if applicable)	\$	30.00
Special meter reads	\$	30.00
Meter dispute charge plus Measurement Canada fees (if meter found correct)	\$	30.00

Non-Payment of Account

Late Payment - per month	%	1.50
Late Payment - per annum	%	19.56
Collection of account charge - no disconnection - after regular hours	\$	30.00
Disconnect/Reconnect at meter - during regular hours	\$	65.00
Disconnect/Reconnect at meter - after regular hours	\$	185.00
Disconnect/Reconnect at pole - during regular hours	\$	185.00
Disconnect/Reconnect at pole - after regular hours	\$	415.00

Other

Temporary service install & remove - overhead - no transformer	\$	500.00
Temporary service install & remove - underground - no transformer	\$	300.00
Specific Charge for Access to the Power Poles \$/pole/year	\$	22.35

Allowances

Transformer Allowance for Ownership - per kW of billing demand/month	\$/kW	(0.50)
Primary Metering Allowance for transformer losses - applied to measured demand and energy	%	(1.00)

Retail Service Charges (if applicable)

Retail Service Charges (if applicable)

Retail Service Charges refer to services provided by a distributor to retailers or customers related to the supply of competitive electricity

One-time charge, per retailer, to establish the service agreement between the distributor and the retailer	\$	100.00
Monthly Fixed Charge, per retailer	\$	20.00
Monthly Variable Charge, per customer, per retailer	\$/cust.	0.50
Distributor-consolidated billing charge, per customer, per retailer	\$/cust.	0.30
Retailer-consolidated billing credit, per customer, per retailer	\$/cust.	(0.30)

Service Transaction Requests (STR)

Request fee, per request, applied to the requesting party	\$	0.25
Processing fee, per request, applied to the requesting party	\$	0.50
Request for customer information as outlined in Section 10.6.3 and Chapter 11 of the Retail Settlement Code directly to retailers and customers, if not delivered electronically through the Electronic Business Transaction (EBT) system, applied to the requesting party		
Up to twice a year		no charge
More than twice a year, per request (plus incremental delivery costs)	\$	2.00

LOSS FACTORS

Total Loss Factor - Secondary Metered Customer < 5,000 kW		1.0377
Total Loss Factor - Secondary Metered Customer > 5,000 kW		1.0147
Total Loss Factor - Primary Metered Customer < 5,000 kW		1.0273
Total Loss Factor - Primary Metered Customer > 5,000 kW		1.0047

Bill Impacts

The bill impacts generated by the *2011 Rate Generator* are provided in the following pages.

Name of LDC: Oakville Hydro Electricity Distribution Inc.
 File Number: EB-2010-0104
 Effective Date: May 1, 2011
 Version : 1.9

Residential

Monthly Rates and Charges	Metric	Current Rate	Applied For Rate
Service Charge	\$	13.25	13.08
Service Charge Rate Adder(s)	\$	1.69	1.69
Service Charge Rate Rider(s)	\$	-	-
Distribution Volumetric Rate	\$/kWh	0.0145	0.0143
Distribution Volumetric Rate Adder(s)	\$/kWh	-	-
Low Voltage Volumetric Rate	\$/kWh	0.0002	0.0002
Distribution Volumetric Rate Rider(s)	\$/kWh	- 0.0012	0.0005
Retail Transmission Rate – Network Service Rate	\$/kWh	0.0055	0.0061
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0046	0.0044
Retail Transmission Rate – Low Voltage Service Rate	\$/kWh	-	-
Wholesale Market Service Rate	\$/kWh	0.0052	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013	0.0013
Special Purpose Charge	\$/kWh	0.0004	0.0004
Standard Supply Service – Administration Charge (if applicable)	\$/kWh	0.25	0.25

Consumption	800	kWh	-	kW
RPP Tier One	600	kWh	Load Factor	

Loss Factor 1.0377

Residential	Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	\$	%	% of Total Bill
Energy First Tier (kWh)	600	0.0650	39.00	600	0.0650	39.00	0.00	0.0%	33.38%
Energy Second Tier (kWh)	231	0.0750	17.33	231	0.0750	17.33	0.00	0.0%	14.83%
Sub-Total: Energy			56.33			56.33	0.00	0.0%	48.21%
Service Charge	1	13.25	13.25	1	13.08	13.08	-0.17	(1.3)%	11.19%
Service Charge Rate Rider(s)	1	0.00	0.00	1	0.00	0.00	0.00	0.0%	0.00%
Distribution Volumetric Rate	800	0.0145	11.60	800	0.0143	11.44	-0.16	(1.4)%	9.79%
Distribution Volumetric Rate Adder(s)	800	0.0000	0.00	800	0.0000	0.00	0.00	0.0%	0.00%
Low Voltage Volumetric Rate	800	0.0002	0.16	800	0.0002	0.16	0.00	0.0%	0.14%
Distribution Volumetric Rate Rider(s)	800	-0.0012	-0.96	800	0.0005	0.40	1.36	(141.7)%	0.34%
Total: Distribution			25.74			26.77	1.03	4.0%	22.91%
Retail Transmission Rate – Network Service Rate	831	0.0055	4.57	831	0.0061	5.07	0.50	10.9%	4.34%
Retail Transmission Rate – Line and Transformation Connection Service Rate	831	0.0046	3.82	831	0.0044	3.66	-0.16	(4.2)%	3.13%
Retail Transmission Rate – Low Voltage Volumetric Rate	831	0.0000	0.00	831	0.0000	0.00	0.00	0.0%	0.00%
Total: Retail Transmission			8.39			8.73	0.34	4.1%	7.47%
Sub-Total: Delivery (Distribution and Retail Transmission)			34.13			35.50	1.37	4.0%	30.38%
Wholesale Market Service Rate	831	0.0052	4.32	831	0.0052	4.32	0.00	0.0%	3.70%
Rural Rate Protection Charge	831	0.0013	1.08	831	0.0013	1.08	0.00	0.0%	0.92%
Special Purpose Charge	831	0.0004	0.33	831	0.0004	0.33	0.00	0.0%	0.28%
Standard Supply Service – Administration Charge (if applicable)	1	0.25	0.25	1	0.25	0.25	0.00	0.0%	0.21%
Sub-Total: Regulatory			5.98			5.98	0.00	0.0%	5.12%
Debt Retirement Charge (DRC)	800	0.00700	5.60	800	0.00700	5.60	0.00	0.0%	4.79%
Total Bill before Taxes			102.04			103.41	1.37	1.3%	88.50%
HST	102.04	13%	13.27	103.41	13%	13.44	0.17	1.3%	11.50%
Total Bill			115.31			116.85	1.54	1.3%	100.00%

Rate Class Threshold Test

Residential

kWh	250	600	800	1,400	2,250
Loss Factor Adjusted kWh	260	623	831	1,453	2,335

kW
Load Factor

Energy

Applied For Bill	\$ 16.90	\$ 40.73	\$ 56.33	\$ 102.98	\$ 169.13
Current Bill	\$ 16.90	\$ 40.73	\$ 56.33	\$ 102.98	\$ 169.13
\$ Impact	\$ -	\$ -	\$ -	\$ -	\$ -
% Impact	0.0%	0.0%	0.0%	0.0%	0.0%
% of Total Bill	35.7%	45.2%	48.2%	52.4%	54.6%

Distribution

Applied For Bill	\$ 18.52	\$ 23.77	\$ 26.77	\$ 35.77	\$ 48.52
Current Bill	\$ 18.31	\$ 23.04	\$ 25.74	\$ 33.84	\$ 45.31
\$ Impact	\$ 0.21	\$ 0.73	\$ 1.03	\$ 1.93	\$ 3.21
% Impact	1.1%	3.2%	4.0%	5.7%	7.1%
% of Total Bill	39.1%	26.4%	22.9%	18.2%	15.7%

Retail Transmission

Applied For Bill	\$ 2.73	\$ 6.54	\$ 8.73	\$ 15.25	\$ 24.51
Current Bill	\$ 2.63	\$ 6.30	\$ 8.39	\$ 14.67	\$ 23.58
\$ Impact	\$ 0.10	\$ 0.24	\$ 0.34	\$ 0.58	\$ 0.93
% Impact	3.8%	3.8%	4.1%	4.0%	3.9%
% of Total Bill	5.8%	7.3%	7.5%	7.8%	7.9%

Delivery (Distribution and Retail Transmission)

Applied For Bill	\$ 21.25	\$ 30.31	\$ 35.50	\$ 51.02	\$ 73.03
Current Bill	\$ 20.94	\$ 29.34	\$ 34.13	\$ 48.51	\$ 68.89
\$ Impact	\$ 0.31	\$ 0.97	\$ 1.37	\$ 2.51	\$ 4.14
% Impact	1.5%	3.3%	4.0%	5.2%	6.0%
% of Total Bill	44.8%	33.6%	30.4%	25.9%	23.6%

Regulatory

Applied For Bill	\$ 2.04	\$ 4.55	\$ 5.98	\$ 10.28	\$ 16.36
Current Bill	\$ 2.04	\$ 4.55	\$ 5.98	\$ 10.28	\$ 16.36
\$ Impact	\$ -	\$ -	\$ -	\$ -	\$ -
% Impact	0.0%	0.0%	0.0%	0.0%	0.0%
% of Total Bill	4.3%	5.0%	5.1%	5.2%	5.3%

Debt Retirement Charge

Applied For Bill	\$ 1.75	\$ 4.20	\$ 5.60	\$ 9.80	\$ 15.75
Current Bill	\$ 1.75	\$ 4.20	\$ 5.60	\$ 9.80	\$ 15.75
\$ Impact	\$ -	\$ -	\$ -	\$ -	\$ -
% Impact	0.0%	0.0%	0.0%	0.0%	0.0%
% of Total Bill	3.7%	4.7%	4.8%	5.0%	5.1%

GST

Applied For Bill	\$ 5.45	\$ 10.37	\$ 13.44	\$ 22.63	\$ 35.66
Current Bill	\$ 5.41	\$ 10.25	\$ 13.27	\$ 22.30	\$ 35.12
\$ Impact	\$ 0.04	\$ 0.12	\$ 0.17	\$ 0.33	\$ 0.54
% Impact	0.7%	1.2%	1.3%	1.5%	1.5%
% of Total Bill	11.5%	11.5%	11.5%	11.5%	11.5%

Total Bill

Applied For Bill	\$ 47.39	\$ 90.16	\$ 116.85	\$ 196.71	\$ 309.93
Current Bill	\$ 47.04	\$ 89.07	\$ 115.31	\$ 193.87	\$ 305.25
\$ Impact	\$ 0.35	\$ 1.09	\$ 1.54	\$ 2.84	\$ 4.68

Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

General Service Less Than 50 kW

Monthly Rates and Charges	Metric	Current Rate	Applied For Rate
Service Charge	\$	32.54	32.60
Service Charge Rate Adder(s)	\$	1.69	1.69
Service Charge Rate Rider(s)	\$	-	-
Distribution Volumetric Rate	\$/kWh	0.0143	0.0143
Distribution Volumetric Rate Adder(s)	\$/kWh	-	-
Low Voltage Volumetric Rate	\$/kWh	0.0002	0.0002
Distribution Volumetric Rate Rider(s)	\$/kWh	0.0015	-
Retail Transmission Rate – Network Service Rate	\$/kWh	0.0051	0.0056
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0042	0.0040
Retail Transmission Rate – Low Voltage Service Rate	\$/kWh	-	-
Wholesale Market Service Rate	\$/kWh	0.0052	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013	0.0013
Special Purpose Charge	\$/kWh	0.0004	0.0004
Standard Supply Service – Administration Charge (if applicable)	\$/kWh	0.25	0.25

Consumption	2,000	kWh	-	kW
RPP Tier One	750	kWh	Load Factor	

Loss Factor 1.0377

General Service Less Than 50 kW	Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	\$	%	% of Total Bill
Energy First Tier (kWh)	750	0.0650	48.75	750	0.0650	48.75	0.00	0.0%	16.59%
Energy Second Tier (kWh)	1,326	0.0750	99.45	1,326	0.0750	99.45	0.00	0.0%	33.85%
Sub-Total: Energy			148.20			148.20	0.00	0.0%	50.44%
Service Charge	1	32.54	32.54	1	32.60	32.60	0.06	0.2%	11.10%
Service Charge Rate Rider(s)	1	0.00	0.00	1	0.00	0.00	0.00	0.0%	0.00%
Distribution Volumetric Rate	2,000	0.0143	28.60	2,000	0.0143	28.60	0.00	0.0%	9.73%
Distribution Volumetric Rate Adder(s)	2,000	0.0000	0.00	2,000	0.0000	0.00	0.00	0.0%	0.00%
Low Voltage Volumetric Rate	2,000	0.0002	0.40	2,000	0.0002	0.40	0.00	0.0%	0.14%
Distribution Volumetric Rate Rider(s)	2,000	-0.0015	-3.00	2,000	0.0000	0.00	3.00	(100.0)%	0.00%
Total: Distribution			60.23			63.29	3.06	5.1%	21.54%
Retail Transmission Rate – Network Service Rate	2,076	0.0051	10.59	2,076	0.0056	11.63	1.04	9.8%	3.96%
Retail Transmission Rate – Line and Transformation Connection Service Rate	2,076	0.0042	8.72	2,076	0.0040	8.30	-0.42	(4.8)%	2.83%
Retail Transmission Rate – Low Voltage Volumetric Rate	2,076	0.0000	0.00	2,076	0.0000	0.00	0.00	0.0%	0.00%
Total: Retail Transmission			19.31			19.93	0.62	3.2%	6.78%
Sub-Total: Delivery (Distribution and Retail Transmission)			79.54			83.22	3.68	4.6%	28.33%
Wholesale Market Service Rate	2,076	0.0052	10.80	2,076	0.0052	10.80	0.00	0.0%	3.68%
Rural Rate Protection Charge	2,076	0.0013	2.70	2,076	0.0013	2.70	0.00	0.0%	0.92%
Special Purpose Charge	2,076	0.0004	0.83	2,076	0.0004	0.83	0.00	0.0%	0.28%
Standard Supply Service – Administration Charge (if applicable)	1	0.25	0.25	1	0.25	0.25	0.00	0.0%	0.09%
Sub-Total: Regulatory			14.58			14.58	0.00	0.0%	4.96%
Debt Retirement Charge (DRC)	2,000	0.00700	14.00	2,000	0.00700	14.00	0.00	0.0%	4.77%
Total Bill before Taxes			256.32			260.00	3.68	1.4%	88.50%
HST	256.32	13%	33.32	260.00	13%	33.80	0.48	1.4%	11.50%
Total Bill			289.64			293.80	4.16	1.4%	100.00%

Rate Class Threshold Test

General Service Less Than 50 kW

kWh	1,000	2,000	7,500	15,000	20,000
Loss Factor Adjusted kWh	1,038	2,076	7,783	15,566	20,755

kW
Load Factor

Energy

Applied For Bill	\$ 70.35	\$ 148.20	\$ 576.23	\$ 1,159.95	\$ 1,549.13
Current Bill	\$ 70.35	\$ 148.20	\$ 576.23	\$ 1,159.95	\$ 1,549.13
\$ Impact	\$ -	\$ -	\$ -	\$ -	\$ -
% Impact	0.0%	0.0%	0.0%	0.0%	0.0%
% of Total Bill	43.4%	50.4%	56.6%	57.9%	58.2%

Distribution

Applied For Bill	\$ 48.79	\$ 63.29	\$ 143.04	\$ 251.79	\$ 324.29
Current Bill	\$ 47.23	\$ 60.23	\$ 131.73	\$ 229.23	\$ 294.23
\$ Impact	\$ 1.56	\$ 3.06	\$ 11.31	\$ 22.56	\$ 30.06
% Impact	3.3%	5.1%	8.6%	9.8%	10.2%
% of Total Bill	30.1%	21.5%	14.1%	12.6%	12.2%

Retail Transmission

Applied For Bill	\$ 9.96	\$ 19.93	\$ 74.71	\$ 149.43	\$ 199.25
Current Bill	\$ 9.65	\$ 19.31	\$ 72.38	\$ 144.77	\$ 193.02
\$ Impact	\$ 0.31	\$ 0.62	\$ 2.33	\$ 4.66	\$ 6.23
% Impact	3.2%	3.2%	3.2%	3.2%	3.2%
% of Total Bill	6.1%	6.8%	7.3%	7.5%	7.5%

Delivery (Distribution and Retail Transmission)

Applied For Bill	\$ 58.75	\$ 83.22	\$ 217.75	\$ 401.22	\$ 523.54
Current Bill	\$ 56.88	\$ 79.54	\$ 204.11	\$ 374.00	\$ 487.25
\$ Impact	\$ 1.87	\$ 3.68	\$ 13.64	\$ 27.22	\$ 36.29
% Impact	3.3%	4.6%	6.7%	7.3%	7.4%
% of Total Bill	36.2%	28.3%	21.4%	20.0%	19.7%

Regulatory

Applied For Bill	\$ 7.42	\$ 14.58	\$ 53.95	\$ 107.66	\$ 143.46
Current Bill	\$ 7.42	\$ 14.58	\$ 53.95	\$ 107.66	\$ 143.46
\$ Impact	\$ -	\$ -	\$ -	\$ -	\$ -
% Impact	0.0%	0.0%	0.0%	0.0%	0.0%
% of Total Bill	4.6%	5.0%	5.3%	5.4%	5.4%

Debt Retirement Charge

Applied For Bill	\$ 7.00	\$ 14.00	\$ 52.50	\$ 105.00	\$ 140.00
Current Bill	\$ 7.00	\$ 14.00	\$ 52.50	\$ 105.00	\$ 140.00
\$ Impact	\$ -	\$ -	\$ -	\$ -	\$ -
% Impact	0.0%	0.0%	0.0%	0.0%	0.0%
% of Total Bill	4.3%	4.8%	5.2%	5.2%	5.3%

GST

Applied For Bill	\$ 18.66	\$ 33.80	\$ 117.06	\$ 230.60	\$ 306.30
Current Bill	\$ 18.41	\$ 33.32	\$ 115.28	\$ 227.06	\$ 301.58
\$ Impact	\$ 0.25	\$ 0.48	\$ 1.78	\$ 3.54	\$ 4.72
% Impact	1.4%	1.4%	1.5%	1.6%	1.6%
% of Total Bill	11.5%	11.5%	11.5%	11.5%	11.5%

Total Bill

Applied For Bill	\$ 162.18	\$ 293.80	\$ 1,017.49	\$ 2,004.43	\$ 2,662.43
Current Bill	\$ 160.06	\$ 289.64	\$ 1,002.07	\$ 1,973.67	\$ 2,621.42
\$ Impact	\$ 2.12	\$ 4.16	\$ 15.42	\$ 30.76	\$ 41.01

Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

General Service 50 to 999 kW

Monthly Rates and Charges	Metric	Current Rate	Applied For Rate
Service Charge	\$	116.64	116.85
Service Charge Rate Adder(s)	\$	1.69	1.69
Service Charge Rate Rider(s)	\$	-	-
Distribution Volumetric Rate	\$/kW	3.6216	3.6281
Distribution Volumetric Rate Adder(s)	\$/kW	-	-
Low Voltage Volumetric Rate	\$/kW	0.0638	0.0638
Distribution Volumetric Rate Rider(s)	\$/kW	- 0.5964	- 0.3605
Retail Transmission Rate – Network Service Rate	\$/kW	1.9161	2.1184
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	1.5762	1.4959
Retail Transmission Rate – Low Voltage Service Rate	\$/kW	-	-
Wholesale Market Service Rate	\$/kWh	0.0052	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013	0.0013
Special Purpose Charge	\$/kWh	0.0004	0.0004
Standard Supply Service – Administration Charge (if applicable)	\$/kWh	0.25	0.25

Consumption	140,000	kWh	480	kW
RPP Tier One	750	kWh	Load Factor	40.0%

Loss Factor 1.0377

General Service 50 to 999 kW	Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	\$	%	% of Total Bill
Energy First Tier (kWh)	750	0.0650	48.75	750	0.0650	48.75	0.00	0.0%	0.26%
Energy Second Tier (kWh)	144,529	0.0750	10,839.68	144,529	0.0750	10,839.68	0.00	0.0%	58.77%
Sub-Total: Energy			10,888.43			10,888.43	0.00	0.0%	59.03%
Service Charge	1	116.64	116.64	1	116.85	116.85	0.21	0.2%	0.63%
Service Charge Rate Rider(s)	1	0.00	0.00	1	0.00	0.00	0.00	0.0%	0.00%
Distribution Volumetric Rate	480	3.6216	1,738.37	480	3.6281	1,741.49	3.12	0.2%	9.44%
Distribution Volumetric Rate Adder(s)	480	0.0000	0.00	480	0.0000	0.00	0.00	0.0%	0.00%
Low Voltage Volumetric Rate	480	0.0638	30.62	480	0.0638	30.62	0.00	0.0%	0.17%
Distribution Volumetric Rate Rider(s)	480	-0.5964	-286.27	480	-0.3605	-173.04	113.23	(39.6)%	-0.94%
Total: Distribution			1,601.05			1,717.61	116.56	7.3%	9.31%
Retail Transmission Rate – Network Service Rate	480	1.9161	919.73	480	2.1184	1,016.83	97.10	10.6%	5.51%
Retail Transmission Rate – Line and Transformation Connection Service Rate	480	1.5762	756.58	480	1.4959	718.03	-38.55	(5.1)%	3.89%
Retail Transmission Rate – Low Voltage Volumetric Rate	480	0.0000	0.00	480	0.0000	0.00	0.00	0.0%	0.00%
Total: Retail Transmission			1,676.31			1,734.86	58.55	3.5%	9.41%
Sub-Total: Delivery (Distribution and Retail Transmission)			3,277.36			3,452.47	175.11	5.3%	18.72%
Wholesale Market Service Rate	145,279	0.0052	755.45	145,279	0.0052	755.45	0.00	0.0%	4.10%
Rural Rate Protection Charge	145,279	0.0013	188.86	145,279	0.0013	188.86	0.00	0.0%	1.02%
Special Purpose Charge	145,279	0.0004	58.11	145,279	0.0004	58.11	0.00	0.0%	0.32%
Standard Supply Service – Administration Charge (if applicable)	1	0.25	0.25	1	0.25	0.25	0.00	0.0%	0.00%
Sub-Total: Regulatory			1,002.67			1,002.67	0.00	0.0%	5.44%
Debt Retirement Charge (DRC)	140,000	0.00700	980.00	140,000	0.00700	980.00	0.00	0.0%	5.31%
Total Bill before Taxes			16,148.46			16,323.57	175.11	1.1%	88.50%
HST	16,148.46	13%	2,099.30	16,323.57	13%	2,122.06	22.76	1.1%	11.50%
Total Bill			18,247.76			18,445.63	197.87	1.1%	100.00%

Rate Class Threshold Test

General Service 50 to 999 kW

	kWh	18,200	98,000	175,000	270,000	365,000
Loss Factor Adjusted kWh		18,887	101,695	181,598	280,180	378,761

	kW	50	270	480	740	1,000
	Load Factor	49.9%	49.7%	50.0%	50.0%	50.0%
Energy						
Applied For Bill	\$	1,409.03	\$ 7,619.63	\$ 13,612.35	\$ 21,006.00	\$ 28,399.58
Current Bill	\$	1,409.03	\$ 7,619.63	\$ 13,612.35	\$ 21,006.00	\$ 28,399.58
\$ Impact	\$	-	\$ -	\$ -	\$ -	\$ -
% Impact		0.0%	0.0%	0.0%	0.0%	0.0%
% of Total Bill		58.5%	61.3%	61.6%	61.8%	61.9%
Distribution						
Applied For Bill	\$	285.10	\$ 1,018.02	\$ 1,717.61	\$ 2,583.77	\$ 3,449.94
Current Bill	\$	272.78	\$ 952.36	\$ 1,601.05	\$ 2,404.18	\$ 3,207.33
\$ Impact	\$	12.32	\$ 65.66	\$ 116.56	\$ 179.59	\$ 242.61
% Impact		4.5%	6.9%	7.3%	7.5%	7.6%
% of Total Bill		11.8%	8.2%	7.8%	7.6%	7.5%
Retail Transmission						
Applied For Bill	\$	180.72	\$ 975.86	\$ 1,734.86	\$ 2,674.59	\$ 3,614.30
Current Bill	\$	174.62	\$ 942.92	\$ 1,676.31	\$ 2,584.30	\$ 3,492.30
\$ Impact	\$	6.10	\$ 32.94	\$ 58.55	\$ 90.29	\$ 122.00
% Impact		3.5%	3.5%	3.5%	3.5%	3.5%
% of Total Bill		7.5%	7.8%	7.9%	7.9%	7.9%
Delivery (Distribution and Retail Transmission)						
Applied For Bill	\$	465.82	\$ 1,993.88	\$ 3,452.47	\$ 5,258.36	\$ 7,064.24
Current Bill	\$	447.40	\$ 1,895.28	\$ 3,277.36	\$ 4,988.48	\$ 6,699.63
\$ Impact	\$	18.42	\$ 98.60	\$ 175.11	\$ 269.88	\$ 364.61
% Impact		4.1%	5.2%	5.3%	5.4%	5.4%
% of Total Bill		19.3%	16.0%	15.6%	15.5%	15.4%
Regulatory						
Applied For Bill	\$	130.56	\$ 701.94	\$ 1,253.28	\$ 1,933.49	\$ 2,613.70
Current Bill	\$	130.56	\$ 701.94	\$ 1,253.28	\$ 1,933.49	\$ 2,613.70
\$ Impact	\$	-	\$ -	\$ -	\$ -	\$ -
% Impact		0.0%	0.0%	0.0%	0.0%	0.0%
% of Total Bill		5.4%	5.6%	5.7%	5.7%	5.7%
Debt Retirement Charge						
Applied For Bill	\$	127.40	\$ 686.00	\$ 1,225.00	\$ 1,890.00	\$ 2,555.00
Current Bill	\$	127.40	\$ 686.00	\$ 1,225.00	\$ 1,890.00	\$ 2,555.00
\$ Impact	\$	-	\$ -	\$ -	\$ -	\$ -
% Impact		0.0%	0.0%	0.0%	0.0%	0.0%
% of Total Bill		5.3%	5.5%	5.5%	5.6%	5.6%
GST						
Applied For Bill	\$	277.27	\$ 1,430.19	\$ 2,540.60	\$ 3,911.42	\$ 5,282.23
Current Bill	\$	274.87	\$ 1,417.37	\$ 2,517.84	\$ 3,876.34	\$ 5,234.83
\$ Impact	\$	2.40	\$ 12.82	\$ 22.76	\$ 35.08	\$ 47.40
% Impact		0.9%	0.9%	0.9%	0.9%	0.9%
% of Total Bill		11.5%	11.5%	11.5%	11.5%	11.5%
Total Bill						
Applied For Bill	\$	2,410.08	\$ 12,431.64	\$ 22,083.70	\$ 33,999.27	\$ 45,914.75
Current Bill	\$	2,389.26	\$ 12,320.22	\$ 21,885.83	\$ 33,694.31	\$ 45,502.74
\$ Impact	\$	20.82	\$ 111.42	\$ 197.87	\$ 304.96	\$ 412.01

Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

General Service Greater Than 1,000 kW

Monthly Rates and Charges	Metric	Current Rate	Applied For Rate
Service Charge	\$	3,417.13	3,374.20
Service Charge Rate Adder(s)	\$	1.69	1.69
Service Charge Rate Rider(s)	\$	-	-
Distribution Volumetric Rate	\$/kW	1.8664	1.8430
Distribution Volumetric Rate Adder(s)	\$/kW	-	-
Low Voltage Volumetric Rate	\$/kW	0.0638	0.0638
Distribution Volumetric Rate Rider(s)	\$/kW	- 0.9424	- 0.7329
Retail Transmission Rate – Network Service Rate	\$/kW	1.9781	2.1870
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	1.6273	1.5444
Retail Transmission Rate – Low Voltage Service Rate	\$/kW	-	-
Wholesale Market Service Rate	\$/kWh	0.0052	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013	0.0013
Special Purpose Charge	\$/kWh	0.0004	0.0004
Standard Supply Service – Administration Charge (if applicable)	\$/kWh	0.25	0.25

Consumption	1,100,000	kWh	3,000	kW
RPP Tier One	750	kWh	Load Factor	50.3%

Loss Factor 1.0377

General Service Greater Than 1,000 kW	Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	\$	%	% of Total Bill
Energy First Tier (kWh)	750	0.0650	48.75	750	0.0650	48.75	0.00	0.0%	0.04%
Energy Second Tier (kWh)	1,140,721	0.0750	85,554.08	1,140,721	0.0750	85,554.08	0.00	0.0%	63.48%
Sub-Total: Energy			85,602.83			85,602.83	0.00	0.0%	63.51%
Service Charge	1	3,417.13	3,417.13	1	3,374.20	3,374.20	-42.93	(1.3)%	2.50%
Service Charge Rate Rider(s)	1	0.00	0.00	1	0.00	0.00	0.00	0.0%	0.00%
Distribution Volumetric Rate	3,000	1.8664	5,599.20	3,000	1.8430	5,529.00	-70.20	(1.3)%	4.10%
Distribution Volumetric Rate Adder(s)	3,000	0.0000	0.00	3,000	0.0000	0.00	0.00	0.0%	0.00%
Low Voltage Volumetric Rate	3,000	0.0638	191.40	3,000	0.0638	191.40	0.00	0.0%	0.14%
Distribution Volumetric Rate Rider(s)	3,000	-0.9424	-2,827.20	3,000	-0.7329	-2,198.70	628.50	(22.2)%	-1.63%
Total: Distribution			6,382.22			6,897.59	515.37	8.1%	5.12%
Retail Transmission Rate – Network Service Rate	3,000	1.9781	5,934.30	3,000	2.1870	6,561.00	626.70	10.6%	4.87%
Retail Transmission Rate – Line and Transformation Connection Service Rate	3,000	1.6273	4,881.90	3,000	1.5444	4,633.20	-248.70	(5.1)%	3.44%
Retail Transmission Rate – Low Voltage Volumetric Rate	3,000	0.0000	0.00	3,000	0.0000	0.00	0.00	0.0%	0.00%
Total: Retail Transmission			10,816.20			11,194.20	378.00	3.5%	8.31%
Sub-Total: Delivery (Distribution and Retail Transmission)			17,198.42			18,091.79	893.37	5.2%	13.42%
Wholesale Market Service Rate	1,141,471	0.0052	5,935.65	1,141,471	0.0052	5,935.65	0.00	0.0%	4.40%
Rural Rate Protection Charge	1,141,471	0.0013	1,483.91	1,141,471	0.0013	1,483.91	0.00	0.0%	1.10%
Special Purpose Charge	1,141,471	0.0004	456.59	1,141,471	0.0004	456.59	0.00	0.0%	0.34%
Standard Supply Service – Administration Charge (if applicable)	1	0.25	0.25	1	0.25	0.25	0.00	0.0%	0.00%
Sub-Total: Regulatory			7,876.40			7,876.40	0.00	0.0%	5.84%
Debt Retirement Charge (DRC)	1,100,000	0.00700	7,700.00	1,100,000	0.00700	7,700.00	0.00	0.0%	5.71%
Total Bill before Taxes			118,377.65			119,271.02	893.37	0.8%	88.50%
HST	118,377.65	13%	15,389.09	119,271.02	13%	15,505.23	116.14	0.8%	11.50%
Total Bill			133,766.74			134,776.25	1,009.51	0.8%	100.00%

Rate Class Threshold Test

General Service Greater Than 1,000 kW

kWh	438,000	876,000	1,313,000	1,751,000	2,189,000
Loss Factor Adjusted kWh	454,513	909,026	1,362,501	1,817,013	2,271,526

kW	1,000	2,000	3,000	4,000	5,000
Load Factor	60.0%	60.0%	60.0%	60.0%	60.0%

Energy

Applied For Bill	\$ 34,080.98	\$ 68,169.45	\$ 102,180.08	\$ 136,268.48	\$ 170,356.96
Current Bill	\$ 34,080.98	\$ 68,169.45	\$ 102,180.08	\$ 136,268.48	\$ 170,356.96
\$ Impact	\$ -	\$ -	\$ -	\$ -	\$ -
% Impact	0.0%	0.0%	0.0%	0.0%	0.0%
% of Total Bill	62.1%	64.3%	65.1%	65.5%	65.8%

Distribution

Applied For Bill	\$ 4,549.79	\$ 5,723.69	\$ 6,897.59	\$ 8,071.49	\$ 9,245.39
Current Bill	\$ 4,406.62	\$ 5,394.42	\$ 6,382.22	\$ 7,370.02	\$ 8,357.82
\$ Impact	\$ 143.17	\$ 329.27	\$ 515.37	\$ 701.47	\$ 887.57
% Impact	3.2%	6.1%	8.1%	9.5%	10.6%
% of Total Bill	8.3%	5.4%	4.4%	3.9%	3.6%

Retail Transmission

Applied For Bill	\$ 3,731.40	\$ 7,462.80	\$ 11,194.20	\$ 14,925.60	\$ 18,657.00
Current Bill	\$ 3,605.40	\$ 7,210.80	\$ 10,816.20	\$ 14,421.60	\$ 18,027.00
\$ Impact	\$ 126.00	\$ 252.00	\$ 378.00	\$ 504.00	\$ 630.00
% Impact	3.5%	3.5%	3.5%	3.5%	3.5%
% of Total Bill	6.8%	7.0%	7.1%	7.2%	7.2%

Delivery (Distribution and Retail Transmission)

Applied For Bill	\$ 8,281.19	\$ 13,186.49	\$ 18,091.79	\$ 22,997.09	\$ 27,902.39
Current Bill	\$ 8,012.02	\$ 12,605.22	\$ 17,198.42	\$ 21,791.62	\$ 26,384.82
\$ Impact	\$ 269.17	\$ 581.27	\$ 893.37	\$ 1,205.47	\$ 1,517.57
% Impact	3.4%	4.6%	5.2%	5.5%	5.8%
% of Total Bill	15.1%	12.4%	11.5%	11.1%	10.8%

Regulatory

Applied For Bill	\$ 3,136.40	\$ 6,272.53	\$ 9,401.51	\$ 12,537.65	\$ 15,673.78
Current Bill	\$ 3,136.40	\$ 6,272.53	\$ 9,401.51	\$ 12,537.65	\$ 15,673.78
\$ Impact	\$ -	\$ -	\$ -	\$ -	\$ -
% Impact	0.0%	0.0%	0.0%	0.0%	0.0%
% of Total Bill	5.7%	5.9%	6.0%	6.0%	6.1%

Debt Retirement Charge

Applied For Bill	\$ 3,066.00	\$ 6,132.00	\$ 9,191.00	\$ 12,257.00	\$ 15,323.00
Current Bill	\$ 3,066.00	\$ 6,132.00	\$ 9,191.00	\$ 12,257.00	\$ 15,323.00
\$ Impact	\$ -	\$ -	\$ -	\$ -	\$ -
% Impact	0.0%	0.0%	0.0%	0.0%	0.0%
% of Total Bill	5.6%	5.8%	5.9%	5.9%	5.9%

GST

Applied For Bill	\$ 6,313.39	\$ 12,188.86	\$ 18,052.37	\$ 23,927.83	\$ 29,803.30
Current Bill	\$ 6,278.40	\$ 12,113.30	\$ 17,936.23	\$ 23,771.12	\$ 29,606.01
\$ Impact	\$ 34.99	\$ 75.56	\$ 116.14	\$ 156.71	\$ 197.29
% Impact	0.6%	0.6%	0.6%	0.7%	0.7%
% of Total Bill	11.5%	11.5%	11.5%	11.5%	11.5%

Total Bill

Applied For Bill	\$ 54,877.96	\$ 105,949.33	\$ 156,916.75	\$ 207,988.05	\$ 259,059.43
Current Bill	\$ 54,573.80	\$ 105,292.50	\$ 155,907.24	\$ 206,625.87	\$ 257,344.57
\$ Impact	\$ 304.16	\$ 656.83	\$ 1,009.51	\$ 1,362.18	\$ 1,714.86

Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Unmetered Scattered Load

Monthly Rates and Charges	Metric	Current Rate	Applied For Rate
Service Charge	\$	11.40	11.42
Service Charge Rate Adder(s)	\$	-	-
Service Charge Rate Rider(s)	\$	-	-
Distribution Volumetric Rate	\$/kWh	0.0106	0.0106
Distribution Volumetric Rate Adder(s)	\$/kWh	-	-
Low Voltage Volumetric Rate	\$/kWh	0.0002	0.0002
Distribution Volumetric Rate Rider(s)	\$/kWh	0.0015	0.0004
Retail Transmission Rate – Network Service Rate	\$/kWh	0.0051	0.0056
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0042	0.0040
Retail Transmission Rate – Low Voltage Service Rate	\$/kWh	-	-
Wholesale Market Service Rate	\$/kWh	0.0052	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013	0.0013
Special Purpose Charge	\$/kWh	0.0004	0.0004
Standard Supply Service – Administration Charge (if applicable)	\$/kWh	0.25	0.25

Consumption	2,000 kWh	0 kW
RPP Tier One	750 kWh	Load Factor

Loss Factor 1.0377

Unmetered Scattered Load	Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	\$	%	% of Total Bill
Energy First Tier (kWh)	750	0.0650	48.75	750	0.0650	48.75	0.00	0.0%	18.71%
Energy Second Tier (kWh)	1,326	0.0750	99.45	1,326	0.0750	99.45	0.00	0.0%	38.18%
Sub-Total: Energy			148.20			148.20	0.00	0.0%	56.89%
Service Charge	1	11.40	11.40	1	11.42	11.42	0.02	0.2%	4.38%
Service Charge Rate Rider(s)	1	0.00	0.00	1	0.00	0.00	0.00	0.0%	0.00%
Distribution Volumetric Rate	2,000	0.0106	21.20	2,000	0.0106	21.20	0.00	0.0%	8.14%
Distribution Volumetric Rate Adder(s)	2,000	0.0000	0.00	2,000	0.0000	0.00	0.00	0.0%	0.00%
Low Voltage Volumetric Rate	2,000	0.0002	0.40	2,000	0.0002	0.40	0.00	0.0%	0.15%
Distribution Volumetric Rate Rider(s)	2,000	-0.0015	-3.00	2,000	0.0004	0.80	3.80	(126.7)%	0.31%
Total: Distribution			30.00			33.82	3.82	12.7%	12.98%
Retail Transmission Rate – Network Service Rate	2,076	0.0051	10.59	2,076	0.0056	11.63	1.04	9.8%	4.46%
Retail Transmission Rate – Line and Transformation Connection Service Rate	2,076	0.0042	8.72	2,076	0.0040	8.30	-0.42	(4.8)%	3.19%
Retail Transmission Rate – Low Voltage Volumetric Rate	2,076	0.0000	0.00	2,076	0.0000	0.00	0.00	0.0%	0.00%
Total: Retail Transmission			19.31			19.93	0.62	3.2%	7.65%
Sub-Total: Delivery (Distribution and Retail Transmission)			49.31			53.75	4.44	9.0%	20.63%
Wholesale Market Service Rate	2,076	0.0052	10.80	2,076	0.0052	10.80	0.00	0.0%	4.15%
Rural Rate Protection Charge	2,076	0.0013	2.70	2,076	0.0013	2.70	0.00	0.0%	1.04%
Special Purpose Charge	2,076	0.0004	0.83	2,076	0.0004	0.83	0.00	0.0%	0.32%
Standard Supply Service – Administration Charge (if applicable)	1	0.25	0.25	1	0.25	0.25	0.00	0.0%	0.10%
Sub-Total: Regulatory			14.58			14.58	0.00	0.0%	5.60%
Debt Retirement Charge (DRC)	2,000	0.00700	14.00	2,000	0.00700	14.00	0.00	0.0%	5.37%
Total Bill before Taxes			226.09			230.53	4.44	2.0%	88.50%
HST	226.09	13%	29.39	230.53	13%	29.97	0.58	2.0%	11.50%
Total Bill			255.48			260.50	5.02	2.0%	100.00%

Rate Class Threshold Test

Unmetered Scattered Load

kWh	500	2,000	7,500	15,000	20,000
Loss Factor Adjusted kWh	519	2,076	7,783	15,566	20,755

kW
Load Factor

Energy

Applied For Bill	\$ 33.73	\$ 148.20	\$ 576.23	\$ 1,159.95	\$ 1,549.13
Current Bill	\$ 33.73	\$ 148.20	\$ 576.23	\$ 1,159.95	\$ 1,549.13
\$ Impact	\$ -	\$ -	\$ -	\$ -	\$ -
% Impact	0.0%	0.0%	0.0%	0.0%	0.0%
% of Total Bill	47.3%	56.9%	59.8%	60.3%	60.5%

Distribution

Applied For Bill	\$ 17.02	\$ 33.82	\$ 95.42	\$ 179.42	\$ 235.42
Current Bill	\$ 16.05	\$ 30.00	\$ 81.15	\$ 150.90	\$ 197.40
\$ Impact	\$ 0.97	\$ 3.82	\$ 14.27	\$ 28.52	\$ 38.02
% Impact	6.0%	12.7%	17.6%	18.9%	19.3%
% of Total Bill	23.9%	13.0%	9.9%	9.3%	9.2%

Retail Transmission

Applied For Bill	\$ 4.99	\$ 19.93	\$ 74.71	\$ 149.43	\$ 199.25
Current Bill	\$ 4.83	\$ 19.31	\$ 72.38	\$ 144.77	\$ 193.02
\$ Impact	\$ 0.16	\$ 0.62	\$ 2.33	\$ 4.66	\$ 6.23
% Impact	3.3%	3.2%	3.2%	3.2%	3.2%
% of Total Bill	7.0%	7.7%	7.8%	7.8%	7.8%

Delivery (Distribution and Retail Transmission)

Applied For Bill	\$ 22.01	\$ 53.75	\$ 170.13	\$ 328.85	\$ 434.67
Current Bill	\$ 20.88	\$ 49.31	\$ 153.53	\$ 295.67	\$ 390.42
\$ Impact	\$ 1.13	\$ 4.44	\$ 16.60	\$ 33.18	\$ 44.25
% Impact	5.4%	9.0%	10.8%	11.2%	11.3%
% of Total Bill	30.9%	20.6%	17.7%	17.1%	17.0%

Regulatory

Applied For Bill	\$ 3.83	\$ 14.58	\$ 53.95	\$ 107.66	\$ 143.46
Current Bill	\$ 3.83	\$ 14.58	\$ 53.95	\$ 107.66	\$ 143.46
\$ Impact	\$ -	\$ -	\$ -	\$ -	\$ -
% Impact	0.0%	0.0%	0.0%	0.0%	0.0%
% of Total Bill	5.4%	5.6%	5.6%	5.6%	5.6%

Debt Retirement Charge

Applied For Bill	\$ 3.50	\$ 14.00	\$ 52.50	\$ 105.00	\$ 140.00
Current Bill	\$ 3.50	\$ 14.00	\$ 52.50	\$ 105.00	\$ 140.00
\$ Impact	\$ -	\$ -	\$ -	\$ -	\$ -
% Impact	0.0%	0.0%	0.0%	0.0%	0.0%
% of Total Bill	4.9%	5.4%	5.4%	5.5%	5.5%

GST

Applied For Bill	\$ 8.20	\$ 29.97	\$ 110.87	\$ 221.19	\$ 294.74
Current Bill	\$ 8.05	\$ 29.39	\$ 108.71	\$ 216.88	\$ 288.99
\$ Impact	\$ 0.15	\$ 0.58	\$ 2.16	\$ 4.31	\$ 5.75
% Impact	1.9%	2.0%	2.0%	2.0%	2.0%
% of Total Bill	11.5%	11.5%	11.5%	11.5%	11.5%

Total Bill

Applied For Bill	\$ 71.27	\$ 260.50	\$ 963.68	\$ 1,922.65	\$ 2,562.00
Current Bill	\$ 69.99	\$ 255.48	\$ 944.92	\$ 1,885.16	\$ 2,512.00
\$ Impact	\$ 1.28	\$ 5.02	\$ 18.76	\$ 37.49	\$ 50.00

Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Sentinel Lighting

Monthly Rates and Charges	Metric	Current Rate	Applied For Rate
Service Charge	\$	1.48	2.15
Service Charge Rate Adder(s)	\$	-	-
Service Charge Rate Rider(s)	\$	-	-
Distribution Volumetric Rate	\$/kW	25.0161	36.3826
Distribution Volumetric Rate Adder(s)	\$/kW	-	-
Low Voltage Volumetric Rate	\$/kW	0.0124	0.0124
Distribution Volumetric Rate Rider(s)	\$/kW	- 0.7549	1.1772
Retail Transmission Rate – Network Service Rate	\$/kW	0.3841	0.4247
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	0.3159	0.2998
Retail Transmission Rate – Low Voltage Service Rate	\$/kW	-	-
Wholesale Market Service Rate	\$/kWh	0.0052	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013	0.0013
Special Purpose Charge	\$/kWh	0.0004	0.0004
Standard Supply Service – Administration Charge (if applicable)	\$/kWh	0.25	0.25

Consumption	180 kWh	0.50 kW
RPP Tier One	750 kWh	Load Factor 49.3%

Loss Factor 1.0377

Sentinel Lighting	Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	\$	%	% of Total Bill
Energy First Tier (kWh)	187	0.0650	12.16	187	0.0650	12.16	0.00	0.0%	29.69%
Energy Second Tier (kWh)	0	0.0750	0.00	0	0.0750	0.00	0.00	0.0%	0.00%
Sub-Total: Energy			12.16			12.16	0.00	0.0%	29.69%
Service Charge	1	1.48	1.48	1	2.15	2.15	0.67	45.3%	5.25%
Service Charge Rate Rider(s)	1	0.00	0.00	1	0.00	0.00	0.00	0.0%	0.00%
Distribution Volumetric Rate	0.50	25.0161	12.51	0.50	36.3826	18.19	5.68	45.4%	44.41%
Distribution Volumetric Rate Adder(s)	0.50	0.0000	0.00	0.50	0.0000	0.00	0.00	0.0%	0.00%
Low Voltage Volumetric Rate	0.50	0.0124	0.01	0.50	0.0124	0.01	0.00	0.0%	0.02%
Distribution Volumetric Rate Rider(s)	0.50	-0.7549	-0.38	0.50	1.1772	0.59	0.97	(255.3)%	1.44%
Total: Distribution			13.62			20.94	7.32	53.7%	51.12%
Retail Transmission Rate – Network Service Rate	0.50	0.3841	0.19	0.50	0.4247	0.21	0.02	10.5%	0.51%
Retail Transmission Rate – Line and Transformation Connection Service Rate	0.50	0.3159	0.16	0.50	0.2998	0.15	-0.01	(6.3)%	0.37%
Retail Transmission Rate – Low Voltage Volumetric Rate	0.50	0.0000	0.00	0.50	0.0000	0.00	0.00	0.0%	0.00%
Total: Retail Transmission			0.35			0.36	0.01	2.9%	0.88%
Sub-Total: Delivery (Distribution and Retail Transmission)			13.97			21.30	7.33	52.5%	52.00%
Wholesale Market Service Rate	187	0.0052	0.97	187	0.0052	0.97	0.00	0.0%	2.37%
Rural Rate Protection Charge	187	0.0013	0.24	187	0.0013	0.24	0.00	0.0%	0.59%
Special Purpose Charge	187	0.0004	0.07	187	0.0004	0.07	0.00	0.0%	0.17%
Standard Supply Service – Administration Charge (if applicable)	1	0.25	0.25	1	0.25	0.25	0.00	0.0%	0.61%
Sub-Total: Regulatory			1.53			1.53	0.00	0.0%	3.74%
Debt Retirement Charge (DRC)	180	0.00700	1.26	180	0.00700	1.26	0.00	0.0%	3.08%
Total Bill before Taxes			28.92			36.25	7.33	25.3%	88.50%
HST	28.92	13%	3.76	36.25	13%	4.71	0.95	25.3%	11.50%
Total Bill			32.68			40.96	8.28	25.3%	100.00%

Rate Class Threshold Test

Sentinel Lighting

kWh	70	130	180	270	360
Loss Factor Adjusted kWh	73	135	187	281	374

kW	0.20	0.35	0.50	0.75	1.00
Load Factor	48.0%	50.9%	49.3%	49.3%	49.3%

Energy

Applied For Bill	\$ 4.74	\$ 8.77	\$ 12.15	\$ 18.26	\$ 24.31
Current Bill	\$ 4.74	\$ 8.77	\$ 12.15	\$ 18.26	\$ 24.31
\$ Impact	\$ -	\$ -	\$ -	\$ -	\$ -
% Impact	0.0%	0.0%	0.0%	0.0%	0.0%
% of Total Bill	26.6%	29.4%	29.7%	30.4%	30.7%

Distribution

Applied For Bill	\$ 9.67	\$ 15.29	\$ 20.94	\$ 30.33	\$ 39.72
Current Bill	\$ 6.33	\$ 9.98	\$ 13.62	\$ 19.68	\$ 25.76
\$ Impact	\$ 3.34	\$ 5.31	\$ 7.32	\$ 10.65	\$ 13.96
% Impact	52.8%	53.2%	53.7%	54.1%	54.2%
% of Total Bill	54.2%	51.3%	51.1%	50.4%	50.1%

Retail Transmission

Applied For Bill	\$ 0.14	\$ 0.25	\$ 0.36	\$ 0.54	\$ 0.72
Current Bill	\$ 0.14	\$ 0.24	\$ 0.35	\$ 0.53	\$ 0.70
\$ Impact	\$ -	\$ 0.01	\$ 0.01	\$ 0.01	\$ 0.02
% Impact	0.0%	4.2%	2.9%	1.9%	2.9%
% of Total Bill	0.8%	0.8%	0.9%	0.9%	0.9%

Delivery (Distribution and Retail Transmission)

Applied For Bill	\$ 9.81	\$ 15.54	\$ 21.30	\$ 30.87	\$ 40.44
Current Bill	\$ 6.47	\$ 10.22	\$ 13.97	\$ 20.21	\$ 26.46
\$ Impact	\$ 3.34	\$ 5.32	\$ 7.33	\$ 10.66	\$ 13.98
% Impact	51.6%	52.1%	52.5%	52.7%	52.8%
% of Total Bill	55.0%	52.1%	52.0%	51.3%	51.1%

Regulatory

Applied For Bill	\$ 0.75	\$ 1.18	\$ 1.53	\$ 2.19	\$ 2.83
Current Bill	\$ 0.75	\$ 1.18	\$ 1.53	\$ 2.19	\$ 2.83
\$ Impact	\$ -	\$ -	\$ -	\$ -	\$ -
% Impact	0.0%	0.0%	0.0%	0.0%	0.0%
% of Total Bill	4.2%	4.0%	3.7%	3.6%	3.6%

Debt Retirement Charge

Applied For Bill	\$ 0.49	\$ 0.91	\$ 1.26	\$ 1.89	\$ 2.52
Current Bill	\$ 0.49	\$ 0.91	\$ 1.26	\$ 1.89	\$ 2.52
\$ Impact	\$ -	\$ -	\$ -	\$ -	\$ -
% Impact	0.0%	0.0%	0.0%	0.0%	0.0%
% of Total Bill	2.7%	3.1%	3.1%	3.1%	3.2%

GST

Applied For Bill	\$ 2.05	\$ 3.43	\$ 4.71	\$ 6.92	\$ 9.11
Current Bill	\$ 1.62	\$ 2.74	\$ 3.76	\$ 5.53	\$ 7.30
\$ Impact	\$ 0.43	\$ 0.69	\$ 0.95	\$ 1.39	\$ 1.81
% Impact	26.5%	25.2%	25.3%	25.1%	24.8%
% of Total Bill	11.5%	11.5%	11.5%	11.5%	11.5%

Total Bill

Applied For Bill	\$ 17.84	\$ 29.83	\$ 40.95	\$ 60.13	\$ 79.21
Current Bill	\$ 14.07	\$ 23.82	\$ 32.67	\$ 48.08	\$ 63.42
\$ Impact	\$ 3.77	\$ 6.01	\$ 8.28	\$ 12.05	\$ 15.79

Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Street Lighting

Monthly Rates and Charges	Metric	Current Rate	Applied For Rate
Service Charge	\$	1.70	2.33
Service Charge Rate Adder(s)	\$	-	-
Service Charge Rate Rider(s)	\$	-	-
Distribution Volumetric Rate	\$/kW	10.3987	14.2461
Distribution Volumetric Rate Adder(s)	\$/kW	-	-
Low Voltage Volumetric Rate	\$/kW	0.0516	0.0516
Distribution Volumetric Rate Rider(s)	\$/kW	- 0.7041	0.4244
Retail Transmission Rate – Network Service Rate	\$/kW	1.5986	1.7674
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	1.3150	1.2480
Retail Transmission Rate – Low Voltage Service Rate	\$/kW	-	-
Wholesale Market Service Rate	\$/kWh	0.0052	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013	0.0013
Special Purpose Charge	\$/kWh	0.0004	0.0004
Standard Supply Service – Administration Charge (if applicable)	\$/kWh	0.25	0.25

Consumption	37	kWh	0.10	kW
RPP Tier One	750	kWh	Load Factor	50.7%

Loss Factor 1.0377

Street Lighting	Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$	\$	%	% of Total Bill
Energy First Tier (kWh)	39	0.0650	2.54	39	0.0650	2.54	0.00	0.0%	30.31%
Energy Second Tier (kWh)	0	0.0750	0.00	0	0.0750	0.00	0.00	0.0%	0.00%
Sub-Total: Energy			2.54			2.54	0.00	0.0%	30.31%
Service Charge	1	1.70	1.70	1	2.33	2.33	0.63	37.1%	27.80%
Service Charge Rate Rider(s)	1	0.00	0.00	1	0.00	0.00	0.00	0.0%	0.00%
Distribution Volumetric Rate	0.10	10.3987	1.04	0.10	14.2461	1.42	0.38	36.5%	16.95%
Distribution Volumetric Rate Adder(s)	0.10	0.0000	0.00	0.10	0.0000	0.00	0.00	0.0%	0.00%
Low Voltage Volumetric Rate	0.10	0.0516	0.01	0.10	0.0516	0.01	0.00	0.0%	0.12%
Distribution Volumetric Rate Rider(s)	0.10	-0.7041	-0.07	0.10	0.4244	0.04	0.11	(157.1)%	0.48%
Total: Distribution			2.68			3.80	1.12	41.8%	45.35%
Retail Transmission Rate – Network Service Rate	0.10	1.5986	0.16	0.10	1.7674	0.18	0.02	12.5%	2.15%
Retail Transmission Rate – Line and Transformation Connection Service Rate	0.10	1.3150	0.13	0.10	1.2480	0.12	-0.01	(7.7)%	1.43%
Retail Transmission Rate – Low Voltage Volumetric Rate	0.10	0.0000	0.00	0.10	0.0000	0.00	0.00	0.0%	0.00%
Total: Retail Transmission			0.29			0.30	0.01	3.4%	3.58%
Sub-Total: Delivery (Distribution and Retail Transmission)			2.97			4.10	1.13	38.0%	48.93%
Wholesale Market Service Rate	39	0.0052	0.20	39	0.0052	0.20	0.00	0.0%	2.39%
Rural Rate Protection Charge	39	0.0013	0.05	39	0.0013	0.05	0.00	0.0%	0.60%
Special Purpose Charge	39	0.0004	0.02	39	0.0004	0.02	0.00	0.0%	0.24%
Standard Supply Service – Administration Charge (if applicable)	1	0.25	0.25	1	0.25	0.25	0.00	0.0%	2.98%
Sub-Total: Regulatory			0.52			0.52	0.00	0.0%	6.21%
Debt Retirement Charge (DRC)	37	0.00700	0.26	37	0.00700	0.26	0.00	0.0%	3.10%
Total Bill before Taxes			6.29			7.42	1.13	18.0%	88.54%
HST	6.29	13%	0.82	7.42	13%	0.96	0.14	17.1%	11.46%
Total Bill			7.11			8.38	1.27	17.9%	100.00%

Rate Class Threshold Test

Street Lighting

kWh	37	73	110	146	183
Loss Factor Adjusted kWh	39	76	115	152	190

kW	0.10	0.20	0.30	0.40	0.50
Load Factor	50.7%	50.0%	50.3%	50.0%	50.2%

Energy

Applied For Bill	\$ 2.53	\$ 4.94	\$ 7.47	\$ 9.88	\$ 12.35
Current Bill	\$ 2.53	\$ 4.94	\$ 7.47	\$ 9.88	\$ 12.35
\$ Impact	\$ -	\$ -	\$ -	\$ -	\$ -
% Impact	0.0%	0.0%	0.0%	0.0%	0.0%
% of Total Bill	30.2%	36.1%	39.0%	40.4%	41.4%

Distribution

Applied For Bill	\$ 3.80	\$ 5.27	\$ 6.75	\$ 8.22	\$ 9.69
Current Bill	\$ 2.68	\$ 3.65	\$ 4.63	\$ 5.60	\$ 6.58
\$ Impact	\$ 1.12	\$ 1.62	\$ 2.12	\$ 2.62	\$ 3.11
% Impact	41.8%	44.4%	45.8%	46.8%	47.3%
% of Total Bill	45.4%	38.6%	35.3%	33.6%	32.5%

Retail Transmission

Applied For Bill	\$ 0.30	\$ 0.60	\$ 0.90	\$ 1.21	\$ 1.50
Current Bill	\$ 0.29	\$ 0.58	\$ 0.87	\$ 1.17	\$ 1.46
\$ Impact	\$ 0.01	\$ 0.02	\$ 0.03	\$ 0.04	\$ 0.04
% Impact	3.4%	3.4%	3.4%	3.4%	2.7%
% of Total Bill	3.6%	4.4%	4.7%	5.0%	5.0%

Delivery (Distribution and Retail Transmission)

Applied For Bill	\$ 4.10	\$ 5.87	\$ 7.65	\$ 9.43	\$ 11.19
Current Bill	\$ 2.97	\$ 4.23	\$ 5.50	\$ 6.77	\$ 8.04
\$ Impact	\$ 1.13	\$ 1.64	\$ 2.15	\$ 2.66	\$ 3.15
% Impact	38.0%	38.8%	39.1%	39.3%	39.2%
% of Total Bill	49.0%	42.9%	40.0%	38.6%	37.5%

Regulatory

Applied For Bill	\$ 0.52	\$ 0.78	\$ 1.05	\$ 1.30	\$ 1.57
Current Bill	\$ 0.52	\$ 0.78	\$ 1.05	\$ 1.30	\$ 1.57
\$ Impact	\$ -	\$ -	\$ -	\$ -	\$ -
% Impact	0.0%	0.0%	0.0%	0.0%	0.0%
% of Total Bill	6.2%	5.7%	5.5%	5.3%	5.3%

Debt Retirement Charge

Applied For Bill	\$ 0.26	\$ 0.51	\$ 0.77	\$ 1.02	\$ 1.28
Current Bill	\$ 0.26	\$ 0.51	\$ 0.77	\$ 1.02	\$ 1.28
\$ Impact	\$ -	\$ -	\$ -	\$ -	\$ -
% Impact	0.0%	0.0%	0.0%	0.0%	0.0%
% of Total Bill	3.1%	3.7%	4.0%	4.2%	4.3%

GST

Applied For Bill	\$ 0.96	\$ 1.57	\$ 2.20	\$ 2.81	\$ 3.43
Current Bill	\$ 0.82	\$ 1.36	\$ 1.92	\$ 2.47	\$ 3.02
\$ Impact	\$ 0.14	\$ 0.21	\$ 0.28	\$ 0.34	\$ 0.41
% Impact	17.1%	15.4%	14.6%	13.8%	13.6%
% of Total Bill	11.5%	11.5%	11.5%	11.5%	11.5%

Total Bill

Applied For Bill	\$ 8.37	\$ 13.67	\$ 19.14	\$ 24.44	\$ 29.82
Current Bill	\$ 7.10	\$ 11.82	\$ 16.71	\$ 21.44	\$ 26.26
\$ Impact	\$ 1.27	\$ 1.85	\$ 2.43	\$ 3.00	\$ 3.56

Appendix A – Planning Study

Certain portions of the May 2009 Transformer Station Supply Options Study will not be placed on the public or confidential record in this proceeding. These include Appendix 6 to the Study, which consists of advice given to Oakville Hydro by its counsel, Borden Ladner Gervais LLP, and references to that advice in other portions of the Study. That material is subject to solicitor-client privilege, and will not be released by Oakville Hydro. It has been redacted from both the public and confidential versions of the Study. In Appendix C to its Practice Direction on Confidential Filings (the “Practice Direction”), the Board recognizes that “advice with respect to litigation or other legal information protected by solicitor-client privilege or litigation privilege” is among “the types of information previously assessed or maintained by the Board as confidential”. Section 19 of the Freedom of Information and Protection of Privacy Act (“FIPPA”) provides that “a head may refuse to disclose a record that is subject to solicitor-client privilege”.

Certain other portions of the Study and the Application will not be placed on the public record in this proceeding, but will be filed in confidence. These portions pertain to the details of cost estimates provided to Oakville Hydro by Hydro One in respect of the construction of one or more transformer stations to serve the increasing load in the Oakville Hydro service area. While the total estimated cost is a matter of public record, Hydro One has expressed its concerns that the estimates themselves were preliminary and were provided on a confidential basis. Although Hydro One is a regulated utility, the public disclosure of the details of its preliminary cost estimates for expansions to its

transmission system could reasonably be expected to prejudice the economic interests of, significantly prejudice the competitive position of, cause undue financial loss to, and be injurious to the financial interests of Hydro One, since it would enable other entities to ascertain the scope and pricing of services provided by Hydro One and underbid Hydro One for those portions of expansions that may be subject to alternative bid work. The Board's Practice Direction on Confidential Filings (the "Practice Direction") recognizes that these are among the factors that the Board will take into consideration when addressing the confidentiality of filings. They are also addressed in section 17(1) of FIPPA, and the Practice Direction notes (at Appendix C of the Practice Direction) that third party information as described in subsection 17(1) of FIPPA is among the types of information previously assessed or maintained by the Board as confidential. Similarly, Subsection 10(1) of MFIPPA contains protections related to third party information of this kind.

Accordingly, Oakville Hydro requests that the details of the Hydro One cost estimates be kept confidential. Oakville Hydro is prepared to provide copies of the Agreements to parties' counsel and experts or consultants provided that they have executed the Board's form of Declaration and Undertaking with respect to confidentiality and that they comply with the Practice Direction, subject to Oakville Hydro's right to object to the Board's acceptance of a Declaration and Undertaking from any person. In keeping with the requirements of the Practice Direction, Oakville Hydro is filing a confidential unredacted version of the Study (subject to redaction of all solicitor-client privileged information from both the public and confidential versions of the Study, as discussed above). The

unredacted version of the Study has been placed in a sealed envelope marked “Confidential” and filed with the Board Secretary, separately from this Application.

Transformer Station Supply Options Study

Prepared for:

Oakville Hydro Corporation

Prepared by

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May 2009

PRIVATE INFORMATION

Contents of this report shall not be disclosed without
the consent of Oakville Hydro

DISCLAIMER

Costello Associates has prepared this report in accordance with, and subjected to, the terms and conditions of the quotation supplied by Costello Associates dated February 21, 2008 and accepted by Oakville Hydro's Purchase Order.

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Oakville Hydro Corporation
Transformer Station Supply Options Study
May 2009

TABLE OF CONTENTS

1	EXECUTIVE SUMMARY.....	1
2	TRANSFORMER STATIONS	3
2.1	ROLE OF A TRANSFORMER STATION	3
2.2	TRANSFORMER STATION RATINGS.....	3
2.3	POTENTIAL IMPACT OF SUPPLY CONSTRAINTS.....	4
2.4	LDC EXPERIENCES WITH OVERLOADED TS'S.....	5
3	TOWN OF OAKVILLE GROWTH.....	7
3.1	REMAINING CAPACITY	7
3.2	LOAD FORECAST	9
3.2.1	2007 Long Range Planning Study	9
3.2.2	Economic Downturn	11
3.2.3	Timing of Hydro One Station Repairs	12
3.3	REQUIREMENT FOR LONG RANGE SUPPLY PLAN.....	13
4	SUPPLY OPTIONS.....	15
4.1	HISTORICAL PRACTICE.....	15
4.2	TRANSMISSION SYSTEM CODE	15
4.3	COMPARISON OF CONNECTION OPTIONS.....	16
4.4	PROPOSED TRANSFORMER STATIONS.....	17
4.4.1	Oakville Hydro MTS #1	17
4.4.2	Oakville / Milton Hydro MTS #2	19
4.4.3	Hydro One "Tremaine TS".....	19
4.4.4	Hydro One "North Oakville TS"	19
4.5	LONG RANGE SUPPLY OPTIONS	21
4.5.1	Oakville Hydro Self-Build Option.....	21
4.5.2	Oakville – Milton Co-ownership Option.....	21
4.5.3	Hydro One "North Oakville TS" Option.....	22
4.5.4	Hydro One "Tremaine" & Oakville Hydro MTS #1 Option.....	22
5.	ECONOMIC EVALUATION.....	23
5.1	IMPACT TO RATE PAYERS	23
5.2	SHAREHOLDER VALUE	23
5.3	FINANCING OPTIONS	24
5.4	CERTAINTY OF COST RECOVERY.....	24
5.5	TIMING OF DISTRIBUTION RATE RE-BASING	24
5.4.1	Off-ramps.....	25
5.4.2	Incremental Capital Module.....	25
5.4.3	Reporting Requirements	28
5.4.4	Accounting Treatment.....	28
5.5	IMPACT OF ECONOMIC DOWNTURN.....	28
5.6	OAKVILLE HYDRO MTS #1 BUDGET.....	28
5.7	HYDRO ONE "TREMAINE TS" COSTS	29
5.8	HYDRO ONE "NORTH OAKVILLE TS" COSTS	30

5.9	COMPARISON OF STATION COSTS	30
6.	REGULATORY CONSIDERATIONS.....	31
6.1	RIGHT TO BUILD TRANSFORMER STATIONS	31
6.2	REQUIREMENT TO USE EXISTING CAPACITY	33
7.	OPERATIONAL IMPACT OF TS OWNERSHIP.....	35
7.1	ASSET MANAGEMENT PLAN.....	35
7.2	SYSTEM RELIABILITY	35
7.3	STAFF CAPABILITIES	36
7.4	OPERATIONAL CONTROL & RESPONSIVENESS.....	36
7.5	SCADA TELEMETRY & CONTROL	37
7.6	RISK OF FAILURES	37
8.	OAKVILLE – MILTON HYDRO CO-OWNERSHIP.....	39
8.1	BUSINESS ARRANGEMENTS	39
8.2	ADVANTAGES AND DISADVANTAGES.....	40
8.3	PROJECT COSTS AND POTENTIAL SAVINGS	40
9.	PROJECT SCHEDULES.....	45
10.	CONCLUSIONS AND RECOMMENDATIONS	45

Appendices

Appendix 1	Oakville Hydro Load Forecast
Appendix 2	AESI North Oakville Long Range Planning Study
Appendix 3	Hydro One Networks - proposals for Tremaine TS and North Oakville TS
Appendix 4	[REDACTED]
Appendix 5	OEB Letter – Regulatory Framework for Approval of Investment in Infrastructure by Electricity Transmitters and Distributors
[REDACTED]	[REDACTED]
Appendix 7	Financial Impact Data
Appendix 8	Engineering Services Request for Proposals (RFP)

List of Tables

Table 1	Existing transformer station loading	Page 7
Table 2	Existing transformer station loading considering rating restrictions from Hydro One	Page 8
Table 3	Comparison of connection options	Page 16
Table 4	Mechanisms for early relief of specific cost pressures	Page 25
Table 5	Incremental capital module “G” factor	Page 26
Table 6	Oakville Hydro MTS #1 budget summary	Page 29
Table 7	Hydro One “Tremaine TS” cost summary	Page 29
Table 8	Hydro One “North Oakville TS” cost summary	Page 30
Table 9	Comparison of station costs	Page 30
Table 10	Advantages and disadvantages of Oakville/Milton Co-ownership	Page 40

List of Figures

Figure 1	Role of a transformer station	Page 3
Figure 2	Typical municipal transformer station	Page 4
Figure 3	Simcoe Reformer blackout article	Page 6
Figure 4	Existing Hydro One transformer stations	Page 8
Figure 5	2007 Load Forecast	Page 9
Figure 6	North Oakville Development	Page 10
Figure 7	Sensitivity Analysis for Growth	Page 11
Figure 8	Short Term View of Sensitivity Analysis	Page 12
Figure 9	Oakville Hydro MTS #1 Single Line Diagram	Page 18
Figure 10	Proposed TS/MTS locations	Page 20
Figure 11	Ontario LDC’s with Municipal Transformer Stations	Page 32
Figure 12	Hydro One “Tremaine TS” project schedule	Page 42
Figure 13	Oakville Hydro MTS #1 project schedule	Page 43

1 Executive Summary

Costello Associates has been retained by Oakville Hydro Corporation to assist with the study of capacity alternatives required to meet forecasted load growth and to address shortfalls of supply from existing Hydro One transformer stations. The scope of this work includes the review of the Oakville Hydro load forecast, coordination with Hydro One Networks for the provision of pool-funded station options, preparation of preliminary budgets for self-build station options, assessment of operational impacts, development of project schedules, coordination of financial and regulatory impact analysis performed by others, and to make recommendations for the supply of new capacity.

Costello Associates was initially contacted to assist with this project in February 2008. At that time, Oakville Hydro believed that new capacity would be required around 2012 to meet planned development in the North Oakville area. It was also known that one of the local Hydro One transformer stations was overloaded under certain operating conditions. This was not considered a critical concern, as there was believed to be sufficient capacity to move this overload to adjacent stations if necessary.

During the past nine months, additional problems with other Hydro One stations have been uncovered, and it is now clear that there is a critical shortage of supply to Oakville. Not considering any new load in North Oakville, there is a shortfall of supply capacity in the range of 28 MW due to the temporary equipment problems at several local Hydro One stations. Hydro One has indicated that necessary repairs and upgrades will be completed by the end of 2012. Should there be a failure of a single critical component at one of the local Hydro One stations during the summers of 2009 to 2012, it is possible that Oakville will experience wide-scale blackouts. New transformer station capacity is urgently required to accommodate new load growth and to provide relief of Hydro One stations.

Along with Oakville Hydro staff, we have assessed the options available to provide new transformer station capacity. In our opinion, we believe that Oakville Hydro should design, construct, and operate its own municipal transformer station. This is the lowest cost option for Oakville Hydro and its customers, and provides the greatest shareholder value. This option also provides the lowest financial risk to Oakville Hydro with respect to the recent economic downturn and the uncertainty of the pace of future load development. In addition, based on the recent proposals from Hydro One, Oakville Hydro can likely build this station up to one year faster than Hydro One.

This supply shortage will exist at least for the summers of 2009 and 2010, if Oakville Hydro elects to build its own station. The supply shortage could last until the summer of 2012 should Oakville Hydro elect to have Hydro One provide new capacity. In the meantime, Oakville Hydro should develop contingency plans for the possibility of major outages.

We wish to acknowledge the input and analysis of technical, financial, and regulatory data that has been included in this report. Load forecast data has been prepared by Oakville Hydro's engineering staff, based on input from the Town of Oakville, and AESI Inc.. Analysis of the financial impacts of various supply options has been performed by Oakville Hydro's finance staff.

[REDACTED]

*Oakville Hydro Corporation
Transformer Station Supply Options Study
May 2009*

2 Transformer Stations

2.1 Role of a Transformer Station

The role of a transformer station (TS) within the overall power grid is illustrated in Figure 1. Electricity is generated at nuclear, hydroelectric, fossil fuel, wind, and other facilities throughout Ontario. Bulk power is routed over long distances via the transmission system at high voltages (i.e. 115, 230, and 500 kV). Transformer stations are used to step the voltage down from the transmission system to the distribution voltage level. There are presently over 300 transformer stations owned by both Hydro One and municipal utilities throughout Ontario.

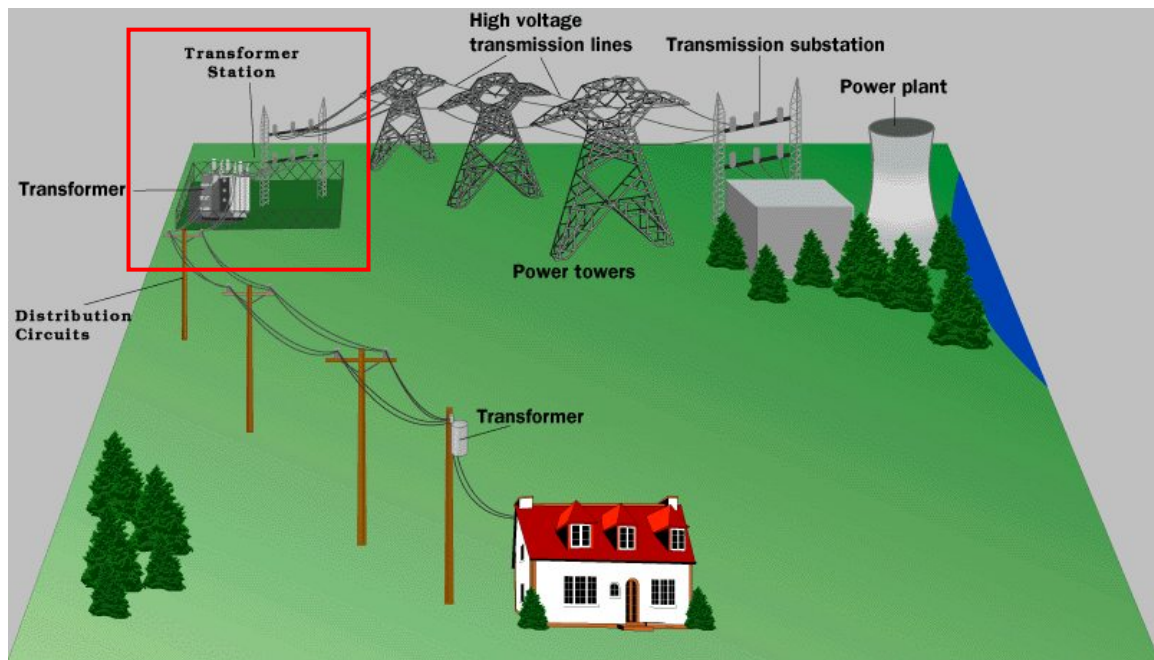


Figure 1

2.2 Transformer Station Ratings

Transformer stations in Ontario are generally designed to have redundancy in critical components, so that the single failure of one device will not result in a loss of supply for distribution customers. Transformer stations are usually supplied by two transmission lines, allowing for constant electricity supply during events such as weather-related momentary outages, and planned maintenance. Stations are equipped with two power transformers, two incoming high voltage switches, two main circuit breakers on the low voltage switchgear, and duplicate protection systems.

As part of the redundancy strategy, power transformers are designed to be overloaded for a specified duration in the event of the failure of one incoming transmission circuits or the failure of the other transformer in the same station. The magnitude of the permitted overload is based on

the original transformer design, which accounts for the anticipated summer and winter loading throughout the life of the station. This "Limited Time Rating (LTR)" is the maximum loading permitted on a transformer station for safe, reliable operation.

In the event of the loss of one transmission line or power transformer, any station load in excess of the LTR must be removed from the station. This can be done by transferring load to an adjacent facility, or rotational load shedding if alternate supply is not available.

As part of normal utility planning processes, the transmission and distribution utilities review the capability of the transformer stations to ensure that adequate supply exists. Given that new transformer stations require about two to three years to plan, design, and construct, the decision to build new station capacity must be made well before the electrical load approaches the ratings of the transformer station.



Figure 2 – Typical MTS Station

2.3 Potential Impact of Supply Constraints

The creation of additional transformer station capacity is a lengthy process. As a minimum, the shortest time frame possible from the decision to move forward to the in-service date is approximately two years. Items in this process contributing the most uncertainty to the timeline are land acquisition, environmental assessment and transformer delivery.

Accordingly, appropriate lead time ahead of a actual need for supply is required in order to be ready when the load begins to materialize. A planning time of two to three years is necessary to accomplish this.

For Oakville Hydro, customer growth in the northern area of the service territory is quite significant. In particular, approximately 65 per cent of the growth is forecast to occur north of Dundas Street between Neyagawa Boulevard and Ninth Line. This portion of the area is of particular concern since capacity at the closest transformer station, Trafalgar T.S., will be fully utilized supplying existing load in Oakville and existing plus new load in Milton, immediately to the north.

Although additional capacity is not presently available at Palermo T.S., it is possible to add it. However, feeder egress from the station would be problematic due to existing congestion and Palermo T.S. is located toward the western boundary of Oakville, some distance from the bulk of the forecast load growth, which is not optimal for servicing the new load.

If load growth were to begin to materialize before additional supply capacity was made available, the existing supply infrastructure would be forced to perform beyond its rated capacity. The resulting impacts to the new Oakville Hydro customers could include low voltage problems during high use periods and in order to prevent excessive overloading of equipment, or in the event of equipment failure, rotational blackouts may be ordered by Hydro One. As well, there would be an inability to deliver supply at the pace of growth, and therefore, a delay effect on growth. Should any of these problems occur, the reliability and customer service indicators for Oakville Hydro would be negatively affected.

These undesirable situations can be avoided through commitment to additional supply facilities two to three years in advance of the customer growth. Although an inexact science, load forecasts based on expected community growth are the most critical tool for deciding when to begin.

2.4 LDC Experiences with Overloaded TS's

Historically, Ontario Hydro proactively reviewed transformer station loading, and worked with distribution utilities to add capacity whenever it was required. There have been several instances in the past ten years whereby Hydro One transformer stations have been operating well over published LTR ratings. In at least two cases, this has led to critical problems for distribution utilities:

August 2001 – Norfolk TS, Simcoe ON: a high voltage bushing on one of the station power transformers failed, causing the unit to be tripped off. The station had a published LTR of 65 MW, but was loaded to over 95 MW. Hydro One initiated rotational blackouts throughout Norfolk County, which lasted for three days. The failure occurred at the peak of tobacco harvest. See Figure 3 for the Simcoe Reformer newspaper article.

July 1, 2001 – Beamsville TS: the station suffered the failure of one of two power transformers. Beamsville TS had been operating above its published LTR rating. We understand the local fire department was requested to cool the overloaded transformer with water, in an attempt to control the temperature of the transformer. Fortunately, this cooling controlled the internal temperatures and rotating blackouts were not required.

Transformer station failures are rare, but it is important to recognize the potential impacts of operating the station beyond published ratings. Hydro One has the right (and responsibility) to ensure that their transformers are not damaged by overloading, and will therefore take necessary action to keep the load on a given transformer within its LTR in the event of the failure of either its partner transformer or equipment elsewhere on the grid.

Power levels restored in Norfolk

BY TREVOR HACHÉ
Reformer staff writer

All's well that ends well.

A lot of people in the area were of that mind after power was fully restored to most of Norfolk County on the weekend following three days of rolling blackouts and brownouts.

The loss of electricity wreaked havoc with alarm systems, computers, telephones, intercom machines, and air conditioners. Half a dozen businesses in Simcoe were forced to close or reduce services to customers.

On Friday, at least two area companies weren't taking a chance using the main power grid. Zehrs on the Queensway and Nexans Magnet Wire, Norfolk Power's largest customer, were using generators to power some of their buildings.

"We thank them for that," said Martin Malinowski, president and CEO of Norfolk Power. "It made more power available to others."

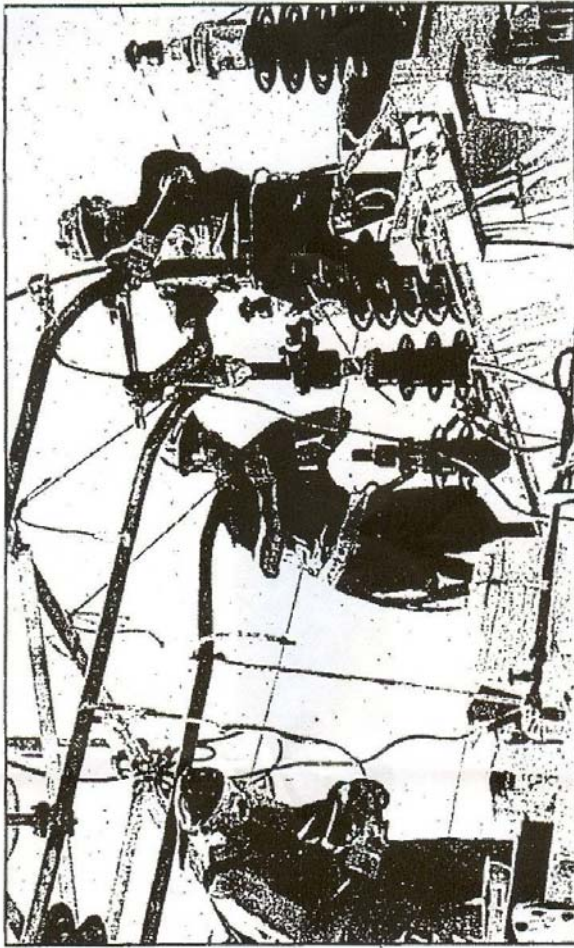
But what caused the transformer that supplies the majority of the county's electricity to fail on Wednesday night remains a mystery.

Karl Peter, a foreman with Hydro One, was at the Norfolk transformer station on Thirteenth St. E. Friday afternoon while crews worked on replacing two damaged bushings.

He said no one has been able to figure out conclusively what caused the initial transformer to fail, sending most of the county's power through a back-up transformer that wavered under the demands of some of the hottest weather in years.

Malinowski originally thought a combination of extreme heat, sunlight, and usage caused a hole to blow in the two bushings. He

(Continued on Page 2)



POWER PLAY: Hydro One station maintenance personnel Dave Rozon (from left), Dan Nagy and Jon Kikot were at the Norfolk transformer station on Thirteenth St. Friday putting the finishing touches on two bushings they had to replace after serious brownout situations plagued the area Wednesday and Thursday. (Staff photo by Trevor Haché)

Power levels

(Continued from Page 1)

then laid the blame on a lightning strike after further investigation.

But Peter said they haven't been able to verify the real reason yet, and may never be able to.

"It's a guessing game. Sometimes they just fail," Peter said.

Peter said the transformers are about 50 years old and at that age they sometimes fail. But he's seen transformers made in the 1930s that are still operating perfectly.

As far as Shirley Robertson is concerned it doesn't matter how old the transformer is as long as it provides her coffee shop with power.

"Everything is fine," said Shirley Robertson, co-owner of two Tim Hortons locations in town. "The air conditioning is working and everything is back to normal."

Robertson was forced to close her coffee shop on Water St. Thursday when its air conditioner unit wasn't getting enough power to operate effectively.

She was able to open her store again Friday.

On that day, Hydro One workers took pressure off the Simcoe transformers by rerouting electricity through stations in Brant County and Jarvis. By Saturday afternoon, the downed transformer was up and fully operational.

As electricity was switched back to the repaired transformer, the lights went out again briefly on Saturday afternoon.

The back-up transformer had been given a workout and will be examined for repairs sometime in the fall, Malinowski said.

— with files from Daniel Pearce

Figure 3 – Simcoe Reformer Article

3 Town of Oakville Growth

3.1 Remaining Capacity

Oakville Hydro is the licensed distributor of electricity for the Town of Oakville. Oakville Hydro receives electrical power from the transmission system, owned and operated by Hydro One Networks. Hydro One Networks maintains four transformer stations (TS's) that step down the transmission voltage to the distribution level. These four stations are at or near their rated capacity, and new facilities are required to serve future growth.

Station Loading

The table below shows Oakville Hydro's loading and allocated capacity at the four area transformer stations.

	Bronte TS	Palermo TS	Trafalgar TS	Oakville TS
Allocated Capacity (MW)	118	60.89	108	
2007 Peak Demand	91.68	84.107		
Remaining Capacity	27.8		5	1
Total Remaining Capacity	25 MW			
New Capacity Required	2011-12 (based on 2007 forecast – see Appendix 1)			

Table 1

Recently, it has come to light that two area Hydro One transformer stations have been temporarily derated due to equipment problems.

The derating of the Oakville TS is part of a systemic problem with the design of a particular vintage of Hydro One transformers. Hydro One has disclosed that twenty-two (22) 75/100/125 MVA power transformers in service at 12 transformer stations were not designed to meet the standard overload requirements, and have suffered thermal damage as a result of overloading. Three of these transformers have failed, and the remaining 19 units have been substantially derated to prevent further damage. Hydro One intends to replace these units by the end of 2012. In the meantime, the LDC's supplied from these stations must provide other sources of supply capacity.

The derating of Bronte TS is due to upstream 115 kV operating restrictions at Burlington TS. Hydro One initially capped Oakville Hydro to its 2007 peak summer demand of 91MW, but recently imposed a further 10MW restriction for at least the next two summers. Hydro One is suggesting that Oakville can move this 10MW to Palermo TS, but this station is already overloaded and will require Milton Hydro to move about half of its Palermo load to Halton TS. There is capacity remaining at Halton TS, and Milton Hydro is expected to accommodate this request from Hydro One.

Based on these restrictions, the system capacity/loading is as follows:

Oakville Hydro Corporation
Transformer Station Supply Options Study
May 2009

	Bronte TS	Palermo TS	Trafalgar TS	Oakville TS *
Allocated Capacity (MW)	81 70 89 82			*
2007 Peak Demand	91 68 84 107			
Remaining Capacity	-10	2 5 -25		
Total Remaining Capacity (shortfall)	(28 MW)			
New Capacity Required	Immediately required due to shortfall			

Table 2

As demonstrated by Table 2, should there be a critical failure at any one of these four Hydro One transformer stations, rotational blackouts could be imposed by Hydro One. Oakville Hydro may have the ability under emergency conditions to place up to 30MW of load on Trafalgar TS, and possibly avoid lengthy outages. This contingency has not been previously tested, but is presently under review by Oakville Hydro operations staff. The existing distribution automation schemes were not designed to support this configuration, and manual switching would be required to accommodate this load transfer. Short term outages may occur during switching activities.

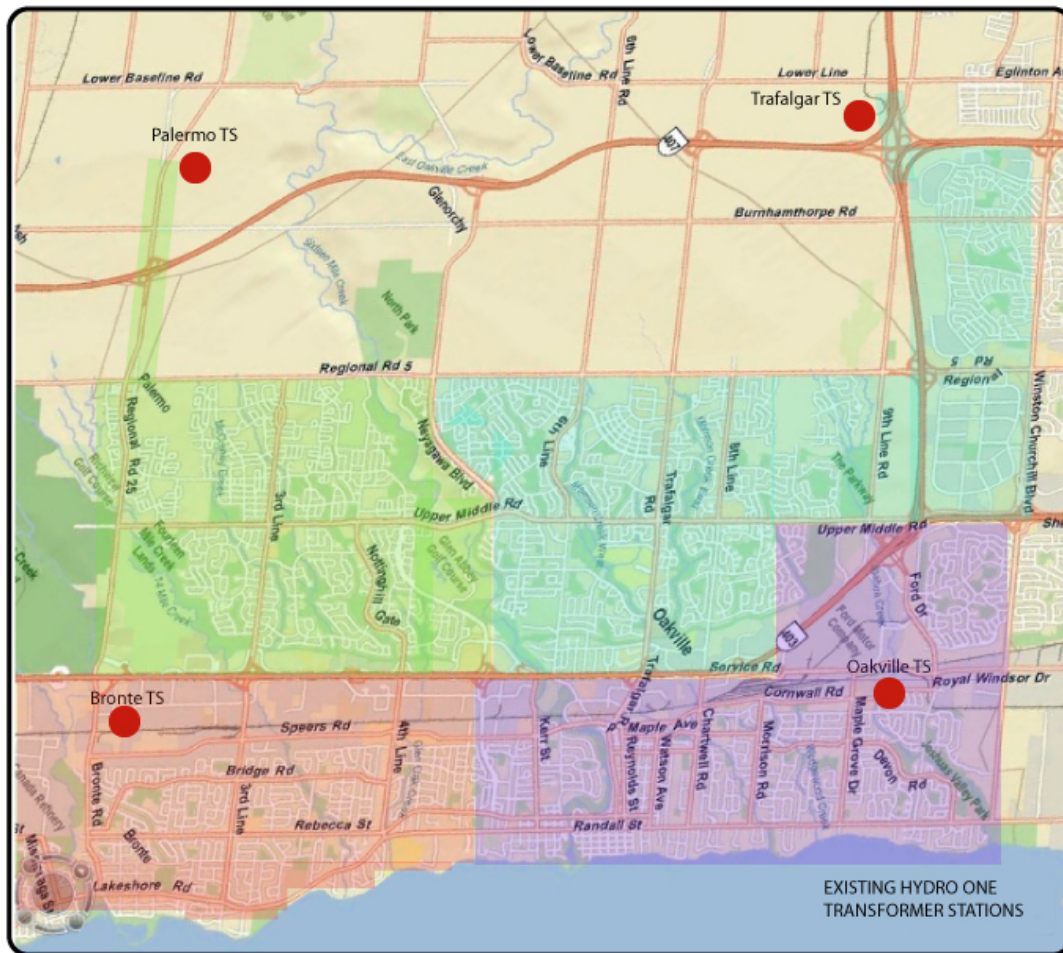


Figure 4 – Existing Hydro One Transformer Stations

3.2 Load Forecast

Utility load forecasts can be used for different purposes. Engineering forecasts tend to focus on the capability of the distribution system to provide power to the maximum load that could develop in a given time period. The benefit of this is that should all of the forecasted load actually develop, the infrastructure can accept the new load. In contrast, financial load forecasts are often used for rate-making purposes and may tend to be more conservative. Variations between the actual growth and the forecasted growth can be accommodated in subsequent rate applications. The load forecasts discussed in this report are engineering forecasts, and are based on ensuring that sufficient capacity is available for new growth. Oakville Hydro's future rate-making load forecasts may not match the engineering forecasts described below for this reason.

3.2.1 2007 Long Range Planning Study

As part of routine system planning, Oakville Hydro staff has been working with the Town of Oakville for several years to plan for forecasted growth in north Oakville. In the summer of 2007, the engineering firm AESI was engaged to perform a detailed analysis of growth potential for north Oakville. The AESI study considered the planning densities for housing and employment provided by the Town as well as the Region of Halton. Their study also considered potential impacts of conservation and demand management, as well as the potential for district heating projects. The AESI final report was completed in November 2007, and is attached in Appendix 2.

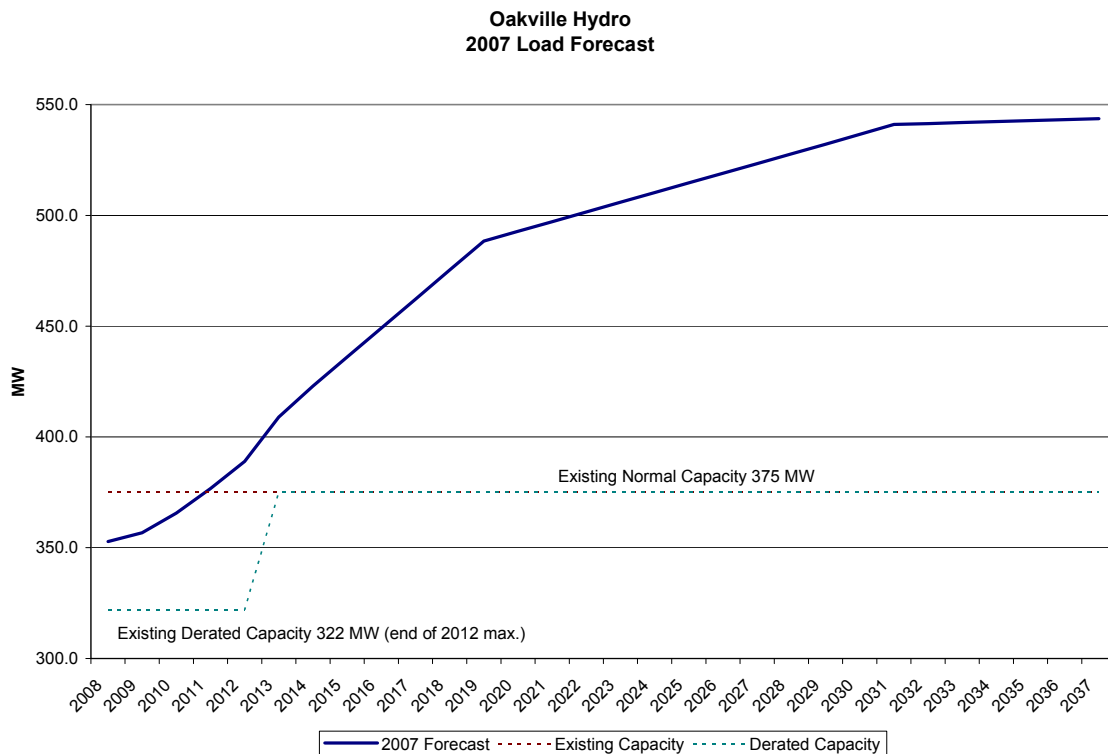


Figure 5 – 2007 Load Forecast

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May 2009*

Subsequently, Oakville Hydro and Town planning staff revised the planning estimates between March and May 2008 based on current conditions. A detailed geographic load forecast was completed in the summer of 2008 as part of a regional electric planning study conducted with Hydro One Networks, Burlington Hydro, and Milton Hydro. This forecast concluded that new transformer station capacity would be required around 2011-2012 (excluding the impact of the operating restrictions at the local Hydro One stations).

North of Dundas Street between Tremaine Road and Ninth Line, the Town of Oakville is expected to grow rapidly. That growth is expected to bring 133MW of new load onto the Oakville Hydro distribution system. This includes the provision of new supply capacity to a proposed hospital complex planned for northwest Oakville. This hospital is forecasted to require 8MW of capacity, but will actually require an additional 8MW of standby capacity for redundancy, for a total requirement of 16MW. This load is included in the 133MW requirement. In order to accommodate these new customers, Oakville Hydro will need to expand the power available in the area. Figure 6 shows the forecasted load growth in north Oakville.

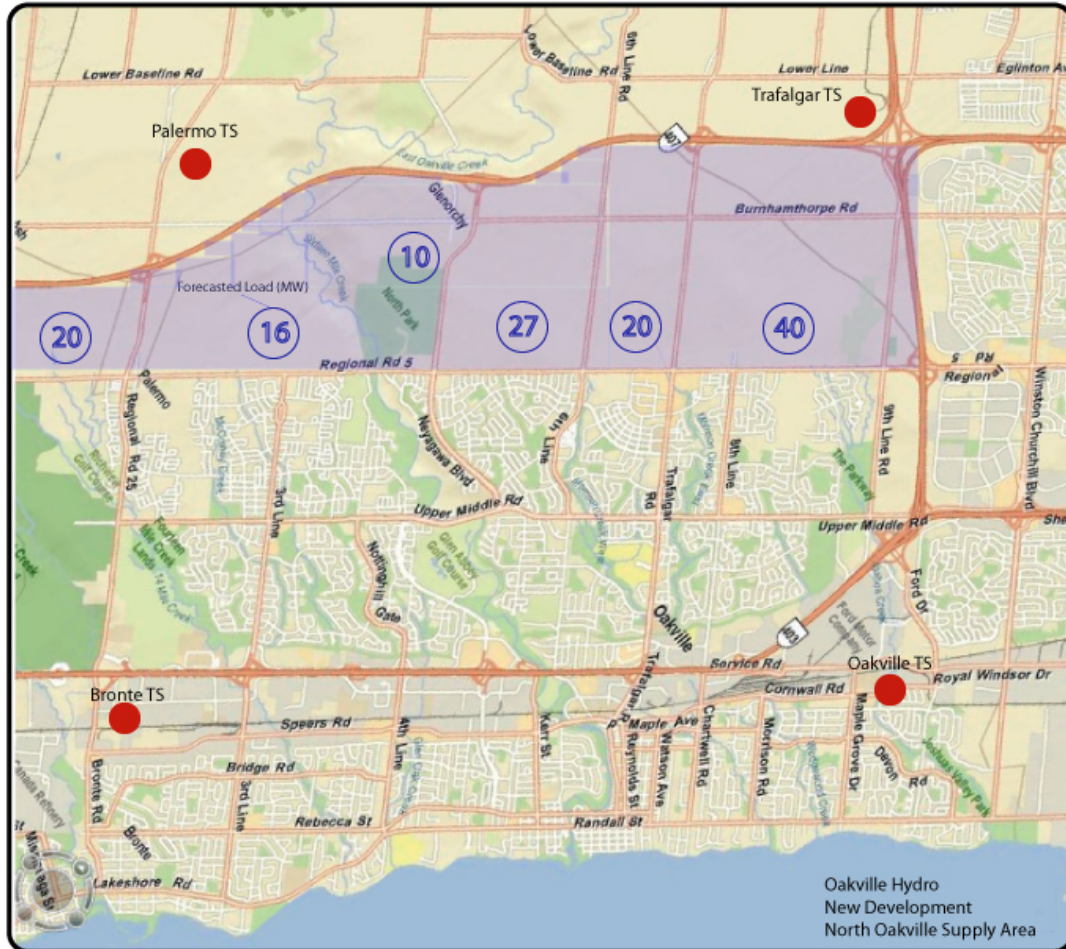


Figure 6 – North Oakville Development

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Historically, load in this northern area of Oakville has been light in comparison to what the new growth will require, and has been supplied from Trafalgar T.S. and Palermo T.S. - existing transformer stations owned and operated by Hydro One. These transformer stations, as they exist today, can not deliver the capacity necessary to meet the forecasted load growth for the area. Limits on existing equipment together with the new load developing in the area create the need for additional transformer station capacity.

3.2.2 Economic Downturn

The impact of the recent economic downturn on short term load growth is not known with certainty at this time. Preliminary data for the first four months of 2009 shows an overall drop in electricity consumption of about 8%, as compared to the same period of 2008. One major 10 MW customer has temporarily suspended operations, at least until the spring of 2010. Excluding the lost of consumption for this customer, the decline is about 2.5%. We expect that there will be an associated decline in the short term summer demand based on this data, but it is difficult to predict the overall impact with accuracy.

While the short term demand will certainly be affected by the downturn, we expect that all of the forecasted load will ultimately develop in time. The need for additional supply capacity remains, with only the timing for the start of construction to be determined. Sensitivity analysis for several growth scenarios was performed as shown in Figure 7 below. The growth from the 2007 load forecast was delayed by one to three years, along with one additional case that considers the loss of 2% of the system demand, with a two year recovery period.

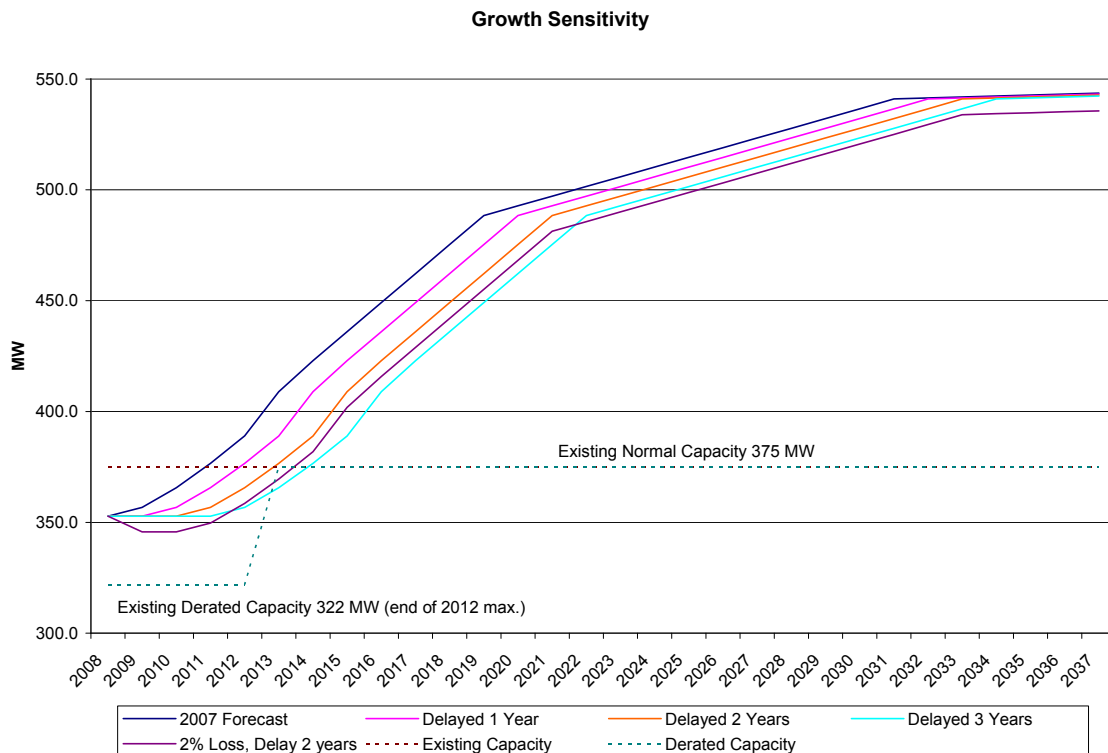


Figure 7 – Sensitivity Analysis for Growth

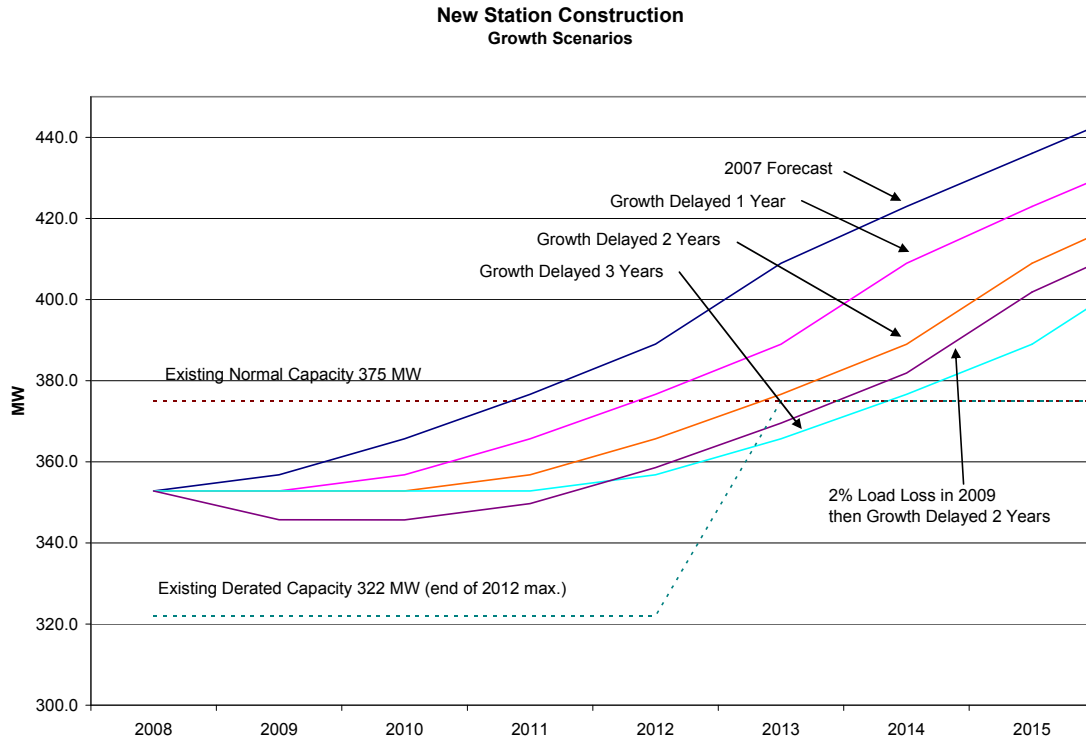


Figure 8 – Short Term View of Sensitivity Analysis

Figure 8 shows the short term system loading of the five growth scenarios studied. Based on the normal system capacity of 375 MW, the required in-service date is likely 2012-2013. However, considering the temporary operating restrictions at area Hydro One stations, Figure 8 shows that under every growth scenario studied, there is an immediate shortfall of capacity until Hydro One makes necessary repairs and upgrades.

3.2.3 Timing of Hydro One Station Repairs

Hydro One has indicated that the temporary operating restrictions at Oakville TS and Bronte TS will be removed by the end of 2012. They apparently cannot commit to a schedule for their repair work. It may be possible that some of the repairs are made sooner than 2012, freeing up capacity earlier than expected. On the other hand, they could experience unforeseen problems and the restrictions could be extended.

Oakville Hydro may elect to advance the in-service date of a new transformer station, specifically to mitigate the serious risk associated with this temporary shortfall in capacity.

3.3 Requirement for Long Range Supply Plan

Long range transmission planning is the responsibility of the Independent Electricity System Operator (IESO), Hydro One Networks, and the Ontario Power Authority. The IESO and Hydro One regularly request updated load forecasts from connected customers, and manage the short and long term planning of the transmission system. LDC's are encouraged to take an active role in at least observing the planning processes, and where possible, actively participating in activities such as regional supply studies. Oakville Hydro has been active in the recent Halton Region transmission supply planning work facilitated by Hydro One.

The planning and construction of transformer stations requires significant time, resources, and funding. Oakville Hydro has completed a detailed, long range distribution plan for the Town of Oakville. As part of this planning process, we suggest that a long range plan for transformer station supply should be considered at the same time. This will provide a comprehensive supply plan for electricity customers in Oakville, and allow detailed technical and financial analysis of long term options.

Our view is that Oakville Hydro should match their 25 year distribution load forecast with a corresponding long term transformer station plan. Ideally, this would involve a comparison of long term pool funded options with Oakville Hydro's self-build options. This will ensure that the infrastructure will have adequate capacity to serve development within the Town of Oakville.

Hydro One Networks had initially provided a proposal to design and construct the first of up to four new transformer station facilities required in Halton Region (called "Tremaine TS", discussed in detail in Section 4). This station would provide capacity to Oakville Hydro, Burlington Hydro, and Milton Hydro. This proposed station would provide capacity for only two to four years of Oakville growth. Additional capacity would have to be constructed almost as soon as Tremaine TS was placed into service. This option alone would not provide a long-term station supply for Oakville Hydro, and at that time, Hydro One would not provide any proposals for additional capacity unless the Tremaine proposal was accepted. This would in essence commit Oakville Hydro to a long-term contract with Hydro One with unknown terms.

After a comprehensive review of the Tremaine TS proposal, Oakville Hydro declined this offer and requested Hydro One to provide a proposal for a pool-funded "North Oakville TS". A proposal for this station was necessary to allow Oakville Hydro to directly compare self-built and pool-funded options, and both provide long-term supply stability. Hydro One submitted a brief proposal, which is discussed in Section 4.

Consequently, Oakville Hydro now has the ability to compare long-term pool-funded and self-built transformer station options.

4 Supply Options

4.1 Historical Practice

Prior to the opening of the electricity market, Ontario Hydro typically constructed new transformer station facilities proactively as demand required. These facilities were provided at no direct cost to the distribution utilities, as station costs were pooled and recovered through regulated transmission charges. Costs for related distribution improvements such as feeder ducts and cables were the responsibility of the LDC. The financial evaluation of projects considered the overall transmission and distribution costs, with each entity responsible for their own portion.

4.2 Transmission System Code

In 2002, as part of the industry changes associated with the passing of the Electricity Act and market opening, the Transmission System Code came into effect and we moved to a “user pay” approach. Costs for projects specifically attributable to one or more customers are recovered as part of the regulated connection process. Connecting customers have the choice to undertake certain contestable work or have Hydro One provide services, at the connecting customer’s cost.

In the case of municipal utilities requiring new transformer station capacity, three basic options exist:

1. Hydro One designs, constructs, and operates the new station. An economic evaluation is performed by Hydro One, whereby the net present value of the future incremental load revenue is compared to the cost of construction, operation, and maintenance cost of the station. If there is a shortfall in load revenue, the LDC pays the difference up front in the form of a capital contribution to Hydro One.
2. The LDC designs and constructs the new station according to Hydro One’s technical standards, and turns the station over to Hydro One prior to energization. Hydro One would reimburse the LDC for “reasonable costs” less the cost to oversee and administer the project. The economic evaluation described in the scenario above is used to calculate cost recovery. This option could be used if the LDC believed it could construct a transformer station exactly the same as Hydro One would, and do it for less cost. To the best of our knowledge, no LDC has exercised this option.
3. The LDC designs, constructs, owns, and operates the new station. The station asset would become part of the LDC distribution asset base, and the LDC would earn the regulated rate of return for the value of the station. Some or all of the capital cost of the project would be offset by a reduction in transmission charges payable to Hydro One.

4.3 Comparison of Connection Options

Principle	Pool-funded Option	LDC Build/ Turn Over to Hydro One	LDC Self-Build Option
1 Overall capital cost	x	□	✓
2 Risk of load growth – true up payments	x	□	✓
3 Increase LDC asset base	x	x	✓
4 Control of system capacity	x	x	✓
5 Operating flexibility	□	□	✓
6 Lower transmission charges	x	x	✓
7 Lower upfront capital requirements	✓	□	x
8 Burden on resources – project management, engineering, operating expertise	✓	x	x

Legend: ✓ = Best □ = Better x = Least

Table 3

Additional comments on Table 3:

1. LDC's typically build municipal transformer stations for significantly less cost than Hydro One. Historically LDC cost savings were in the range of 20 – 30%, however with recent pricing from Hydro One, the savings are even greater.
2. Should the LDC load not materialize as fast as forecasted, Hydro One could collect additional payments from the connecting customer. If the LDC owned the transformer station, cost is recovered in the distribution rate base, on the book value of the station asset. The amount of load on a municipal transformer station does not affect the recovery of costs and return on equity.
3. Municipal transformer stations are capitalized and placed in the distribution asset base. This provides an opportunity for the LDC to add significant value to the asset base in a single project. This option delivers the highest increase in Shareholder value.
4. The control of system capacity refers to the LDC taking total responsibility for transformer station and distribution system capacity, such that LDC planning ensures that there is sufficient capacity at all times.
5. Operating flexibility refers to day to day system operation, for events such as placing hold-offs, storm response, detailed SCADA information, and maintenance coordination. Hydro One stations are controlled from the Ontario Grid Control Centre (OGCC), and major events across the province are prioritized. A relatively small problem in Oakville's service territory may not receive prompt attention from the OGCC if there are larger system issues elsewhere.

6. LDC's that build their own transformer stations avoid the transformation tariff from Hydro One, currently \$1.65 / kw. This rate is predicted to rise to \$1.83 / kw by 2010. This is a pass through cost via retail transmission charges, but does have an impact on the total end cost to local retail customers.
7. Hydro One pool-funded stations require less up front capital from the LDC as opposed to the LDC building the station. Some capital contribution may be necessary depending on the total capital cost of the project and the value of the incremental load revenue over the 25 year economic horizon.
8. The design and construction of municipal transformer station requires dedicated and experienced resources. Many LDC's do not have internal expertise in stations, its staff may be fully engaged in other activities, or do not wish to take on the responsibility for a project of such magnitude.
9. We are not aware of any connecting customer that has built a transformer station according to Hydro One specifications and turned the station back to Hydro One at time of energization. We expect that although this may seem to be a lower cost alternative compared to Hydro One building the station, Hydro One would impose engineering and administration charges that would be subtracted from the purchase price. We also expect that there would be some growing pains with the development of this process, possibly resulting in delays and higher costs.

4.4 Proposed Transformer Stations

A comprehensive supply plan for Oakville Hydro will require two or more new transformer stations to be constructed over the next thirteen years. The following is a summary of each possible transformer station under consideration in this study:

4.4.1 Oakville Hydro MTS #1

MTS #1 is a proposed 170 MVA (153 MW) municipal transformer station, owned by Oakville Hydro or jointly owned with Milton Hydro. The station is to be constructed around 6th Line and Highway 407, to be in-service by summer 2011.

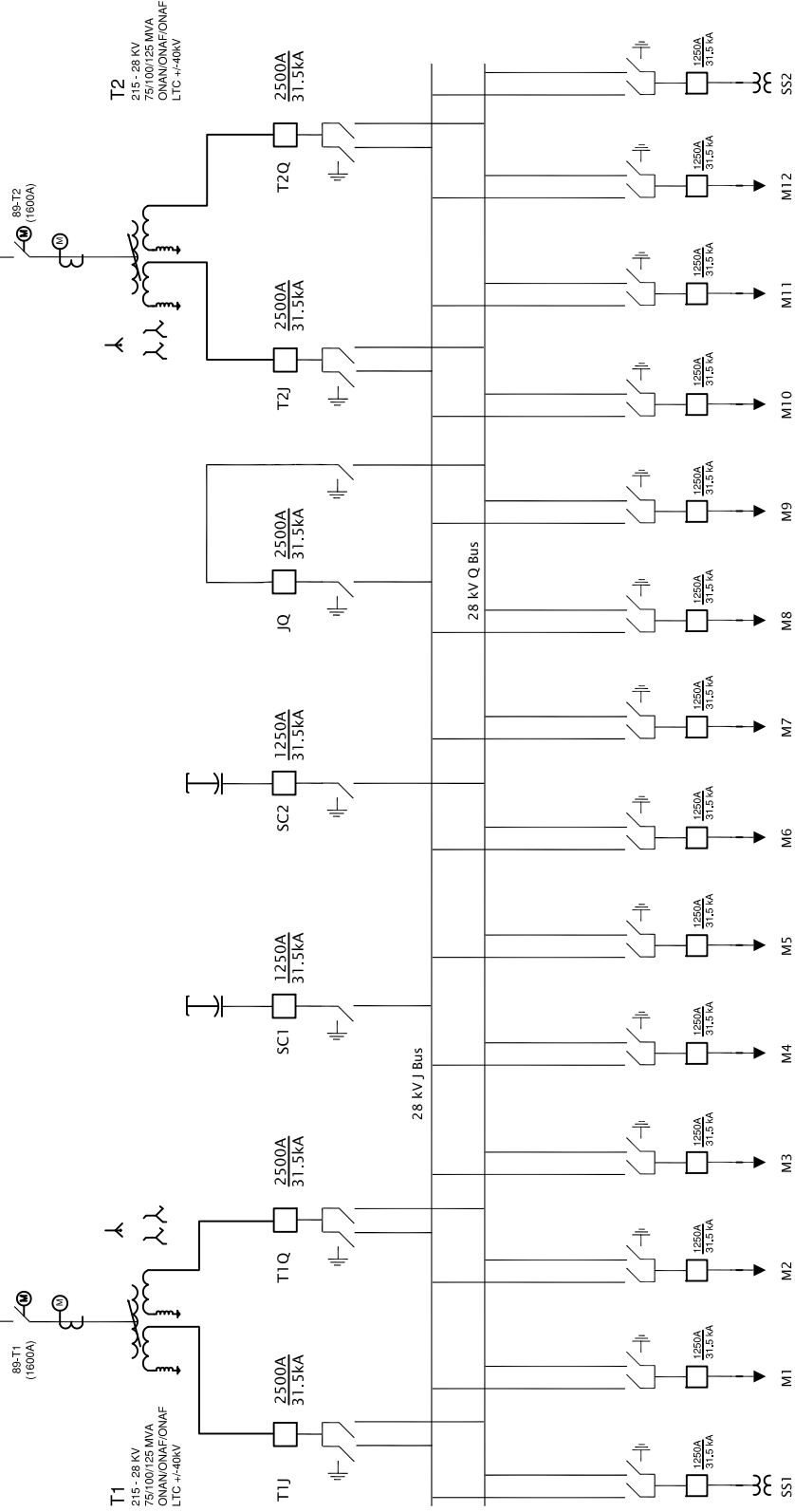
The station is configured as a typical Ontario Hydro "Bermondsey" station, with two 75/100/125 MVA power transformers, each with dual 28 kV secondary windings. Municipal utilities have been utilizing 36 kV class gas insulated switchgear (IEC rated), manufactured in Europe with special features to ensure compatibility with North American standards. This switchgear would be configured with twelve (12) feeder breakers, and two breakers for power factor correction capacitors. A typical single line diagram is shown in Figure 9.

The total cost of the project of this project, including metering, land, feeders, sales taxes, and 10% contingency, is budgeted at \$20.5M. This compares favorably to Hydro One's cost of \$27M - \$31.5M to build the same amount of capacity.

Should Oakville Hydro opt to completely own this station, it would provide enough capacity to service all of the forecasted growth in the north Oakville area. If the capacity is shared with Milton Hydro, it will provide local capacity for about ten years.

230 kV CIRCUIT
XXXX

230 kV CIRCUIT
XXXX

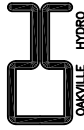


KEY MAP
NOTES

1. Conceptual drawing only, Not for construction.
2. All nomenclature is conceptual only.

NOT FOR CONSTRUCTION

NO.	DATE	REVISION	MADE BY
1	4/08/08	Added double bus	SC
REVISIONS			



Costella associates
158 Pined Hollow Drive
Sudbury, ON P3E 6L2
(705) 522-0501
www.costella.com

Oakville Hydro MTS #1 Project
Costella Associates Inc.
230 kV Bernardsville Station
MV-GIS Switchgear
175 MVA LTR Capacity

DESIGNED BY: S. Costello	DATE: Aug 11, 2008	REVIEWED BY: NTS
CHECKED BY:	APPROVED BY:	DRAWN BY: C-002

4.4.2 Oakville / Milton Hydro MTS #2

MTS #2 is a proposed municipal transformer station that would be necessary only if Oakville and Milton elect to co-own MTS #1. This station is identical to MTS #1 above. Based on current load forecasts, the station would most likely be a 170 MVA station similar to MTS #1. Should development occur at a slower pace than the present forecast, a smaller station could be constructed.

4.4.3 Hydro One “Tremaine TS”

Tremaine TS is a proposed Hydro One-owned 170 MVA (153 MW) station, to be constructed on Tremaine Road north of Highway 407 (see Figure 10 for location). Hydro One has made an offer to design and construct this station, to be ready for service in 2012. This station would provide new capacity for Oakville Hydro, Milton Hydro, and Burlington Hydro.

This station is proposed to have twelve feeders, two dedicated to Oakville Hydro, four for Milton Hydro, and six for Burlington Hydro. Hydro One has allocated 28 MVA (~25.2 MW) of new capacity from this station to Oakville Hydro. A 27.6 kV feeder is typically designed for 16.7 MVA (15 MW), so these two feeder positions offered by Hydro One will be designed to operate at about 85% of typical capacity.

The quoted cost of the project from Hydro One is approximately \$25M, however the cost of certain features and components have been excluded from the budget. No costs have been allowed for feeders, revenue metering, property, or tie switches. We estimate an additional two to three million dollars of costs will be ultimately allocated by Hydro One, to be recovered from the three LDC's as part of the capital contribution. This results in a total project cost of \$27M - \$28M.

Should Oakville Hydro elect to participate in the Tremaine TS project, a capital contribution of \$1.3M is required in addition to the guarantee of incremental load revenue for the next 25 years. Again, we expect that the capital contribution will be closer to \$2M due to the exclusion of necessary components and features from Hydro One's initial offer.

The station location is less than ideal for Oakville Hydro, given that it is located west of Oakville's service territory. New load is expected to materialize in the north-central and north-eastern areas of Oakville, and will require a local source of supply. This would mean that even if Oakville elected to take capacity from Tremaine TS, another station would be required to come online in that area at the same time.

4.4.4 Hydro One “North Oakville TS”

North Oakville TS is a proposed Hydro One-owned station, to be constructed somewhere in north-central Oakville. Oakville requested a proposal for this facility due to the fact that the Tremaine TS option only provided capacity for a small portion of the planned north-Oakville growth.

Hydro One provided a one-page, high level proposal for this station, and provided two options for the capacity of the station. The first option is to construct a 102 MW station (8 feeders), at a cost

*Oakville Hydro Corporation
Transformer Station Supply Options Study
May 2009*

of about \$25M (the same quoted cost as the 153 MW Tremaine TS). The second option is to construct a 153 MW station, at a cost of about \$29M.

Considering the load revenue Hydro One would obtain from new load, Oakville Hydro would need to make capital contributions of about \$14.6M for the 102MW station, and \$18.6M for the 153 MW station. In addition, Oakville Hydro would have to guarantee the load revenue for the next 25 years.

In addition, the market rules demand that the existing capacity at Trafalgar TS be utilized before placing any new load on the North Oakville TS. Oakville Hydro would be required to pay Hydro One's cost to add one or two new breaker positions at Trafalgar TS, and build new feeders to the load area. The estimated cost of the station work is in the range of \$600K - \$1.2M.

This proposal provides a direct comparison of Hydro One station costs and LDC costs. The total budget for Oakville Hydro's MTS #1 station is \$20.5M, including 10% contingency. The total cost for the Hydro One option is about \$31.5M including the cost of expanding Trafalgar TS. Considering the cost of the capital contribution (\$18.6M), the cost of expanding Trafalgar TS (~\$1M), Oakville Hydro will spend about \$20M upfront regardless of who builds the station. Add on the requirement to guarantee the load revenue to Hydro One for 25 years, this proposal-funded option is not a reasonable alternative.

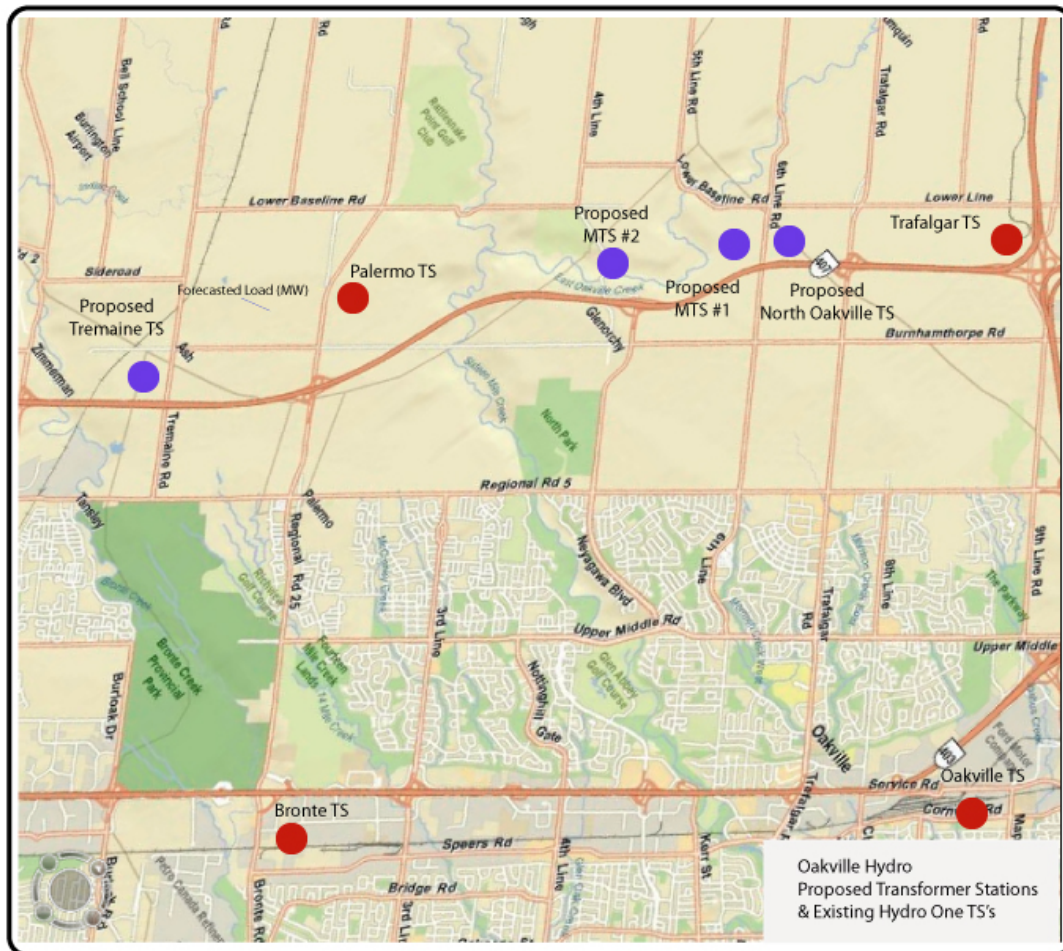


Figure 10 – Proposed TS Locations

4.5 Long Range Supply Options

The following three options provide sufficient transformer station capacity for Oakville Hydro for the next 25 years, based on current load forecasts.

4.5.1 Oakville Hydro Self-Build Option

Oakville Hydro requires about 133 MW of new capacity in the north Oakville area. Oakville may also require an additional 30 MW to service redevelopment projects in the midtown area.

The proposed Oakville Hydro MTS #1 station would provide enough capacity to meet all of the forecasted load requirements for North Oakville, and have about 20 MW of additional capacity remaining for unforeseen loads. Oakville Hydro would not be required to utilize the remaining Trafalgar TS capacity if they elect to build this MTS (see Appendix 4 for confirming email from Hydro One).

There is an opportunity to expand the existing Hydro One-owned Bronte TS to provide additional capacity for the midtown area. Hydro One added a new transformer to Bronte TS around 1998 to provide additional capacity for Oakville and Burlington. Unfortunately the new station configuration does not provide redundancy for short term outages, and therefore the customers fed from this transformer over time will experience lower reliability levels than other customers.

The expansion of Bronte TS could provide the necessary capacity for midtown Oakville, and eliminate the reliability concern.

4.5.2 Oakville – Milton Co-ownership Option

Milton Hydro is currently supplied from two Hydro One-owned transformer stations – Palermo TS in the south, and Halton TS in the north. Halton TS is nearing its rated capacity, and will require relief around 2012 – 2013. As mentioned above, Palermo TS is operating well over its published ratings.

Milton Hydro is presently undertaking a long term planning study, and is co-operating with neighboring LDC's and Hydro One to find supply options.

Milton Hydro requires a total of 172 MW of new supply capacity in its southern supply area. In combination with the north Oakville requirements, there is a need for over 300 MW of new capacity in the next 25 years.

Oakville and Milton could elect to either co-own one or more new transformer stations, or one LDC could elect to supply the other feeders and retain complete ownership of the station. In the latter case, the OEB would need to be consulted for regulatory guidance, as we are not aware of a precedent for this arrangement between LDC's.

Regardless of ownership, should Milton and Oakville choose to cooperate on the provision of new supply capacity; the following station additions would be required:

- MTS #1 is constructed and in-service by 2012
- MTS #2 is constructed and in-service by 2022
- Bronte TS is expanded as required for midtown development

4.5.3 Hydro One “North Oakville TS” Option

Hydro One provided two capacity alternatives for this station – 102 MW and 153 MW. Oakville Hydro requires about 133 MW of new supply capacity in north Oakville. Should Oakville Hydro elect to have Hydro One build this station, the remaining capacity at Trafalgar TS (approximately 19MW) must be utilized prior to loading a new station. The remaining 114 MW of forecasted load could not be serviced by the 102 MW station, and therefore Oakville must consider this facility to be a 153 MW (170MVA), 12 feeder station.

As mentioned above, Oakville Hydro would be responsible for the cost of upgrading Trafalgar TS (~\$1M), and would have to contribute \$18.6M to Hydro One. This Hydro One option requires Oakville Hydro to pay the same upfront costs as if they built their own station, would require the guarantee of load revenue for the next 25 years, and Oakville Hydro customers would be incur the transformation tariffs for all load on the station.

The proposed North Oakville TS 153 MW station is identical conceptually to the Oakville Hydro MTS #1 station, and would provide enough capacity to serve Oakville's long term supply requirements. The total cost of the Hydro One station is about 50% higher than Oakville Hydro's proposed station. There is risk in guaranteeing the load revenue for this station, especially considering the uncertainty of development due to the recent economic downturn. This is not a reasonable alternative due to the high cost and increased risk of the project.

4.5.4 Hydro One “Tremaine” & Oakville Hydro MTS #1 Option

Oakville Hydro could elect to participate in the Tremaine TS project, for a projected capital contribution of \$2M+, and the accompanying 25 year load revenue guarantee. Oakville Hydro would then only require about 100 MW of new capacity, which could be served by a smaller 125 MVA MTS with a budget cost of \$17M.

Bronte TS would also need to be expanded under this option to provide capacity and reliability to the mid-town area.

The total cost of participating in the Tremaine TS project and then having to build a 125 MVA MTS is comparable to building an entire 170 MVA MTS (as per 4.2.1). Considering the poor geographic location of Tremaine TS, this option does not appear to be attractive from Oakville Hydro's perspective.

5. Economic Evaluation

5.1 Impact to Rate Payers

Oakville Hydro is in the process of preparing its full cost of service rate application for submission in August 2009, for rates effective May 1, 2010. It is anticipated that the next rebasing application will occur in 2013 for rates in 2014.

For purposes of this report, the assessment presented here attempts to isolate the impact of the costs of putting an MTS into service from the many other factors which make up the customer's electricity bill.

Supporting information for this assessment is included in Appendix 7.

Under joint ownership option with Milton Hydro, the impact on the residential customer's bill solely from the addition of the new TS will be an increase of 1.15%. Under the Oakville alone option, the increase would be 2.27% on the bill of the average 1000 kWh per month residential customer. This impact would result as an output of the rate application immediately following the in service date for the station. This impact does not consider the anticipated savings from the elimination of Hydro One Transmission and Connection charges for the load on this new station.

Another factor to be considered is the avoidance of transformation charges that are normally paid to Hydro One when they own the TS. LDC's collect retail transmission charges from their customers and effectively pay Hydro One at the wholesale transmission level. These are "pass-through" charges that impact the total cost of the LDC's customer bill. If Oakville Hydro constructs a MTS, there would be a reduction in the wholesale transmission charges paid to Hydro One. At the current OEB approved rates, without escalation, the present value of 25 years of avoided charges is approximately \$16.5M.

The Hydro One Transmission and Connection charge savings will not benefit the electricity customer immediately. The process for passing this savings on to the customer would involve applying to the OEB to refund the balance of these payments accumulated in regulatory liabilities on Oakville Hydro's balance sheet through an adder to rates. Likely the OEB would approve the refund of these accumulated balances to customers over a number of years.

Due to the initial capital expense of the new transformer station this option produces a higher initial impact on rates than the pool-funded option, however, it also offers the best cost saving profile for Oakville Hydro and its customers over a term of 40 years.

5.2 Shareholder Value

Although it requires the greatest outlay of initial capital, the highest Shareholder value is created under the option where Oakville Hydro builds, owns and operates the new transformer station. From a net income perspective, the Shareholder will earn the regulated rate of return of 7.2 percent on the net book value of transformer station as an asset. (USofA 1810) This means that an asset investment of \$20M would realize gross pre-tax return to the shareholder of \$8.2M over the 40 years the asset is in service. The NPV of the annual pre-tax return to the shareholder is \$1.9M. The return would be recovered through rates charged to utility customers over the life of the asset.

5.3 Financing Options

The financing option that seems to best fit this project is an Infrastructure Ontario interest-only loan at approximately 1.39 (variable rate at 1/24/2009) percent for 100 percent of the construction cost. Interest is only payable on the amount drawn and best practice project management reporting is required for loans greater than 10 million dollars.

Once the new transformer station is in service, the loan may be converted to a long-term debenture under Infrastructure Ontario's Municipal Corporation Loan Program.

The addition of 10-20 million dollars in long-term debt to Oakville Hydro's capital structure may marginally take the debt level outside the OEB's deemed debt ratio of 60 percent. The impact of this would be to increase the overall return to the shareholder as the corporation increases leverage at a cheaper rate. This assumption is based on increases in equity, and flat dividend payments for 2009 and 2010 at rates similar to 2009 budget.

5.4 Certainty of Cost Recovery

In a statement from the Chair of the Ontario Energy Board, Howard Wetston, dated April 3, 2009 (see Appendix 5) there is clear shift in the OEB's policy towards the recovery of capital costs. The letter provides strong indication that the OEB recognizes that LDC's will need receive greater regulatory certainty of recovery prior to making significant capital investments. To that end he goes on to explain that the board is presently considering several regulatory approaches to allow for early recovery of capital costs. Since prompt regulatory recovery had been identified as a timing risk to this project, this message by the board and the future consideration of this issue should allow this project to proceed with a level of certainty of cost recovery and return to the shareholder.

5.5 Timing of Distribution Rate Re-basing

The OEB has determined that the plan term for 3rd Generation IR will be fixed at three years (i.e., rebasing year plus three years).

There are two options for an earlier relief on specific cost pressures (e.g., additional investment):

1. Off-ramps
2. Incremental Capital Module

*Oakville Hydro Corporation
Transformer Station Supply Options Study
May 2009*

Comparison:

Off-ramp	Incremental Capital Module
Earlier Rebasing process; Notice to the OEB no later than 60 days after annual audited financial statement	Included in IRM time framing and submission (separate model)
The capital additional costs are included in the rate base	Rate adder; collected amount carried in deferral account 1508 as Other Regulatory Asset; the variance between forecasted costs and collected amounts is subject to the OEB review
Long project and big burden	Model provided; easier process; threshold test for qualification
Recovery after the costs incurred	<u>Partial cost recovery</u> (the excess of the threshold) before and/or during the costs incur
<u>Eligibility</u> : performing outside of an annual ROE dead band of ± 300 basis points – no final model at this time	<u>Eligibility</u> : costs in excess of the materiality threshold

Table 4

5.4.1 Off-ramps

The rates of the distributor are not expected to be subject to rebasing before the end of the plan term other than through an eligible off-ramp.

An off-ramp is based on a pre-defined set of conditions under which the IR plan would be terminated or modified before its normal end-of-term date, usually because of extreme events that cannot be effectively addressed, or that should not be addressed, through Z-factor treatment or some other IR mechanism such as earnings sharing (e.g. the new MTS).

Therefore, an off-ramp is available where the adjustments provided by IR proved insufficient for specific cost pressures (e.g., additional capital investment). Where this is the case, distributors are expected to file a comprehensive cost of service application and not to rely on the simplified filing requirements for the incentive mechanism.

The OEB has determined that the 3rd Generation IR plan will include a trigger mechanism with an annual ROE dead band of ± 300 basis points. When a distributor performs outside of this earnings dead band, a regulatory review may be initiated. In support of this approach, a distributor will be required make a report to the OEB no later than 60 days after the company's receipt of its annual audited financial statements, in the event that the distributor falls short of or exceeds its ROE by 300 basis points. The report will be reviewed to determine if further action by the OEB is warranted. Any such review would be prospective and could result in modifications to the IR plan, a termination of the IR plan or the continuation of the IR plan.

5.4.2 Incremental Capital Module

The Incremental Capital Module is intended to address concerns over the treatment of incremental capital investment needs that may arise during the IR term.

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Transformer Station Supply Options Study
May 2009*

For incremental capital expenditures to be considered for recovery prior to rebasing, amounts must satisfy the eligibility criteria:

Materiality: the amounts must exceed the Board-defined materiality threshold and clearly have a significant influence on the operation of the distributor; otherwise they should be dealt with at rebasing.

Need : amounts should be directly related to the claimed driver, which must be clearly non-discretionary. The amounts must be clearly outside of the base upon which rates were derived.

Prudence: the amounts to be incurred must be prudent. This means that the distributor's decision to incur the amounts must represent the most cost-effective option (not necessarily least initial cost) for ratepayers.

Therefore, the eligibility of a distributor to apply for rate relief through the module will be subject to a materiality threshold.

The OEB has also determined that there will be annual reporting on actual capital spending and a prudence review at the time of rebasing. Distributors that receive rate relief through this module will be required to report to the Board annually on the actual amounts spent. At the time of rebasing, the Board will carry out a prudence review to determine the amounts to be incorporated in rate base. The Board will also make a determination at that time regarding the treatment of differences between forecast and the actual spending during the IR plan term.

The OEB has determined that the appropriate CAPEX to depreciation threshold value to establish materiality for the incremental capital module should be distributor-specific and derived using the following formula:

$$\text{Threshold Value} = 1 + \left(\frac{\text{RB}}{d}\right) * (g + \text{PCI} * (1 + g)) + 20\%$$

Where:

RB = rate base included in base rates (\$);
d = depreciation expense included in base rates (\$);
g = distribution revenue change from load growth (%); and
PCI = price cap index (% inflation less productivity factor less stretch factor).

The values for "RB" and "d" are the Board-approved amounts in the distributor's base year rate decision.

The value for "g" is the % difference in distribution revenues between the most current complete year and the base year. For example, for distributors that were rebased in 2010:

If a distributor applies in	Then "g" will be the difference between
2011	2009 actuals and 2010 Board-approved base
Jan-Mar 2012	2009 actuals and 2010 Board-approved base
Apr-Dec 2012	2010 Board-approved base and 2011 actuals
Jan-Mar 2013	2010 Board-approved base and 2011 actuals
Apr-Dec 2013	2010 Board-approved base and 2012 actuals

Table 5

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Transformer Station Supply Options Study
May 2009*

The OEB expects the distributor to manage a CAPEX level of up to threshold (threshold % X depreciation included in the rate base) before being eligible to apply to recover incremental amounts.

The incremental capital for which the Board may provide rate relief is the new capital sought in excess of the materiality threshold. The proceeding to consider an eligible distributor's application for rate relief would examine the reasonableness of the distributor's increased spending plan. If the application is approved, a rate rider would be established to reflect an amount sufficient to accommodate the portion of the approved incremental spending that exceeds the threshold amount.

Distributors that receive rate relief through this module will be required to report to the Board annually on the actual amounts spent. At the time of rebasing, the Board will carry out a prudence review to determine the amounts to be incorporated in rate base. The Board will also make a determination at that time regarding the treatment of differences between forecast and actual capital spending during the IR plan term. Overspending or under-spending will be reviewed at the time of rebasing.

The OEB expects that applications requesting relief for incremental CAPEX during the IR plan term will be accompanied by comprehensive evidence to support the claimed need, and include the following:

- An analysis demonstrating that the materiality threshold test has been met and that the amounts will have a significant influence on the operation of the distributor;
- A description of the underlying causes and timing of the capital expenditures including an indication of whether expenditure levels could trigger a further application before the end of the IR term;
- An analysis of the revenue requirement associated with the capital spending (i.e., the incremental depreciation, OM&A, return on rate base and PILs associated with the incremental capital), and a specific proposal as to the amount of relief sought;
- Justification that amounts being sought are directly related to the claimed cause, which must be clearly non-discretionary and clearly outside of the base upon which current rates were derived. This includes historical plant continuity information for each year of the IR plan term since the last Board-approved Test Year;
- Justification that the amounts to be incurred will be prudent. This means that the distributor's decision to incur the amounts represents the most cost-effective option (not necessarily least initial cost) for ratepayers;
- Evidence that the incremental revenue requested will not be recovered through other means (e.g., it is not, in full or in part, included in base rates or being funded by the expansion of service to include new customers and other load growth); and
- A description of the actions the distributor will take in the event that the Board does not approve the application.

5.4.3 Reporting Requirements

Distributors that receive rate relief through this module will be required to report to the Board annually on the actual amounts spent. At the time of rebasing, the Board will carry out a prudence review to determine the amounts to be incorporated in rate base. The Board will also make a determination at that time regarding the treatment of differences between forecast and actual capital spending during the IR plan term. Overspending or under-spending will be reviewed at the time of rebasing.

5.4.4 Accounting Treatment

Eligible **Incremental Capital Module** amounts should be recorded in Account 1508, "Other Regulatory Asset, Sub-account Incremental Capital Expenditures", of the Board's USoA contained in the Accounting Procedures Handbook for electricity distributors.

Carrying charge amounts shall be calculated using simple interest applied to the monthly opening balances in the account and recorded in a separate sub-account of this account. The rate of interest shall be the rate prescribed by the Board for the respective quarterly period for deferral and variance accounts. These prescribed rates are reviewed and updated each quarter and published on the Board's web site.

In our case, the IC threshold value is \$11.7M if reported to the approved rate base of \$108.6M. Oakville Hydro is going through a re-basing process for 2009 rates. The estimated rate base is of \$135M. In case it was approved, the incremental capital cost threshold will increase (estimated threshold \$12.4M).

5.5 Impact of Economic Downturn

The engineering load forecast used in this analysis was prepared in the summer of 2008, prior to the economic downturn which began in the fall of 2008. It is unclear at this time to what extent this downturn will have on the rate of development in Oakville, and therefore the load forecast has not been adjusted.

What is understood is that the self-build option helps to mitigate whatever effect the economic situation will have on development in that cost recovery is based on the value of the station asset. In contrast, the Hydro On e pool-funded option would commit Oakville Hydro to a certain pace of load growth and therefore increase the business risk associated with that option.

This business risk due to this downturn is better managed with Oakville Hydro building its own municipal transformer station.

5.6 Oakville Hydro MTS #1 Budget

The total budget amount for the MTS #1 option is \$20.5M. A detailed budget is included in Appendix 7. The budget is based on a station design that meets or exceeds the technical requirements of the IESO's market rules, and based on typical Ontario Hydro station designs that have been used for decades. The budget provides funding for the use of modern, high quality,

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Transformer Station Supply Options Study
May 2009*

state of the art equipment that has been used by both LDC's and Hydro One in recent station projects. The budget for this station includes \$1.7M for contingency.

The estimated cost per feeder for this option is \$1.71M. The estimated cost per MW is \$134,000.

170 MVA (153 MW) Station with 12 Feeders – Budget Summary		
1 Land		\$1,800,000
2 Engineering		\$1,040,000
3 Major Equipment		\$10,590,000
4 Civil Construction		\$2,560,000
5 Electrical Construction		\$1,260,000
Sub-total		\$17,250,000
Contingency		\$1,725,000
Total		\$18,975,000
PST		\$1,518,000
Budget Amount		\$20,493,000

Table 6

5.7 Hydro One “Tremaine TS” Costs

Hydro One has estimated the cost of the Tremaine TS at \$25M. This estimate did not include the cost of revenue metering, feeder cables and ducts, property, and feeder tie switches. The total cost of the project, including these elements, is estimated to be in the range of **\$27M - \$28M**. Note that this cost does not include any contingency expense.

Oakville Hydro has been offered two feeder positions from Tremaine TS, with an allocated capacity of 28 MVA (~25.2 MW). The portion of the total project costs allocated to Oakville Hydro are as follows:

28 MVA Capacity, 2 Feeders for Oakville Hydro			
1	Oakville Hydro Capital Contribution	\$1,300,000	\$1,300,000
2	Revenue Metering (not included)	\$45,000	\$90,000
3	Feeders	\$70,000	\$140,000
4	Land Costs (17% of total Costs)	\$306,000	\$306,000
5	Feeder Tie Switches (17% of upgrade in switchgear)	\$85,000	\$85,000
Total	Capital Costs		\$1,921,000

Table 7

In addition to the contributed capital and direct costs above, Hydro One will require the guarantee of incremental load revenue for 25 years. Hydro One has not provided a detailed breakdown of

*Oakville Hydro Corporation
Transformer Station Supply Options Study
May 2009*

their financial calculations, but the net value of incremental load revenue less OM&A costs is in the order of \$2.9M.

The estimated cost per feeder is about \$2.29M. The cost per MW is about \$180,000.

5.8 Hydro One “North Oakville TS” Costs

Hydro One has estimated the cost of the North Oakville at \$29M. This estimate did not include the cost of revenue metering, feeder cables and ducts, feeder tie switches, and upgrades to Trafalgar TS. The total cost of the project, including these elements, is estimated to be in the range of **\$31.5M**. Note that this cost does not include any contingency expense.

170 MVA (153 MW) Station with 12 Feeders			
1 Station Cost	\$29,000,000		
2 Revenue Metering (not included)	\$200,000		
3 Feeders (12)	\$70,000		
4 Feeder Tie Switches	\$85,000		
5 Trafalgar TS Upgrades	\$1,000,000		
Total Capital Costs			\$31,550,000

Table 8

5.9 Comparison of Station Costs

Item		Oakville Hydro MTS #1	Hydro One “North Oakville TS”	Hydro One “Tremaine TS”
1 Total capital cost		\$20.5M	\$31.5M	\$27M-\$28M
2 Cost per MW		\$134,000		\$180,000
3 Cost per feeder		\$1.71M		\$2.29M
4 Allowance for contingency		\$1.7M	\$0	\$0

Table 9

Clearly, the Oakville Hydro MTS #1 option provides higher value.

7. Operational Impact of TS Ownership

In evaluating the benefits of transformer station ownership, there are operational impacts to be considered that may place additional burdens on LDC's. There are also certain operational benefits that can be quantified to help support the ownership business case. This section lists the several operational impacts to be considered by Oakville Hydro.

7.1 Asset Management Plan

The OEB now requires LDC's to have detailed asset management plans (AMP) to address capital and maintenance costs associated with maintaining and enhancing the reliability of the distribution system. These plans are now required to be included in the cost of service/rebasing applications.

System planning, including the requirement for new transformer station capacity, should be part of an LDC AMP. The OEB seems to be particularly interested in how capital investments and maintenance activities impact system reliability and safety.

Considering the current state of loading at the local Hydro One transformer stations, Oakville Hydro is taking measures to ensure that there is adequate transformer station supply for the next 25 years. Oakville's AMP should address the state of loading and general condition of the existing Hydro One stations in its next rebasing application, and make the connection between its decision for the provision of new capacity and its responsibility for system reliability.

7.2 System Reliability

Hydro One and LDC-owned transformer stations are both built to rigorous utility standards, as specified by the Transmission System Code. It would be difficult to argue that there is a significant difference in the inherent reliability between Hydro One and LDC stations.

There have however been several cases where Hydro One has allowed load growth to exceed the capability of the station ratings. In some cases, LDC's were not aware that the TS was overloaded until Hydro One directed them to move load to other stations (if possible), or initiated rotating blackouts.

The risk of overloading Hydro One TS's is essentially on the downstream customers, as Hydro One will take measures to ensure their transformers are not damaged due to overload. Hydro One recovers their regulated transmission tariff based on the loading of the facility, so it could be argued that there is a financial benefit to operating stations beyond their capability.

LDC's have taken the position that system reliability has been compromised by the age, condition, or loading at existing Hydro One stations, and that by owning their own MTS, the LDC will take the responsibility of ensuring that there is adequate supply capability for the LDC.

7.3 Staff Capabilities

The operation and maintenance of a transformer station requires specialized technical resources. Transformer stations are significantly more complex than municipal substations, and it is unlikely that existing staff will be considered competent without additional training. In addition, expensive test equipment is required from time to time to perform mandated testing.

LDC's have taken two approaches with these stations. The larger utilities tend to hire and train substation electricians, protection and control (P&C) technologists/engineers, and stations engineers. This may be practical and cost effective if there are multiple transformer stations to be maintained or constructed, or if there are a large number of municipal substations that can be maintained by the same staff. In addition, utilities of this size often have control rooms with modern SCADA systems, and the P&C staff also maintains the SCADA system and associated communication infrastructure.

Smaller utilities usually contract maintenance to qualified contractors. There are several contractors that are well trained and capable of maintaining utility transformer stations. The day to day operation of the transformer station can usually be handled by the utility staff, providing they receive the necessary training prior to energization. Many small LDC's also contract out the continuous monitoring of the station to other LDC's with SCADA (continuous monitoring is a requirement).

Oakville Hydro maintains a 24 hour control room, and has a modern SCADA system that will be capable of monitoring and controlling transformer stations. System operators would require some specialized training, and new operational procedures would need to be created for their reference. Oakville Hydro also has a protection and control department, with technicians, technologists, and engineers with general backgrounds in P&C. Again, some specialized training would be necessary in order to be self-sufficient, but we expect that Oakville Hydro's staff have the necessary foundations to be capable of maintaining transformer stations.

7.4 Operational Control & Responsiveness

The Hydro One transmission system is monitored and controlled from the Ontario Grid Control Centre (OGCC) in Barrie. This includes all transmission interconnects with adjacent power jurisdictions, major generator connections, transmission lines, network stations, and transformer stations.

During normal day to day operations, Hydro One is able to expeditiously interact with LDC customers for operational issues such as hold-offs and routine switching. There are times, however where the OGCC is dealing with major events such as multiple storm fronts in different areas of the province, whereby tasks they consider non-essential are classified as low priority. In these cases, there are often delays in responsiveness which may result in prolonged outages or crews waiting for hold-offs.

LDC's that own transformer stations typically have full SCADA control of the station, and give MTS operation their top priority.

7.5 SCADA Telemetry & Control

Utilities that own MTS's typically have full digital access to all of the station control, status, and analog point telemetry. System operators have full control of station components, including breaker trip/close, recloser block/enable, and bus voltage raise/lower. Operators and planners also have access to all analog quantities, such as feeder amps, watts, vars, power factor, bus voltage, and outage logs. With network access to the SCADA master station, data can be electronically exported to other applications such as load flow, coordination, GIS, outage management, and other smart grid technologies.

Many utilities now have SCADA connections to the Hydro One OGCC SCADA system, but the functionality is very limited in comparison.

7.6 Risk of Failures

Transformer stations are designed with a high level of redundancy, as described in Section 2. This allows for the failure of any single major component without prolonged outages (in some cases, without any outages).

When considering the risks associated with equipment failure, the primary risk is associated with the transformers within the transformer station. These units are high cost and subject to long delivery times as they are not inventoried, but rather, made to order by manufacturers.

One of the techniques used to manage this risk in virtually all transformer stations in Ontario is the redundancy in the station design. In this format, there are two partner transformers each with the capability of carrying the full station load should a failure occur in the other.

Another recommended strategy for mitigating this risk is the partnering of utilities with transformer stations in their asset bases for the purpose of spares. The group of utilities depicted on the map in Section 6 above presents an opportunity for such partnerships.

8. Oakville – Milton Hydro Co-ownership

Oakville Hydro and Milton Hydro are experiencing significant load growth in the same general geographic area. Milton Hydro is forecasting 172 MW of new load growth in the southern area of its service territory, and Oakville is forecasting 133 MW of new load growth in north Oakville. Two transformer stations will ultimately be required to service this load.

The primary advantage of cooperating on MTS projects is that the combined utility loads will help load the first transformer station in about ten years, as opposed to over 25 years should Oakville build the station alone. The second transformer station could be built as required, some time around 2022. Should load develop faster or slower, the second station's in-service date could be adjusted as required.

The OEB is expected to look upon this partnership favorably, given that not only can the LDC's build this station for less costs, the station would be utilized more effectively.

8.1 Business Arrangements

Oakville Hydro and Milton Hydro would need to formalize business arrangements in order to proceed with a transformer station partnership. Items to be considered include:

- The ownership structure in terms of creating a separate regulated transmission or distribution company or keeping the station asset inside the existing LDC's.
- Percentage ownership.
- Governance of station operational issues such as design, construction, commissioning, and operation.
- Responsibility for administration of tenders, purchase orders, and payments.
- Flexibility for variations in load growth (defined conditions for sale of future feeder positions)
- Options for second transformer station to be built

There are two examples of Ontario LDC transformer station partnerships of which we are aware:

- Brant County Power and Brantford Power co-own Powerline MTS in Paris Ontario. The ownership split is about 40/60, with the assets residing inside the LDC.
- Peninsula West Utilities (now part of Niagara Peninsula) and Grimsby Power formed the "Niagara West Transmission Company" and built the Niagara West MTS. This station was constructed prior to the OEB allowing transformer station assets to be held within the distribution asset base of LDC's. The utilities applied for a transmission license and access to the regulated transformation rate.

8.2 Advantages and Disadvantages

Principle Advantage		Disadvantage
1. Overall capital cost – lower cost per MW	✓	
2. Flexibility to respond to variations in growth	✓	
3. Lower upfront capital requirements	✓	
4. Efficient use of transformer station asset	✓	
5. Complicated business arrangement		✓
6. Coordination in operations		✓

Table 10

The above table indicates that there are several key advantages of co-ownership. Oakville Hydro is encouraged to fully explore the opportunity with Milton. Milton Hydro may not feel the same pressure from load growth to make a decision in the timeframe in which Oakville Hydro must act.

The disadvantages indicated are manageable if such a relationship is established, as indicated by the fact that other LDC's have successfully partnered in similar projects.

8.3 Project Costs and Potential Savings

The cost of a joint project is the same as the budget cost for an Oakville-only station, with the exception of any additional legal and administrative costs associated with a partnership. The overall cost per MW is lower when the utilities work together. In addition, the avoided cost of transformation tariffs payable to Hydro One is in the order of \$30M (considering 25 years).

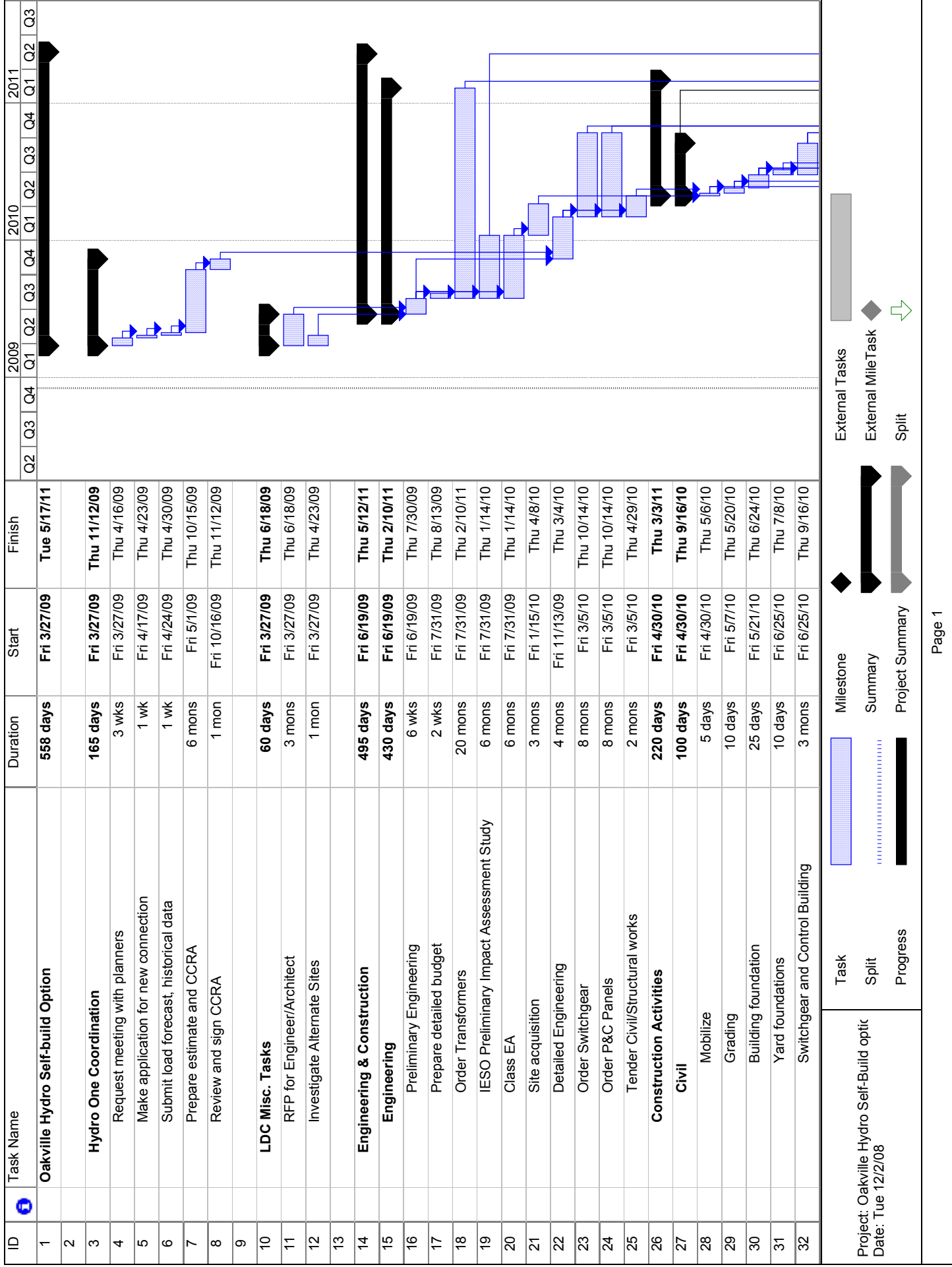
9. Project Schedules

Transformer station projects generally require two to three years from the planning stages to energization. Current market demand has pushed transformer deliveries to almost 24 months, which impacts the critical path of the project.


Based on current planning progress and market conditions, it is expected that Oakville Hydro could construct Oakville Hydro MTS #1 to be ready for service in before the summer of 2011. Hydro One is forecasting Tremaine TS to be ready for service in June 2012.

Note that the Oakville Hydro MTS #1 scheduled in-service date of summer 2011 is an aggressive schedule, and is based on Oakville Hydro initiating engineering activities in March 2009.

Gantt charts for both projects are included on the following pages.



Project: Oakville Hydro Self-Build optic
Date: Tue 12/2/08

ID	Task Name	Duration	Start	Finish	2009				2010				2011				2012	
					Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
1	 Preferred Plan Selected	2 mons	Mon 1/5/09	Fri 2/27/09														
2	Prepare estimate and CCRA's	4 mons	Mon 3/2/09	Fri 6/19/09														
3	CCRA's Signed	6 mons	Mon 6/22/09	Fri 12/4/09														
4	Property & Approvals	15 mons	Mon 12/7/09	Fri 1/28/11														
5	Construction and Commissioning	15 mons	Mon 1/31/11	Fri 3/23/12														


Project: Hydro One Schedule for Trem


Date: Tue 12/2/08


Task

Split

Progress










Milestone

Summary

Project Summary










External Tasks

External Milestone

Deadline







Page 1

10. Conclusions and Recommendations

- A) There is a critical shortfall of supply capacity for the Oakville Hydro area. Palermo TS is substantially overloaded, and in combination with the temporary operating restrictions (due to equipment problems) at Bronte TS and Oakville TS, there is a system-wide shortfall of about 28 MW during peak summer conditions. New transformer station capacity is required immediately.
- B) There is a significant risk to Oakville Hydro in operating the distribution with such a shortfall of capacity. Should there be a single failure in a critical component at three out of four existing Hydro One transformer stations, Oakville Hydro could experience significant outages.
- C) Oakville Hydro should continue to press Hydro One to make repairs at local stations to alleviate the temporary operating restrictions. Hydro One is dealing with similar problems in many jurisdictions, and Hydro One has not disclosed any apparent order of priority.
- D) Oakville Hydro should build its own municipal transformer station as it is less costly for the utility and its customers, and will grow the asset base on behalf of the shareholder. The self-build option also provides less risk due to the current economic downturn as opposed to a pool-funded option.
- E) Oakville Hydro should design, construct, and operate a new 170 MVA transformer station (Oakville Hydro MTS #1), centrally located in the 407 corridor area around 6th Line. This station would provide enough capacity to relieve the Oakville Hydro portion of overload at Palermo TS, as well as capacity for forecasted load growth in the northern supply area for the next 25 years.
- F) Oakville Hydro should reject Hydro One's offer for capacity from the proposed North Oakville TS. The high cost of this station, coupled with the requirement to utilize the existing capacity at Trafalgar TS (and the cost of the accompanying mandatory upgrades) makes this alternative unfeasible.
- G) Oakville Hydro should reject Hydro One's offer for capacity from the proposed Tremaine TS. Tremaine TS is located well away from the forecasted growth areas in Oakville. In addition, the station is substantially more expensive than the Oakville Hydro MTS #1. Tremaine TS would only provide capacity for two to four years in the north west of Oakville, and additional capacity would have to be constructed in the north-central or north-eastern areas of Oakville.
- H) The new Oakville Hydro MTS #1 project should commence as soon as possible, with the goal of placing the station into service before the summer of 2011. Consideration should be given to the immediate start of preliminary engineering activities.
- I) Oakville Hydro should continue co-ownership discussions with Milton Hydro, so long as it does not impede the project schedule.
- J) Oakville Hydro is advised to prepare a "disaster strategy" in case there is a major failure at the existing Hydro One stations. This plan should include operating strategies, rotating blackout schedules, consideration for critical customers, staffing requirements, and media relations.
- K) Land options for the new MTS should be obtained. Options should be contingent on various approvals, such as Town and Regional approvals, IESO impact assessment, Hydro One connection assessment, ESA, and MOE/Environmental Assessment. We

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Transformer Station Supply Options Study
May 2009*

understand that Oakville Hydro is moving forward with a conditional offer for a potential station site.

- L) Oakville Hydro, along with Burlington Hydro, should discuss with Hydro One the expansion of Bronte TS to provide capacity for mid-town Oakville. This expansion would also address the reliability concerns at Bronte TS given that part of the station is of a non-redundant configuration.

Appendix 1

Oakville Hydro 2008 Load Forecast

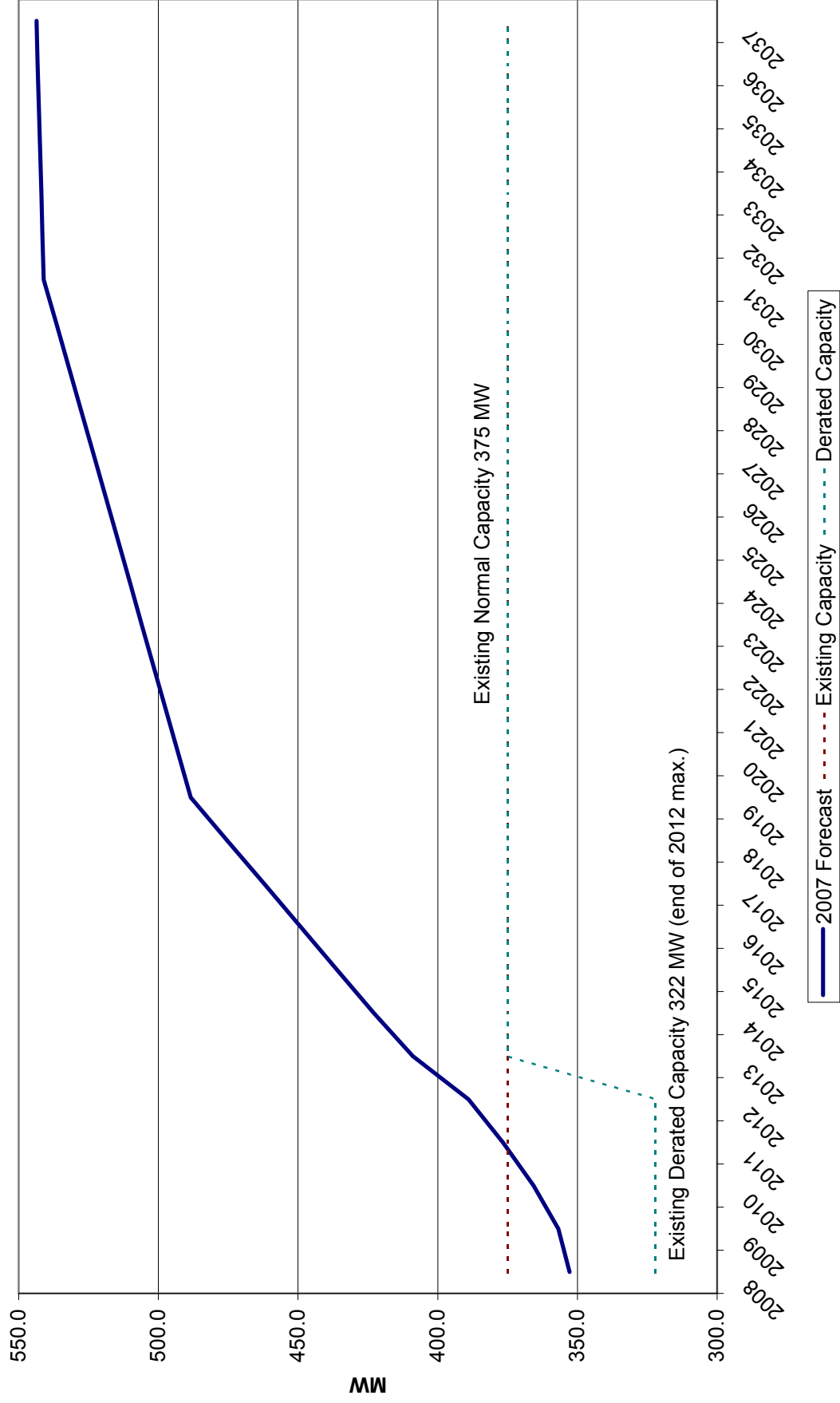
&

Sensitivity Analysis

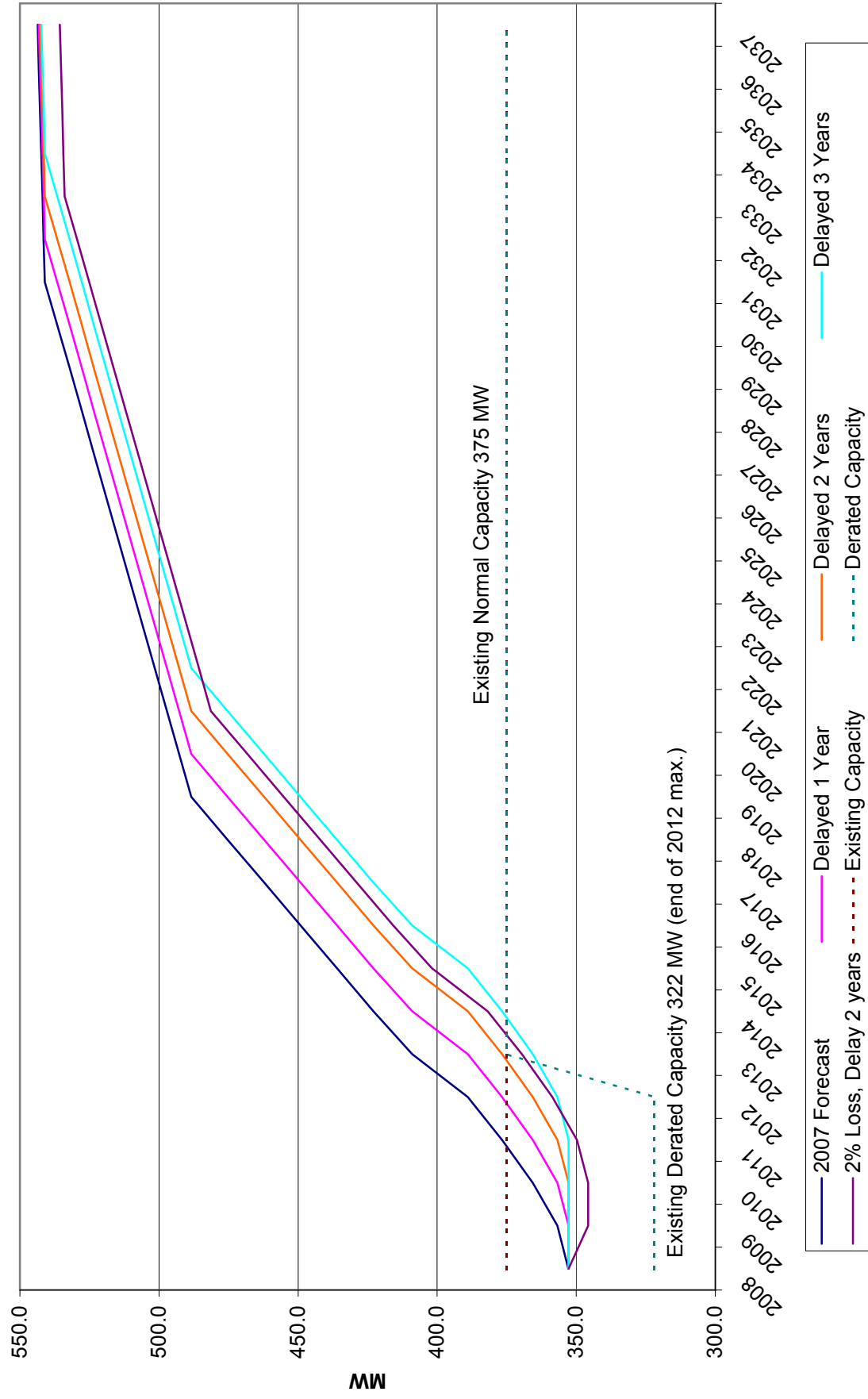
Project: Oakville Hydro Load Forecast

Year	South East (Oakville TS Area)	South West (Bronte Area)	North East (Trafalgar Area)	North West (Palermo Area)	Total Load	Growth (MW)	North Area Only	Growth (MW)	Southern Area Only	Growth (MW)
2008	107.1	90.2	84.1	67.5	348.8		151.5		197.3	
2009	107.1	91.2	85.3	68.6	352.2	3.4	153.9	2.3	198.3	1.1
2010	107.2	92.2	86.5	69.8	355.6	6.8	156.2	4.7	199.4	2.1
2011	107.3	93.7	91.3	71.1	363.4	14.6	162.4	10.9	201.0	3.8
2012	107.4	95.2	96.1	72.5	371.2	22.4	168.6	17.1	202.7	5.4
2013	107.4	96.6	100.7	76.1	380.8	32.0	176.8	25.3	204.0	6.7
2014	107.4	98.9	107.2	83.8	397.3	48.5	191.0	39.5	206.3	9.0
2015	107.4	100.7	114.8	84.4	407.3	58.5	199.2	47.7	208.1	10.8
2016	107.4	102.1	123.6	85.0	418.1	69.3	208.6	57.0	209.5	12.3
2017	107.4	103.6	132.4	85.5	428.9	80.1	217.9	66.4	211.0	13.7
2018	107.4	105.0	141.2	86.0	439.7	90.9	227.3	75.7	212.4	15.2
2019	107.4	106.5	150.1	86.5	450.5	101.7	236.6	85.1	213.9	16.6
2020	107.4	107.9	158.9	87.1	461.3	112.5	246.0	94.4	215.3	18.1
2021	107.4	108.7	160.7	88.4	465.2	116.4	249.1	97.5	216.2	18.9
2022	107.4	109.6	162.4	89.8	469.2	120.4	252.2	100.7	217.0	19.7
2023	107.4	110.4	164.2	91.1	473.1	124.3	255.3	103.8	217.8	20.5
2024	107.4	111.2	166.0	92.5	477.1	128.3	258.5	106.9	218.6	21.3
2025	107.4	112.0	167.8	93.8	481.0	132.2	261.6	110.1	219.4	22.1
2026	107.4	112.8	169.6	95.1	485.0	136.2	264.7	113.2	220.2	23.0
2027	107.4	113.6	171.4	96.5	488.9	140.1	267.9	116.3	221.0	23.8
2028	107.4	114.4	173.1	97.8	492.8	144.0	271.0	119.5	221.9	24.6
2029	107.4	115.3	174.9	99.2	496.8	148.0	274.1	122.6	222.7	25.4
2030	107.4	116.1	176.7	100.5	500.7	151.9	277.2	125.7	223.5	26.2
2031	107.4	116.9	178.5	101.9	504.7	155.9	280.4	128.9	224.3	27.0
2032	107.4	117.7	180.3	103.3	508.7	159.9	283.6	132.1	225.1	27.9
2033	107.4	117.8	180.5	103.4	509.1	160.3	283.9	132.4	225.2	28.0
2034	107.4	117.9	180.7	103.5	509.5	160.7	284.2	132.6	225.4	28.1
2035	107.4	118.1	180.9	103.6	509.9	161.1	284.5	132.9	225.5	28.2
2036	107.4	118.2	181.1	103.7	510.3	161.5	284.7	133.2	225.6	28.3
2037	107.4	118.3	181.2	103.8	510.7	161.9	285.0	133.5	225.7	28.4
2038	107.4	118.4	181.4	103.9	511.1	162.3	285.3	133.8	225.8	28.6

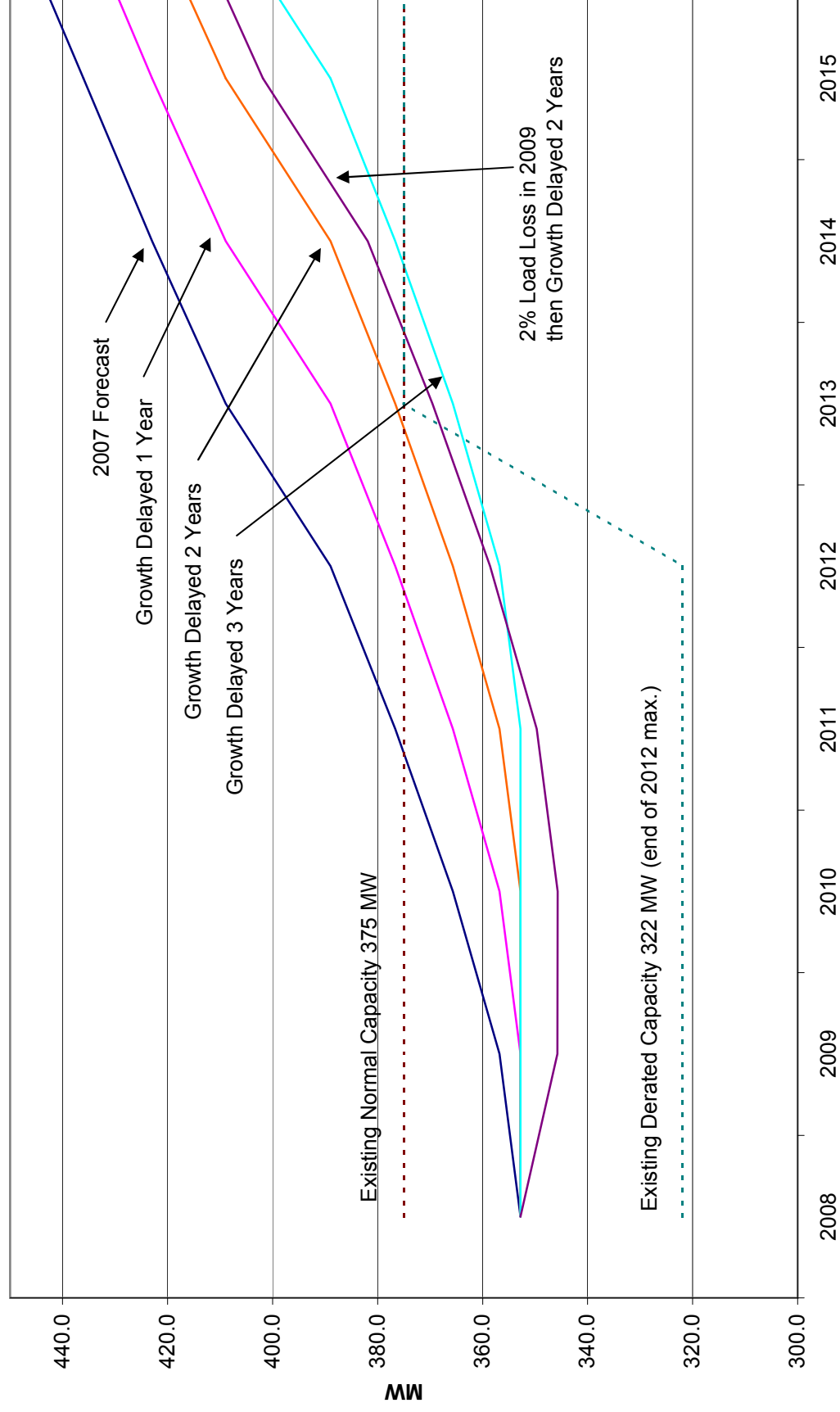
Oakville Hydro 2007 Load Forecast



Growth Sensitivity



New Station Construction Growth Scenarios

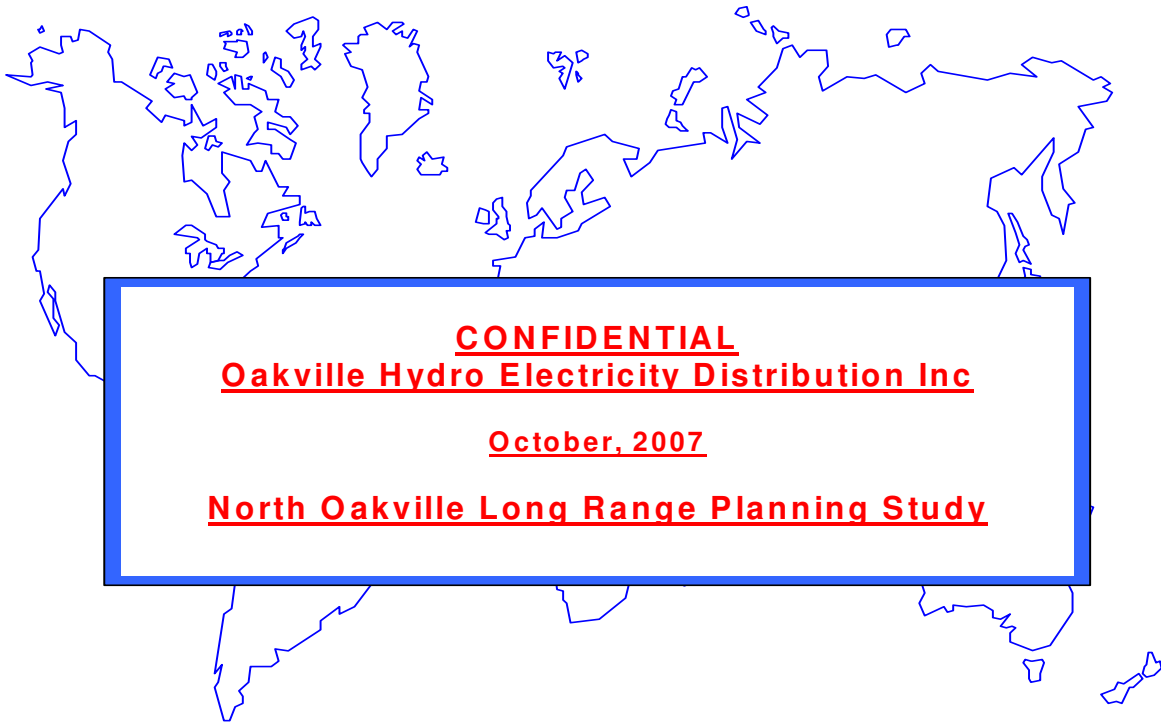


Appendix 2

North Oakville Long Range Planning Study

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TABLE OF CONTENTS

Executive Summary	3
1. Introduction.....	4
2. Study Methodology	4
3. North East Oakville Secondary Plan	4
4. Estimated Electrical Loading.....	5
4.1 Electrical Load Forecast (Table 4.1).....	5
4.2 District Heating and Conservation Impacts	8
5. Review of Existing Distribution Facilities.....	9
5.1 Transformer Stations.....	9
5.2 Distribution Feeders.....	11
6. Projected Capacity of Existing Facilities	13
7. Conclusions.....	21
7.1 Feeder Load Projections	21
7.2 Station Load Projections	22

Appendices

Oakville Hydro Electricity Distribution Inc.

North Oakville Long Range Planning Study

Executive Summary

The Town of Oakville has developed a plan for the development of the North East Oakville Secondary Plan area (north of Dundas St.) This area is bounded by HWY 407 to the north, Ninth Line to the east, Dundas St to the south, and Sixteen Mile Creek to the west. The area west of Sixteen Mile Creek to Bronte Road is not included in the NOESP plan area, but approximations have been included in the Long Term Load Study to include this area as well.

Based on the planning densities and employment projections provided by the Town of Oakville, electrical load estimates were prepared for the NOESP area and are summarized in Table 4.1.

The resultant analysis projects electrical loads in the range of 125.8MW to 179.4MW.

The high level impacts of potential District Heating projects and the OPA Conservation programs were also evaluated. District Heating impacts were very difficult to determine without more information, and a five percent (5%) reduction was factored into the final analysis to gauge the overall impact. Table 6.7 shows this summary.

A review of the existing transformer stations and feeder loadings was carried out to assess remaining capacity and to attempt to predict the future facility needs to supply the area.

This analysis reveals expectations that two of the existing transformer stations that supply the Town of Oakville are already at their Best Practice maximum capacity. The other two stations can be expected to reach this level by 2015 without factoring in the NEOSP growth. Additional transformer station capacity will be required by around 2010 in order to handle the estimated NEOSP load growth.

From a feeder perspective, the existing Palermo feeders are currently at or exceeding their "Best Practice" loading. Even under the minimum NOESP load scenario, load transfers between Palermo feeders and Bronte T.S. would be required to allow the Palermo feeders to supply the NOESP into the 2015-2020 timeframe, at which point they would reach their maximum capacity.

Even under the minimum load growth scenario, up to four (4) additional 27.6kV feeders would be required from the northern transformer stations to meet the electrical servicing needs predicted for the NOESP area.

These feeders could be required as early as 2010 depending on the actual rate of load growth in the NOESP area.

As many as eight (8) new feeders could be required to deal with the possible range of development rates and load densities.

1. Introduction

In May of 2007, Oakville Hydro commissioned AESI Acumen Engineered Solution Int'l Inc. to review the proposed North Oakville East Secondary Plan (Town of Oakville) and to determine a projected long term electrical load growth based on best estimates and current load profiles for the planned development uses.

The analysis and report were also to examine existing Transformer Station (T.S.) and feeder loadings versus design capacities to determine adequacy of current facilities and to offer a high level projection of future capacity requirements.

The report was also required to attach some approximate time frames to the above analysis insofar as the sensitivity of the data and analysis would allow. These draft time frames would provide a starting point for long term capital investment planning activities, which would have to be reviewed on a regular basis to ensure ongoing relevance to actual load growth.

2. Study Methodology

The North Oakville East Secondary Plan ("NOESP" authored by the Town of Oakville) would serve as the principle reference document for the study as it provides details of the current plans for development of the area.

The planned land uses and development densities detailed in the NOESP were discussed with the staff from the Town of Oakville Planning Department to gain understanding of the terminology and interpretation of several descriptions.

Electrical load projections were made based on the most current energy consumption research and land use densities proposed in the NOESP to develop a range of potential electrical load growths for each land use type and on a total aggregated basis.

Oakville Hydro also performed several customer load searches to provide a double check of the predicted load estimates for the kW/employee ratio arrived at from the research materials.

Site visits, meetings and consultations with Oakville Hydro and Hydro One staff were conducted to assess current feeder loadings and remaining transformer station capacities.

3. North East Oakville Secondary Plan

- The NOESP covers only the eastern half of the area of Oakville north of Dundas St. The specific area covered in the NOESP is bounded by:

North Limit:	HWY 407
East Limit:	Ninth Line
South Limit:	Dundas Street
West Limit:	Sixteen Mile Creek

The area west of Sixteen Mile Creek has not current Official Plan, but is expected to be predominately employment area. Electrical loads for this area have been factored in based on data related to developed area for employment uses provided by the Town of Oakville. This information was provided in the strictest confidence and is very, very preliminary.

The load projections would need to be revisited whenever The Town of Oakville prepares a draft plan for this west area (NOWSP).

- Based on the variations in uses and densities of development in each of the major categories of land use, it became necessary to amalgamate the several residential types into an overall Average Residential Unit. This was also the case for the commercial/industrial areas. These areas were combined into an average unit of kW/employee in order to perform a high level analysis and to arrive at the requested long term load forecasts.
- The Town of Oakville indicated that there is no definite planning horizon for this area. It will develop at whatever rate the market decides. Other municipal services along the Right-of-Way will be installed before building permits will be issued. So the associated time frame for required electrical servicing can have no definite time table. This makes it difficult to establish an associated capital plan for the electrical infrastructure without acknowledging the increased level of sensitivity related to developer driven schedules. A best effort has been made to establish a realistic time table for required capital expenditures, but it must be noted that the real rate of development may end up being very different than predicted in this report.
- As a result of the previous discussion, it is recommended that the load forecast be revisited briefly on an annual basis to determine how closely the plan is tracking the real pace of the development.

4. Estimated Electrical Loading

4.1 Electrical Load Forecast (Table 4.1)

- Table 4.1 summarizes the data analysis of the planned densities and employment levels as well as the extrapolated electrical loadings for these areas. Table 4.1 is an amalgamation of Tables 5-1, 5-3, 6-1, 6-2, and 6-3 of the Oakville Hydro Load Projections Report – North Oakville contained in Appendix A.
- Column 2 estimates the available land area that can be developed under the specific landuse.
- Column 3 indicates the estimated levels of employment for each area based on the description in the NOESP.
- Columns 4 & 5 indicate the minimum and maximum numbers of residential units possible in each area.
- Based on the projected possible employment levels and residential dwelling units for each are, and the estimated electrical consumption levels of:

Average Peak kW / Employee	= 3.16kW
Low Density Residential Peak kW	= 2.13kW / unit

Medium Density Residential Peak kW = 1.67kW / unit
High Density Residential Peak kW = 1.48kW / unit

Columns 6 & 7 indicate the Minimum and Maximum Peak kW forecasts for each land use area.

- The following shows the current average loading for the type of development expected based on actual data collected from Oakville Hydro for existing areas of Town that are similar.

Average Peak kW / Employee = 3-3.5kW Range
Low Density Residential Peak kW = 2.43kW / unit
Medium Density Residential Peak kW = 1.92kW / unit
High Density Residential Peak kW = 1.4kW / unit

These values are reasonably consistent with the researched values. The researched values of Table 4.1 are slightly more conservative than the high level values derived by Oakville Hydro, but the variation is not significant enough to be a concern.

TABLE 4.1 Land Use and Estimated Electrical Load Forecasts Summary

Plan Area	Area (Ha)	FROM NEOSP			RESEARCH FORECAST	
		# Employees	Minimum Residential Density (# Units)	Maximum Residential Density (# Units)	Minimum Peak Load Forecast (kW)	Maximum Peak Load Forecast (kW)
Sub-Urban	-	-	1,286	3,000	2,739	5,000
General Urban	-	-	6,368	19,103	10,600	31,900
Urban Center	17	1444	2,384	10,215	8,100	19,700
Neighbourhood 14	3	238	800	4,800	2,100	7,900
Dundas Urban Core	3	272	243	728	1,300	2,100
Neyagawa Urban Core	2	161	75	225	600	900
R.R. 25 Urban Core	2	195	133	398	800	1,300
Trafalgar Urban Core #1	43	3685	-	-	11,600	11,600
Trafalgar Urban Core #2	7	577	104	520	2,000	2,700
Trafalgar Urban Core #3	11	968	1,163	5,814	5,500	12,800
Trafalgar Urban Core #4	11	960	286	1,428	3,600	5,400
Employment Zone	462	16500	-	-	52,100	52,100
Employment Zone (West)*	214	7600			24,000	24,000
Transitional Zone	-	-	248	1,240	500	2,100
Totals	562	32,600	13,087	47,469	125,800	179,400
Column 1	Col2	Col 3	Col 4	Col 5	Col 6	Col 7

Source Data and Analysis: Oakville Hydro Load Projections Report 0786590200 (Appendix A)

*Additional Data supplied by The Town of Oakville for the area West of Sixteen Mile Creek

4.2 District Heating and Conservation Impacts

- **Central District Heating Systems**

During our initial meeting, Oakville Hydro requested that the potential impacts of centralized district heating and provincial electrical conservation initiatives be reviewed as part of a sensitivity analysis on the data and conclusions.

The Trafalgar Urban Core was identified as the most likely location for possible implementation of a centralized heating system, possibly supplied from a cogeneration facility which would produce low pressure steam as well as electricity.

The peak load impacts of such a project are difficult to accurately assess at this time due to the minimum information available related to steam requirement of the Trafalgar Core development and the possible size of the electrical generation to be matched with the steam production.

However, most of the impact of a central heating system would be seen in the winter months, which is typically not where the utility peak system load occurs. Unless developers utilize steam absorption production of chilled water for summer cooling, which would allow the central cogen plant to be at full capacity during the summer months, the full impact of the plant on the Oakville Hydro system peak would never be felt.

- **Provincial and LDC Conservation Programs**

The Ontario Energy Board have implemented directives to the Local Distribution Companies (LDCs) to offer conservation programs to customers in order to curb the overall electrical consumption in Ontario.

LDCs are just beginning to roll these programs out to customers and, although the provinces' long term goals are defined (eg. Smart Meters Program), the ultimate long term impacts to the LDC are very difficult to judge at this early stage.

- **Load Forecast Adjustments for Conservation and District Heating**

Due to the difficulty surrounding a proper assessment of the impacts of a central heating system as outlined above, no effort has been made in the analysis to adjust for this influence. District heating systems are an excellent idea, but it would not be possible to assess the impacts of such without much more information upon which to base a proper analysis.

Historically, the impact of conservation programs has been varied, but the provincial authority, The Ontario Power Authority (OPA) has set a goal of five percent (5%) reductions from conservation measures. In order to account for the possible impacts this conservation goal will have on Oakville Hydro's load forecasting, an across the board 5% reduction has been applied to current loading figures only beginning in 2008.

Table 6.7 shows this analysis.

5. Review of Existing Distribution Facilities

5.1 Transformer Stations

The Town of Oakville is supplied from four Hydro One Networks owned transformer stations. Figure 5.1 shows the approximate locations of these stations relative to the NOESP planning area.

- **Bronte T.S.**

This station is located on Bronte Road south of the QEW Highway in south-west Oakville. It is currently configured as two stations. One station is a DESN (T5/T6) with a Ten Day LTR of 90.9MW, while the other is a single transformer (T2) with an LTR of 90.9MW.

According to HONI records, the current utilization of these stations is at 105MW and 77MW peak respectively. However, Oakville Hydro indicated that these numbers appear to include the Petro Canada load of 30MW (now 3MW). Therefore, there is currently approximately 20MW of capacity at Bronte T.S. in addition to what HONI has indicated.

Bronte T.S. capacity is shared with Burlington Hydro to the west.

- **Palermo T.S.**

This station is located on Highway 25 (Bronte Road) north of the 407ETR. Palermo has a Ten Day LTR of 108.2MW, which is shared with Milton Hydro to the north and Burlington Hydro to the west. The current station utilization is 143MW peak.

- **Trafalgar T.S.**

This station is located in the south-east corner of Milton adjacent to the HWY 403 and the 407ETR.

Trafalgar has a Ten Day LTR of 124MW and a peak utilization of 89MW.

This station will eventually be shared with Milton Hydro.

- **Oakville T.S.**

This station is located in the south-east section of town adjacent to the Ford facility, although it does not supply Ford.

This station is shared with Enersource (Hydro Mississauga) and has a Ten Day LTR of 170.6MW and a utilization of 171MW on peak.

FIGURE 5.1 TRANSFORMER STATION LOCATIONS



5.2 Distribution Feeders

Each of the transformer stations provides a number of 27.6kV distribution feeders into the Oakville Hydro system. Figure 5.2 shows those feeders that feed into or adjacent to the NOESP area.

The Standard Oakville Hydro practice for feeder loading plans for a normal peak load of 17MW (395Amps @ 0.9PF), which allows for backup of other feeders when outages are required. Normal feeder trip settings are set at approximately 800Amps. Maximum feeder loading should not exceed approximately 600Amps except under emergency conditions.

The following sections summarize Feeder Peak Loadings based on data supplied by Oakville Hydro.

Bronte TS Feeders

Feeder #	Amps
13M1	441.5
13M2	143.7
13M3	400.4
13M4	349.1
13M5	189.9
13M6	0
13M7	46.2
13M8	71.9
13M23	215.6
13M24	410.7

Palermo TS Feeders

Feeder #	Amps
4M2	205.3
4M4	318.3
4M7	539
4M8	513.4

Trafalgar TS Feeders

Feeder #	Amps
31M4	256.7
31M5	266.9
31M6	308.0
31M7	410.7
31M8	462.0

Oakville TS Feeders

Feeder #	Amps
22M43	410.7
22M44	338.8
22M49	513.4
22M50	338.8
22M51	308.0
22M52	513.4

FIGURE 5.2 FEEDERS INTO THE NOESP AREA



6. Projected Capacity of Existing Facilities

- The tables included in the text of this report are static in nature and reflect a snapshot of the analysis. For all of the tables included here, the NOESP development timeframe was set at 15 years. The excel spreadsheets that accompany this report are set up to allow easy sensitivity analysis by making adjustments to the feeder loadings and the NOESP development timeframes.
- Table 6.1 provides a summary of current loading and capacity of all transformer stations supplying the Town of Oakville.
Based on the loading values provided by Hydro One and the adjustments to the Bronte T.S. load based on the Petro Canada Refinery load, the current peak loads of these stations were extended at 1% per year for the Oakville and Bronte stations. The growth rate for the Palermo and Trafalgar stations was set at 3% per year.
- Table 6.2 summarizes the current feeder loadings for all feeders into The Town of Oakville based on the data provided by Oakville Hydro. The feeder data was provided by Oakville Hydro in October 2007 and reflects the feeder loadings independent of any temporary load transfers between feeders.
Each of the load projections for future years are based on the current load (Col 4) escalated by the average annual growth in peak experienced by Oakville Hydro over the past ten years. Although this value is for the total Oakville load, it is unlikely that all feeders have experienced this level of growth. Therefore, the feeders out of the southern substations (Bronte T.S. and Oakville T.S.) were only increased by 1% per year going forward.
- Table 6.3 builds upon table 6.2 by summarizing the feeder loading impact if some load was transferred from the Palermo T.S to the Bronte T.S feeders. It must be noted that Table 6.3 does not include any load growth from the NOESP area at this point. Table 6.3 outlines a potential strategy to allow future NOESP load to be supplied from Palermo and Trafalgar feeders, which makes the most sense in the long term.
Also, because of the high level of the research and analysis for this report, the suggestions of the quantity and feeder selection for the load transfers is very subjective and is based only a review of the system operating maps and with no discussion with the system operations staff.
Factors such as critical customers and voltage sensitivities have not been considered in this analysis.
- Table 6.4 builds upon table 6.3 by adding the Minimum NOESP load into the calculations at a rate of 6.67% of the total estimated growth in each of the next fifteen years (2010 to 2025).
The NOESP load is in addition to the regular 3% annual load growth that has been experienced historically.
- Table 6.5 begins with the same scenario as Table 6.4, but adds the Maximum NOESP load growth.
- Table 6.6 summarizes the potential feeder loads for the five existing feeders most likely to supply the NOESP area (ie 4M2, 4M4, 4M7, 4M8, 31M4) plus four (4) future feeders. These future feeders have been added to the calculations starting in 2010, but the actual timing of these is to be determined.
- Table 6.7 builds upon 6.6 taking into account the impact of a 5% conservation in initiative.

TABLE 6.1 TRANSFORMER STATION CAPACITY vs LOADING PROJECTIONS

Facility Transformer Station/ Feeder	Ten Day LTR (kW)	Historical Peak Loading (kW)	Average Annual Peak Demand Growth Rate (%/yr)	Projected Load @ Current Rate of Growth				
				2008 (kW)	2010 (kW)	2015 (kW)	2020 (kW)	2025 (kW)
Palermo T.S	108,200	143,000	3.0%					
Oakville T.S	170,600	171,000	1.0%					
Bronte T2	90,900	77,000	1.0%	77,770	80,103	84,108	88,314	92,729
Bronte T5/T6	90,900	85,000*	1.0%	86,000	88,842	93,284		
Trafalgar T.S.	124,000	89,000	3.0%	91,361	99,583	114,521	131,699	

* indicates HONI Loading –
20MW for PetroCanada
Load (105,000kW-
20,000kW)

Indicates Station at/or exceeding 10 Day LTR Loading

TABLE 6.2 CURRENT FEEDER LOADINGS and PROJECTIONS AT CURRENT ANNUAL PEAK GROWTH RATE

Facility Transformer Station/ Feeder	Historical Peak Loading (kw)	Average Annual Peak Demand Growth Rate (%/yr)	Projected Load @ Current Rate of Growth				
			2008 (kW)	2010 (kW)	2015 (kW)	2020 (kW)	2025 (kW)
Palermo 4M2	8,834	3.0%	9,099	9,645	11,092	12,756	14,669
4M4	13,693	3.0%	14,104	14,950	17,193	19,772	22,738
4M7	23,190	3.0%	23,886	25,319			
4M8	22,086	3.0%	22,749	24,113	27,731		
Oakville 22M43	17,669	1.0%	17,845	18,202	19,113	20,068	21,072
22M44	14,577	1.0%	14,723	15,017	15,768	16,556	17,384
22M49	22,086	1.0%	22,307	22,753	23,085	25,085	26,339
22M50	14,577	1.0%	14,723	15,017	15,768	16,556	17,384
22M51	13,252	1.0%	13,384	13,652	14,334	15,051	15,804
22M52	20,086	1.0%	22,307	22,753	23,891	25,085	26,339
Bronte 13M1	18,994	1.0%	19,184	19,568	20,546	21,573	22,652
13M2	6,184	1.0%	6,246	6,371	6,689	7,024	7,375
13M3	17,227	1.0%	17,399	17,747	18,635	19,566	20,545
13M4	15,018	1.0%	15,169	15,472	16,246	17,058	17,911
13M5	8,172	1.0%	8,254	8,419	8,840	9,282	9,746
13M6	0	1.0%	0	0	0	0	0
13M7	1,988	1.0%	2,008	2,048	2,150	2,258	2,371
13M8	3,092	1.0%	3,123	3,185	3,345	3,512	3,688
13M23	9,276	1.0%	9,369	9,556	10,034	10,536	11,063
13M24	17,669	1.0%	17,845	18,202	19,113	20,068	21,072
Trafalgar 31M4	11,043	3.0%	11,374	12,057	13,865	15,945	18,337
31M5	11,485	3.0%	11,829	12,539	14,420	16,583	19,070
31M6	13,252	3.0%	13,649	14,468	16,638	19,134	22,004
31M7	17,669	3.0%	18,199	19,291	22,184	25,512	29,339
31M8	19,877	3.0%	20,474	21,702	24,957	28,701	33,006
Col 1	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	Col 8
Indicates Feeder at/exceeding Best Practice Loading			Indicates Feeder at/exceeding 600AMP (25MW) Capacity				

**TABLE 6.3 FEEDER LOAD PROJECTIONS AT CURRENT ANNUAL PEAK GROWTH RATE
WITH SUGGESTED LOAD TRANSFERS**

Facility Transformer Station/ Feeder	Historical Peak Loading (kw)	Average Annual Peak Demand Growth Rate (%/yr)	Projected Load @ Current Rate of Growth with Permanent Load Transfers				
			2008 (kW)	2010 (kW)	2015 (kW)	2020 (kW)	2025 (kW)
Palermo 4M2	8,834	3.0%	9,099	9,645	11,092	12,756	14,669
4M4	8,693	3.0%	8,954	9,491	10,915	12,552	14,435
4M7	15,190	3.0%	15,646	16,585	19,072	21,933	25,223
4M8	12,086	3.0%	12,449	13,195	15,175	17,451	20,069
Oakville 22M43	17,669	1.0%	17,845	18,202	19,113	20,068	21,072
22M44	14,577	1.0%	14,723	15,017	15,768	16,556	17,384
22M49	22,086	1.0%	22,307	22,753	23,891	25,085	26,339
22M50	14,577	1.0%	14,723	15,017	15,768	16,556	17,384
22M51	13,252	1.0%	13,384	13,652	14,334	15,051	15,804
22M52	22,086	1.0%	22,307	22,753	23,891	25,085	26,339
Bronte 13M1	18,994	1.0%	19,184	19,568	20,546	21,573	22,652
13M2	6,184	1.0%	6,246	6,371	6,689	7,024	7,375
13M3	17,227	1.0%	17,399	17,747	18,635	19,566	20,545
13M4	15,018	1.0%	15,169	15,472	16,246	17,058	17,911
13M5	13,172	1.0%	13,304	13,570	14,248	14,960	15,709
13M6	0	1.0%	0	0	0	0	0
13M7	1,988	1.0%	2,008	2,048	2,150	2,258	2,371
13M8	13,092	1.0%	13,223	13,487	14,162	14,870	15,613
13M23	17,276	1.0%	17,449	17,798	18,688	19,622	20,603
13M24	17,669	1.0%	17,845	18,202	19,113	20,068	21,072
Trafalgar 31M4	11,043	3.0%	11,374	12,057	13,865	15,945	18,337
31M5	11,485	3.0%	11,829	12,539	14,420	16,583	19,070
31M6	13,252	3.0%	13,649	14,468	16,638	19,134	22,004
31M7	17,669	3.0%	18,199	19,291	22,184	25,512	29,339
31M8	19,877	3.0%	20,474	21,702	24,957	28,701	

Indicates Feeder at/exceeding Best Practice Loading

Indicates Feeder at/exceeding 600AMP (25MW) Capacity

Suggested Load Transfers: 4M4 to 13M5 = 5MW, 4M7 to 13M23 = 8MW, 4M8 to 13M8 = 10MW,

TABLE 6.4 FEEDER LOAD PROJECTIONS AT CURRENT ANNUAL PEAK GROWTH RATE WITH SUGGESTED LOAD TRANSFERS AND MINIMUM NOESP LOAD ADDED

Facility Transformer Station/ Feeder	Historical Peak Loading (kw)	Average Annual Peak Demand Growth Rate (%/yr)	Projected Load @ Current Rate of Growth with Permanent Load Transfers WITH PHASED IN NEOSP LOAD ON PALERMO AND TRAFALGAR FEEDERS				
			2008 (kW)	2010 (kW)	2015 (kW)	2020 (kW)	2025 (kW)
Palermo 4M2	8,834	3.0%	9,099	11,323	21,408		
4M4	8,693	3.0%	8,954	11,169	21,231		
4M7	15,190	3.0%	15,646	18,262	29,388		
4M8	12,086	3.0%	12,449	14,873	25,490		
Oakville 22M43	17,669	1.0%	17,845	18,202	19,113	20,068	21,072
22M44	14,577	1.0%	14,723	15,017	15,768	16,556	17,384
22M49	22,086	1.0%	22,307	22,753	23,891	25,085	
22M50	14,577	1.0%	14,723	15,017	15,768	16,556	17,384
22M51	13,252	1.0%	13,384	13,652	14,334	15,051	15,804
22M52	22,086	1.0%	22,307	22,753	23,891	25,085	26,339
Bronte 13M1	18,994	1.0%	19,184	19,568	20,546	21,573	22,652
13M2	6,184	1.0%	6,246	6,371	6,689	7,024	7,375
13M3	17,227	1.0%	17,399	17,747	18,635	19,566	20,545
13M4	15,018	1.0%	15,169	15,472	16,246	17,058	17,911
13M5	13,172	1.0%	13,304	13,570	14,248	14,960	15,709
13M6	0	1.0%	0	0	0	0	0
13M7	1,988	1.0%	2,008	2,048	2,150	2,258	2,371
13M8	13,092	1.0%	13,223	13,487	14,162	14,870	15,613
13M23	17,276	1.0%	17,449	17,798	18,688	19,622	20,603
13M24	17,669	1.0%	17,845	18,202	19,113	20,068	21,072
Trafalgar 31M4	11,043	3.0%	11,374	13,374	24,181		
31M5	11,485	3.0%	11,829	12,539	14,420	16,583	19,070
31M6	13,252	3.0%	13,649	14,468	16,638	19,134	22,004
31M7	17,669	3.0%	18,199	19,291	22,184	25,512	29,339
31M8	19,877	3.0%	20,474	21,702	24,957	28,701	
Col 1	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	Col 8

Indicates Feeder at/or exceeding Best Practices Loading. Indicates Feeder at/or exceeding 600Amp Load. Estimated rate of development of the NOESP area is 6.7% of total per year over 15 years, beginning in 2010. Spread over 4 Palermo Feeders plus 31M4 out of Trafalgar. Total **Minimum** Projected Load in NOESP =125,800kW, 8428.6kW/Yr, 1685.72kW/yr/feeder

TABLE 6.5 FEEDER LOAD PROJECTIONS AT CURRENT ANNUAL PEAK GROWTH RATE WITH SUGGESTED LOAD TRANSFERS AND MAXIMUM NOESP LOAD ADDED

Facility Transformer Station/ Feeder	Historical Peak Loading (kw)	Average Annual Peak Demand Growth Rate (%/yr)	Projected Load @ Current Rate of Growth WITH PERMANENT LOAD TRANSFERS WITH PHASED IN NEOSP LOAD ON PALERMO AND TRAFALGAR FEEDERS				
			2008 (kW)	2010 (kW)	2015 (kW)	2020 (kW)	2025 (kW)
Palermo 4M2	8,834	3.0%	9,099	12,037	25,803		
4M4	8,693	3.0%	8,954	11,883	25,626		
4M7	15,190	3.0%	15,646	18,977	33,783		
4M8	12,086	3.0%	12,449	15,587	29,886		
Oakville 22M43	17,669	1.0%	17,845	18,202	19,113	20,068	21,072
22M44	14,577	1.0%	14,723	15,017	15,768	16,556	17,384
22M49	22,086	1.0%	22,307	22,753	23,891	25,085	
22M50	14,577	1.0%	14,723	15,017	15,768	16,556	17,384
22M51	13,252	1.0%	13,384	13,652	14,334	15,051	15,804
22M52	22,086	1.0%	22,307	22,753	23,891	25,085	26,339
Bronte 13M1	18,994	1.0%	19,184	19,568	20,546	21,573	22,652
13M2	6,184	1.0%	6,246	6,371	6,689	7,024	7,375
13M3	17,227	1.0%	17,399	17,747	18,635	19,566	20,545
13M4	15,018	1.0%	15,169	15,472	16,246	17,058	17,911
13M5	13,172	1.0%	13,304	13,570	14,248	14,960	15,709
13M6	0	1.0%	0	0	0	0	0
13M7	1,988	1.0%	2,008	2,048	2,150	2,258	2,371
13M8	13,092	1.0%	13,223	13,487	14,162	14,870	15,613
13M23	17,276	1.0%	17,449	17,798	18,688	19,622	20,603
13M24	17,669	1.0%	17,845	18,202	19,113	20,068	21,072
Trafalgar 31M4	11,043	3.0%	11,374	14,449	28,576		
31M5	11,485	3.0%	11,829	12,539	14,420	16,583	19,070
31M6	13,252	3.0%	13,649	14,468	16,638	19,134	22,004
31M7	17,669	3.0%	18,199	19,291	22,184	25,512	
31M8	19,877	3.0%	20,474	21,702	24,957		
Col 1	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	Col 8

Indicates Feeder at/or exceeding Best Practices Loading, Indicates Feeder at/or exceeding 600Amp Load, Estimated rate of development of the NOESP area is 6.7% of total per year over 15 years, beginning in 2010. Spread over 4 Palermo Feeders plus 31M4 out of Trafalgar. Total **Maximum** Projected Load in NOESP =179,400kW, 12019.8kW/Yr, 2403.96kW/yr/feeder

TABLE 6.6 FEEDER LOAD PROJECTIONS WITH NEW FEEDERS

	Historical Peak Load (kW)	Average Annual Peak Demand Growth Rate (%/yr)	(NOESP GROWTH INCULDED) Projected Load @ Current Rate of Growth WITH PERMANENT LOAD TRANSFERS WITH PHASED IN NEOSP LOAD ON PALERMO AND TRAFALGAR FEEDERS PLUS NEW FEEDERS									
			2008		2010		2015		2020		2025	
			Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
			(kW)	(kW)	(kW)	(kW)	(kW)	(kW)	(kW)	(kW)	(kW)	(kW)
Palermo 4M2	8,834	3.0%	9,099	9,099	10,974	10,577	19,265	16,823		28,665		
4M4	8,693	3.0%	8,954	8,954	10,820	10,423	19,088	16,646		28,461		
4M7	15,190	3.0%	15,646	15,646	17,914	17,517	27,245	24,803				
4M8	12,086	3.0%	12,449	12,449	14,524	14,127	23,347	20,906		33,360		
North west Feeder #1					1,329	932	7,973	5,591	14,618	10,250	21,262	14,910
North West Feeder #2					1,329	932	7,973	5,591	14,618	10,250	21,262	14,910
Trafalgar 31M4	11,043	3.0%	11,374	11,374	13,386	12,989	22,038	10,596	38,633	31,854		
31M5	11,485	3.0%										
31M6	13,252	3.0%										
31M7	17,669	3.0%										
31M8	19,877	3.0%										
North East Feeder #1					1,329	932	7,973	5,591	14,618	10,250	21,262	14,910
North East Feeder #2					1,329	932	7,973	5,591	14,618	10,250	21,262	14,910
Col 1	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	Col 8	Col 9	Col 10	Col 11	Col 12	Col 13

Indicates Feeder at/or exceeding Best Practices Loading, Indicates Feeder at/or exceeding 600Amp Load,

TABLE 6.7 FEEDER LOAD PROJECTIONS WITH NEW FEEDERS WITH 5% CONSERVATION

	Historical Peak Load (kW)	Average Annual Peak Demand Growth Rate (%/yr)	CONSERVATION INCLUDED (NOESP GROWTH INCULDED) Projected Load @ Current Rate of Growth WITH PERMANENT LOAD TRANSFERS WITH PHASED IN NEOSP LOAD ON PALERMO AND TRAFALGAR FEEDERS PLUS NEW FEEDERS									
			2008		2010		2015		2020		2025	
			Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
			(kW)	(kW)	(kW)	(kW)	(kW)	(kW)	(kW)	(kW)	(kW)	(kW)
Palermo 4M2		3.0%	8,644	8,644	10,426	10,048	18,302	15,982				
4M4		3.0%	8,506	8,506	10,279	9,902	18,133	15,814				
4M7		3.0%	14,864	14,864	17,018	16,641	25,883	23,563				
4M8		3.0%	11,826	11,826	13,798	13,421	22,180	19,860				
Northwest Feeder #1					1,262	885	7,575	5,312	13,887	9,738	20,199	14,164
NorthWest Feeder #2					1,262	885	7,575	5,312	13,887	9,738	20,199	14,164
Trafalgar 31M4		3.0%	10,806	10,806	12,716	12,339	20,936	18,616		30,261		
North East Feeder #1					1,262	885	7,575	5,312	13,887	9,738	20,199	14,164
North East Feeder #2					1,262	885	7,575	5,312	13,887	9,738	20,199	14,164
Col 1	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	Col 8	Col 9	Col 10	Col 11	Col 12	Col 13

Indicates Feeder at/or exceeding Best Practices Loading, Indicates Feeder at/or exceeding 600Amp Load,

7. Conclusions

7.1 Feeder Load Projections

- Under current conditions, with a continuation of the current Annual Peak Growth Rate, and with no NOESP loads yet factored in, the current feeders at Palermo T.S. would start reaching their 600Amp limit sometime between 2010 and 2015.
(Reference Table 6.2)
Two of the existing feeders out of Trafalgar T.S. are already loaded beyond normal best practice and could not be expected to contribute supply to the NOESP area as it develops.
- With some load transfers between Palermo T.S. to Bronte T.S., the available feeder capacities out of Palermo could be extended to beyond 2020 if we again ignore any NOESP load development. (Reference Table 6.3)
- However, if we factor in the minimum projected NOESP loading over the fifteen years of 2010-2025 on top of the load transfers, we can expect to see the Palermo feeders approach the 600Amp limit sometime around 2015. (Reference Table 6.4)
The 31M4 feeder out of Trafalgar T.S. could be expected to reach the 600Amp limit around the same timeframe of 2015.
- Even under the minimum load growth scenario for the NOESP area, the analysis leads to the obvious conclusion that new feeder capacity will be required into the NOESP area by 2015 at best.
Table 6.6 shows the impacts on existing feeders into the NOESP area if four future feeders are added to the calculations beginning in 2010.
Using the Maximum NOESP load growth scenario, the existing feeder capacity limits would be reached earlier than 2015, but exactly when is much too speculative to determine. (Reference Table 6.5)
- If four new feeders, two in the North-West and two in the North-East are factored into the analysis, the result might look like that shown in Table 6.6.
New feeder capacity available for the NOESP area could allow the Palermo feeders to reach capacity limits by 2020 or beyond. The 31M4 feeder could still be expected to hit the 600Amp limit sometime between 2015 to 2020.
Under minimum NOESP growth estimates, the four new feeders could be expected to reach their 'Best Practice' loading by 2025.
- To deal with the maximum load growth for the NOESP are, up to eight (8) new feeders would likely be required from the north supply stations.

7.2 Station Load Projections

- Table 6.1 shows the expected outcomes of the station loading analysis based on the data supplied by Hydro One.
- Palermo and Oakville transformer stations are already exceeding their recommended Ten Day LTR load levels at peak periods.
- Capacity still remains at the Bronte and Trafalgar stations, however, Milton Hydro has requested HONI to reserve the remaining capacity at Trafalgar for them.
- The reduction of the PetroCanada load has created some additional capacity at Bronte T.S., but load transfers between Palermo and Bronte need to be more closely reviewed for practicality before a firm assessment of the remaining capacities can be reached.
- Table 6.1 ignores any load growth associated with the NOESP area and only looks at capacity limitations due to the current rate of growth. The outcome of the feeder analysis takes NEOSP growth estimates and extrapolates capacity limitations and future station capacity additions required by 2025.
- The feeder analysis concludes that additional transformer station capacity in the north end of the Town will be required by around 2010-2015.

APPENDIX A

Report to:

AESI Inc.

Oakville Hydro Load Projections North Oakville

Document No. 0786590200-REP-E0001-01

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Report to:

AESI INC.

OAKVILLE HYDRO LOAD PROJECTIONS NORTH OAKVILLE

JULY 2007

Prepared by _____ Date 07.07.23

Reviewed by _____ Date 07.07.23

Authorized by _____ Date 07.07.23

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REVISION HISTORY

REV. NO	ISSUE DATE	PREPARED BY AND DATE	REVIEWED BY AND DATE	APPROVED BY AND DATE	DESCRIPTION OF REVISION
00	07.07.16	AJR 07.07.09	ACI 07.07.13	GAR 07.07.13	Issued for comment.
01	07.07.23	AJR 07.07.23	ACI 07.07.23	GAR 07.07.23	Revised per AESI comments of 07.07.19.

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	POTENTIAL FOR ELECTRICAL GROWTH	1
3.0	METHOD	1
3.1	RESIDENTIAL LOADS	1
3.2	EMPLOYMENT LOADS.....	2
4.0	CAVEATS AND LIMITATIONS	2
5.0	NORTH OAKVILLE SECONDARY PLAN	3
5.1	RESIDENTIAL	4
5.2	EMPLOYMENT	5
6.0	LOAD FORECAST	5
6.1	RESIDENTIAL LOAD COMPONENT.....	5
6.2	EMPLOYMENT COMPONENT.....	6
6.3	EXPECTED COMBINED LOAD GROWTH TO 2021	6
6.3.1	MINIMUM SCENARIO	6
6.3.2	MAXIMUM SCENARIO	7
7.0	CONCLUSIONS	8
8.0	REFERENCES	8

LIST OF TABLES

Table 5-1: Land Use Summary (Ha)3

Table 5-2: Residential Archetypes and Unit Density4

Table 5-3: Residential Density and Dwelling Units by Plan Area4

Table 5-4: Employment Areas and Employees5

Table 6-1: Residential Archetypes and Peak Contribution.....6

Table 6-2: Minimum Peak Load Scenario.....7

Table 6-3: Maximum Peak Load Scenario.....7

1.0 INTRODUCTION

As part of their ongoing activities, the Town of Oakville is developing a Secondary Plan that describes the community vision and land use policies for the North Oakville East planning area. The planning horizon for the Secondary Plan is to the year 2021. Oakville Hydro, the local distribution company needs to project electrical loading in the secondary plan area in order to evaluate the adequacy of the distribution system and plan for the future growth.

The purpose of this report is to:

- Review the North Oakville East Secondary plan to form an estimate of dwelling units, dwelling unit mix and employment areas;
- Develop an end-use load forecast based on the expected pattern of land-use in the secondary plan area.

2.0 POTENTIAL FOR ELECTRICAL GROWTH

Capacity of supply facilities is measured against the peak demand of the electrical system. In Oakville, as in virtually every other Southern Ontario utility, the electrical demand is most severe in summer when the supply capacity of electrical components is least.

Electrical growth is driven by the addition of new residential developments and large customer loads such as institutional, industrial, commercial and general service users. These load components increase with the development of new subdivisions, factories and offices.

3.0 METHOD

3.1 RESIDENTIAL LOADS

The net residential areas for the land-use areas were provided by the Town of Oakville planning department. Land-use policies in the Secondary Plan outline a range of housing unit densities for each land-use area. The net hectares in each plan area were multiplied

by the minimum and maximum unit density to develop two load scenarios. Loads were computed by using the expected peak contribution from three dwelling unit archetypes.

3.2 EMPLOYMENT LOADS

The Secondary Plan sets a target for employment in the main Employment district just south of highway 407 of 16,500 jobs. An additional 8,500 jobs are expected to be created in the core and mixed use areas of the Trafalgar urban core areas 1-4, and in the urban centre areas of the neighbourhoods. The additional 8,500 jobs were distributed proportionally based on the net employment land available in the plan areas. A representative ratio of peak contribution per employee was applied to the ultimate number of employees in each plan area to estimate the total employment peak demand.

4.0 CAVEATS AND LIMITATIONS

The forecasts are meant to be a high-level examination of the possible loads in the study area, based on current planning documentation and expected peak load contributions from residential archetypes and aggregate employment loads. The main information source used in this forecast is North Oakville East Secondary Plan working document. The Secondary Plan has not become a recognized amendment to Oakville's Official Plan. There are many disputed land-use policies between the Town of Oakville and landowners. The Secondary Plan is currently before the Ontario Municipal Board (OMB), and there may be changes to the land-use policies in the final Secondary Plan.

Electrical system growth is largely based on new development in general. The timing of electrical growth is a function of the timing of development. Ultimately, this timing will depend on development plans, developers and economic climate. Most of the Secondary Plan area is currently without municipal water or sewer capacity. Town of Oakville planning staff indicated that permits will not be issued to builders until these services have been constructed.

Because of the great variation in the minimum and maximum allowed residential densities expressed in the land-use policies for each plan area, it is difficult to provide a plausible development scenario. Thus, two scenarios were developed to show a range of peak loads. Furthermore, the plan areas provided by the City of Oakville aggregated the available land areas for neighbourhoods 1-13 found on the Secondary Plan Figure NOE1.

The planning horizon in the Secondary Plan document has been identified as 2021. It must be noted however that there are no phasing guidelines in terms of neighbourhoods or core areas for development. There are no phased dwelling unit or employment targets. Rather, the ultimate number of dwelling units is presented via minimum and maximum unit densities and employment figures are expressed as an expected ultimate with the caveat that:

“The achievement of these targets on a yearly basis shall not be required, however, the Town will review the achievement of the targets every five years and will monitor on an annual basis.”¹

Commercial, industrial and institutional peak loads are difficult to predict, as they are heavily dependent upon the specific type of activity being conducted, and may be seasonal. The best estimate for peak loading is expressed as an average over several activity areas.

5.0 NORTH OAKVILLE SECONDARY PLAN

The Secondary Plan outlines fourteen neighbourhood areas, four urban core areas around Trafalgar road, a Dundas urban core area, an employment zone and a transitional district. Figure NOE1 in the Secondary Plan illustrates these areas. The Secondary Plan designates land-use policies that define minimum and maximum net densities of dwelling units, as well as minimum and maximum densities for commercial development. Table 5-1 shows the breakdown of lands by plan area, and the net area for residential and employment lands. Please note that Neighbourhoods 1 through 13 are aggregated in the sub-urban, general urban and urban centre categories.

Table 5-1: Land Use Summary (Ha)

Plan Area	Net Residential	Net Employment
Sub-Urban	85.7	0
General Urban	254.7	0
Urban Centre	68.1	17
Neighbourhood 14 Area	16	2.8
Dundas Urban Core	9.7	1.7
Neyagawa Urban Core	3	2.3
R.R. 25 Urban Core	5.3	2.3
Trafalgar Core #1	0	43.4
Trafalgar Core #2	10.2	6.8
Trafalgar Core #3	34.1	11.4
Trafalgar Core #4	16.9	11.3
Employment Zone	0	461.9
Transitional District	24.9	0
Totals	528.6	560.9

¹ The Corporation of the Town of Oakville. (April 2007). *Official Plan Amendment number 272 to the Official Plan of the Town of Oakville: North Oakville East Secondary Plan (working document version)*.

5.1 RESIDENTIAL

Residential building densities were categorized into three major housing archetypes: low, medium and high density as shown in Table 5-2.

Table 5-2: Residential Archetypes and Unit Density

Category	Archetype	Density Units/Ha
Low Density	Single detached, semi detached, duplex.	<35
Medium Density	Single detached dwellings on small lots, semi-detached, duplex and triplex dwellings, as well multiple attached dwelling units such as townhouses, back-to-back townhouses, block townhouses and stacked townhouses.	35-150
High Density	Stacked townhouses, back-to-back townhouses and apartments or similar.	>150

As the Secondary Plan presents a minimum and maximum density for dwelling units, both “Min” and “Max” scenarios for the ultimate number of units for each plan area are shown in Table 5-3

Table 5-3: Residential Density and Dwelling Units by Plan Area

Plan Area	Density (units/ net ha)		Dwelling Units	
	Min.	Max.	Min.	Max.
Sub-Urban	15	35	1,286	3,000
General Urban	25	75	6,368	19,103
Urban Centre	35	150	2,384	10,215
Neighbourhood 14 Area	50	300	800	4,800
Dundas Urban Core	25	75	243	728
Neyagawa Urban Core	25	75	75	225
R.R. 25 Urban Core	25	75	133	398
Trafalgar Core #1	-	-	-	-
Trafalgar Core #2	10	51	104	520
Trafalgar Core #3	34	171	1,163	5,814
Trafalgar Core #4	17	85	286	1,428
Employment Zone	-	-	-	-
Transitional District	10	50	248	1,240
Totals			13,087	47,469

The total number of dwelling units for the minimum scenario follows the guideline to meet or exceed a density of 30 units per net hectare, while the maximum scenario shows the theoretical limit to housing development in the Secondary Plan area.

5.2 EMPLOYMENT

The Secondary Plan targets 16,500 jobs for the large employment zone south of Highway 407. An additional 8,500 jobs are anticipated for population based employment in the Trafalgar, Dundas and urban centre cores for a total of 25,000 jobs. Table 5-4 illustrates the distribution of employees.

Table 5-4: Employment Areas and Employees

Land Use	Area (Ha)	Employees
Sub-Urban	-	-
General Urban	-	-
Urban Centre	17	1,444
Neighbourhood 14 Area	3	238
Dundas Urban Core	3	272
Neyagawa Urban Core	2	161
R.R. 25 Urban Core	2	195
Trafalgar Core #1	43	3,685
Trafalgar Core #2	7	577
Trafalgar Core #3	11	968
Trafalgar Core #4	11	960
Employment Zone	462	16,500
Transitional District	-	-
Totals	562	25,000

6.0 LOAD FORECAST

6.1 RESIDENTIAL LOAD COMPONENT

Reference points for average residential loads coincident with the system peak have been established in a similar sized LDC in the Greater Toronto Area, and it is assumed that the values are typical for Oakville. The values used are consistent with the Ontario energy consumption by archetype in the “Household end-use energy consumption 1997” study by the Canadian Residential Energy End-use Data and Analysis Center (CREEDAC)² Typical dwelling archetypes, their density per net hectare and peak contribution are shown in Table 6-1.

² CREEDAC. (August 2000). *Household end-use energy consumption in 1997.* CREEDAC-2000-08-02.

Table 6-1: Residential Archetypes and Peak Contribution

Category	Archetype	Density Units/Ha	Peak kW/Unit
Low Density	Single detached, semi detached, duplex	<35	2.13
Medium Density	Single detached dwellings on small lots, semi-detached, duplex and triplex dwellings, as well multiple attached dwelling units such as townhouses, back-to-back townhouses, block townhouses, stacked townhouses, back-to-back townhouses, block townhouses, stacked townhouses, back-to-back townhouses, block townhouses, stacked	35-150	1.67
High Density	stacked townhouses, back-to-back townhouses and apartments or similar	>150	1.48

6.2 EMPLOYMENT COMPONENT

Reference points for average employment loads coincident with the system peak have been established in a similar sized LDC in the Greater Toronto Area of 3.16 kW per employee. This figure is an average across many activity categories, and it is assumed that the values are typical for Oakville.

6.3 EXPECTED COMBINED LOAD GROWTH TO 2021

Residential densities were presented as minimum and maximum values in the Secondary Plan, and accordingly two scenarios were developed. The employment peak load contribution remains the same in both scenarios, as target numbers were provided in the Secondary Plan.

6.3.1 MINIMUM SCENARIO

Based on the minimum residential densities and the peak load contribution of three residential archetypes, and employment loads, the expected ultimate loads are shown in Table 6-2.

Table 6-2: Minimum Peak Load Scenario

Plan Area	Peak MW		
	Residential	Employment	Total
Sub-Urban	2.7	-	2.7
General Urban	10.6	-	10.6
Urban Centre	3.5	4.6	8.1
Neighbourhood 14 Area	1.3	0.8	2.1
Dundas Urban Core	0.4	0.9	1.3
Neyagawa Urban Core	0.1	0.5	0.6
R.R. 25 Urban Core	0.2	0.6	0.8
Trafalgar Core #1	-	11.6	11.6
Trafalgar Core #2	0.2	1.8	2.0
Trafalgar Core #3	2.5	3.1	5.5
Trafalgar Core #4	0.6	3.0	3.6
Employment Zone	-	52.1	52.1
Transitional District	0.5	-	0.5
Totals	22.8	79.0	101.8

By 2021, the total minimum load expected in the Secondary Plan area is approximately 102 MW, of which approximately 23 MW (22%) are residential loads and 79 MW (78%) are employment loads.

6.3.2 MAXIMUM SCENARIO

Based on the maximum residential densities and the peak load contribution of three residential archetypes, the expected ultimate loads are shown in Table 6-3.

Table 6-3: Maximum Peak Load Scenario

Plan Area	Peak MW		
	Residential	Employment	Total
Sub-Urban	5.0	-	5.0
General Urban	31.9	-	31.9
Urban Centre	15.1	4.6	19.7
Neighbourhood 14 Area	7.1	0.8	7.9
Dundas Urban Core	1.2	0.9	2.1
Neyagawa Urban Core	0.4	0.5	0.9
R.R. 25 Urban Core	0.7	0.6	1.3
Trafalgar Core #1	-	11.6	11.6
Trafalgar Core #2	0.9	1.8	2.7
Trafalgar Core #3	9.7	3.1	12.8
Trafalgar Core #4	2.4	3.0	5.4
Employment Zone	-	52.1	52.1
Transitional District	2.1	-	2.1
Totals	76.4	79.0	155.4

By 2021, the total maximum load expected in the Secondary Plan area is approximately 155MW, of which approximately 76 MW (49%) are residential loads and 79 MW (51%) are employment loads.

7.0 CONCLUSIONS

Assuming that development of the North Oakville Secondary Plan area is complete by the planning horizon of 2021; Oakville Hydro can expect ultimate residential loads in the range of 23-76 MW. Employment based loads have been estimated to be approximately 79 MW, based on employment targets and an average peak load contribution of 3.14 kW per employee, established in a similar sized LDC in the Greater Toronto Area.

8.0 REFERENCES

CREEDAC. (August 2000). *Household end-use energy consumption in 1997.* CREEDAC-2000-08-02.


The Corporation of the Town of Oakville. (April 2007). *Official Plan Amendment number 272 to the Official Plan of the Town of Oakville: North Oakville East Secondary Plan (working document version).*





Appendix 3

Hydro One Networks

Proposals for Tremaine TS

and North Oakville TS




			October 16, 2008	
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"Tremaine TS"

Preliminary Proposal

Agenda

	Background
	Need
	Details on "Tremaine TS" Preliminary Proposal
	Benefits of Pool Funded Station
	What Next?

			
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Background


Tremaine TS (230-27.6 kV 2x75/125 MVA)

- Existing transformation capacity and loads in the supply area
- Load forecast
- Need for new capacity
- Proposal for Pool funded new capacity to supply
 - Burlington Hydro Inc.
 - Milton Hydro Distribution Inc.
 - Oakville Hydro Electricity Distribution Inc.







Need




Need

Transformer Station Issues





- Palermo TS is above LTR
- Halton TS is approaching LTR
- Halton TS also has voltage issues
- Trafalgar TS and Oakville TS will reach LTR in approximately 5 to 10 years



Need

System Issues

- Combined load supplied from T38B and T39B is 475 MW (550MVA) – Approaching market limit of 600MW
- Issues with restoration in the event of the loss of a double circuit line (T38B/T39B, B15C/B16C)





Need

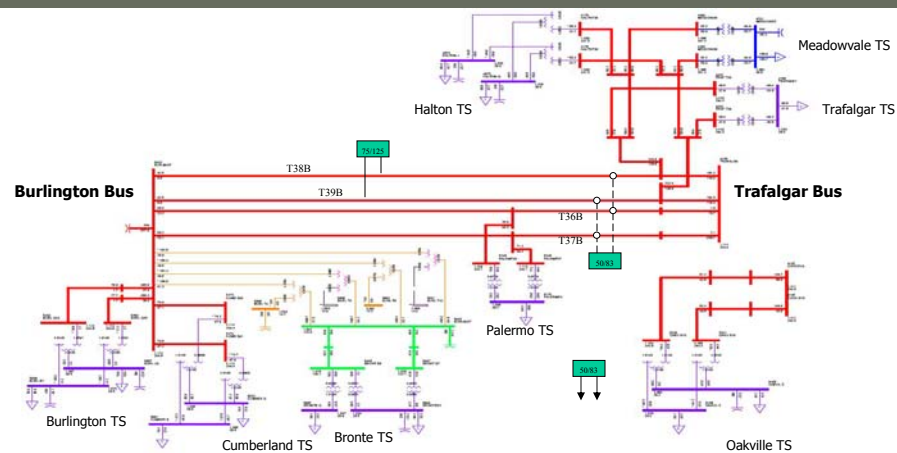
System Issues

- Two DESNs are needed ASAP to address capacity issues at Palermo TS and Halton TS (*Halton TS serves a different geographic area and affects other LDC's. Halton TS issues to be considered separately*)
- One additional DESN is needed around 2020 to support the load growth in south Oakville



Need

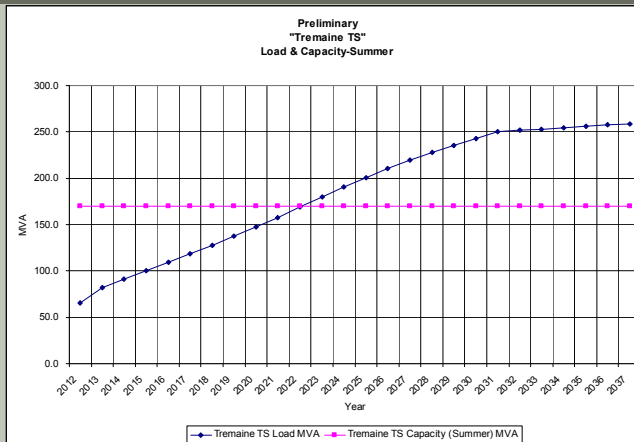
Future Potential Options





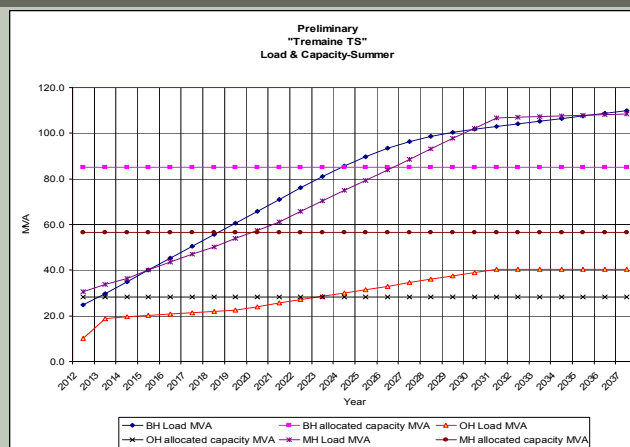
Need

Tremaine TS Forecast



Need

LDC Forecasts





Details on “Tremaine TS”- Technical










Details on “Tremaine TS”

“Tremaine TS” (230-27.6 kV 2x75/125 MVA)

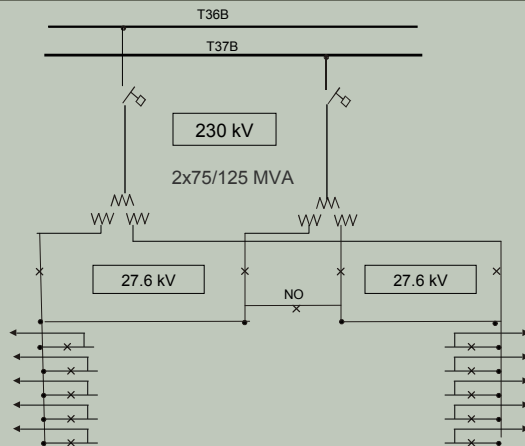
Location	Halton Region
Tapped Circuits (230 kV)	T36B / T37B or T38B / T39B
No of Transformers	2
Transformer Ratings	75/125 MVA
Station Rating (10-Day LTR)	170 MVA
Nominal LV Bus Voltage	27.6 KV
Feeder Positions	12
Proposed Ready for Service Date	Jun 2012



Details on "Tremaine TS" - Preliminary

"Tremaine TS" (230-27.6 kV 2x75/125 MVA)



Notes:

- Two (2) feeder positions for **Oakville Hydro**
- Six (6) feeder positions for **Burlington Hydro**
- Four (4) feeder positions for **Milton Hydro**
- Ready for Service: **June 2012**



Details on "Tremaine TS"

"Tremaine TS" (230-27.6 kV 2x75/125 MVA)

Exclusions

- Revenue metering
- Feeder tie switches
- Isolation switches at first pole
- Approvals for feeder easements
- Leased circuits for metering or telecom
- Property costs





Details on "Tremaine TS"

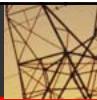
"Tremaine TS" - Station Capacity/Cost Allocation

	Burlington Hydro	Milton Hydro	Oakville Hydro
Feeder Breaker Positions	50% (6)	33% (4)	17% (2)
Assigned Capacity (CATC)	50% (85 MVA)	33% (56 MVA)	17% (28 MVA)
Cost	50%	33%	17%



Details on "Tremaine TS"- Financial





Details on "Tremaine TS" - Preliminary

Burlington Hydro Capital Contribution for Pooled Costs

Project Components	Total Cost (\$M)	Allocated Cost (\$M)	Capital Contribution Required (\$M)	Revenue Guarantee Duration (years)
Pooled Costs				
Line Connection **				
Station	25.0	12.5	4.02	25
Total - Pooled				

* GST Not Included

** Line Connection Costs Extra – not included for preliminary evaluation

*** Non Pool Costs Extra – not included for preliminary evaluation



Details on "Tremaine TS" - Preliminary

Milton Hydro Capital Contribution for Pooled Costs

Project Components	Total Cost (\$M)	Allocated Cost (\$M)	Capital Contribution Required (\$m)	Revenue Guarantee Duration (years)
Pooled Costs				
Line Connection **				
Station	25.0	8.30	1.72	25
Total - Pooled				

* GST Not Included

** Line Connection Costs Extra – not included for preliminary evaluation

*** Non Pool Costs Extra – not included for preliminary evaluation





Details on "Tremaine TS" - Preliminary

Oakville Hydro Capital Contribution for Pooled Costs

Project Components	Total Cost (\$M)	Allocated Cost (\$M)	Capital Contribution Required (\$M)	Revenue Guarantee Duration (years)
Pooled Costs				
Line Connection **				
Station	25.0	4.20	1.30	25
Total - Pooled				

* GST Not Included

** Line Connection Costs Extra – not included for preliminary evaluation

*** Non Pool Costs Extra – not included for preliminary evaluation



Benefits of a Pool Funded Station

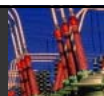




Benefits of Pool Funded Station

“Tremaine TS” (230-27.6 kV 2x75/125 MVA)

- Lower up front capital requirement for customer
- Pool funded financing by Hydro One
- Hydro One provides complete project management
- Hydro One obtains all regulatory approvals (MOE, IESO, OEB, ESA, and Municipal)
- Hydro One responsible for Operation & Maintenance
- Hydro One assumes risk for equipment failure & replacement
- Supported by substantial strategic spare parts inventory
- Allows customer to concentrate on core distribution business



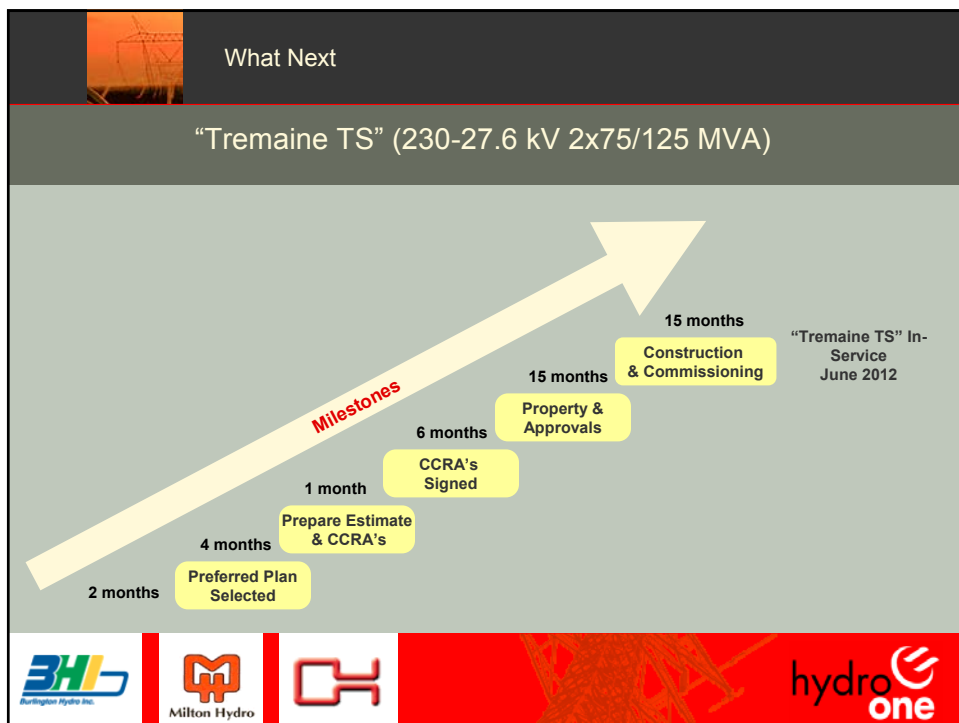
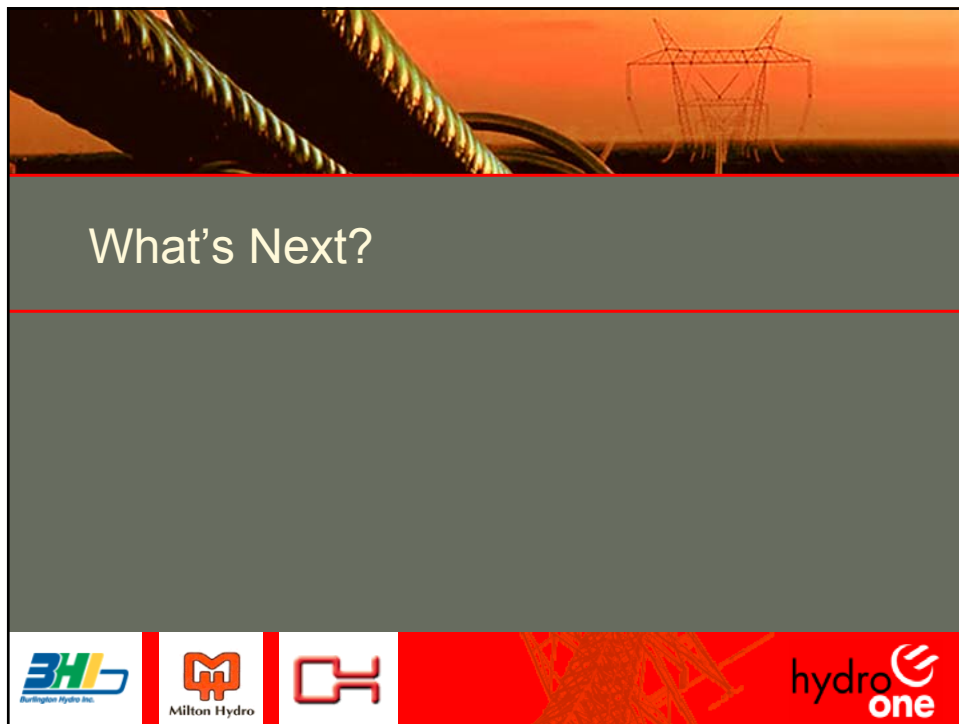
Benefits of Pool Funded Station

“Tremaine TS” (230-27.6 kV 2x75/125 MVA)

Typical O&M Costs Avoided by Customers

- Replacement of a failed transformer – over \$3M
- Replacement of a failed breaker – over \$150K
- Routine maintenance & repair – \$50K/year/TS
- Preventive maintenance to ensure reliability – \$35–\$70K/year/TS depending on age







Oakville Hydro
Electricity Distribution Inc.
P. O. Box 1900
861 Redwood Square
Oakville ON L6J 5E3
Telephone: 905-825-9400
Fax: 905-825-5830
email: hydro@oakvillehydro.com
www.oakvillehydro.com

November 7, 2008

Hydro One Networks Inc.
483 Bay Street
15th Floor North Tower
Toronto, ON M5G 2P5

Attention: Mr. Arthur Fischer

Dear Sir:

Subject: Capacity Requirements in Oakville

Thank you for providing the Tremaine TS Preliminary Proposal. We will consider this proposal and how it aligns with our future capacity requirements and supply options. As you are aware, the Tremaine option only satisfies a small part of the north Oakville area growth. The majority of growth in Oakville is in the "north-east", east of the Sixteen Mile Creek. The 25 year forecasted growth is in the order of 100 MW.

To better understand our options, we would ask that Hydro One prepare a proposal for a pool funded facility to satisfy Oakville Hydro's growth over the 25 year period commencing in 2012. The general area of growth is east of Sixteen Mile Creek, south of Highway 407, north of Dundas Street and west of Ninth Line. Could you please confirm the approximate timeframe to complete this proposal. As you know, area growth potential and the strain on existing facilities are making capacity decisions time critical. Your earliest response possible is appreciated. Let me know if you require further information from Oakville Hydro. I will send the 25 year forecasted load growth for this area electronically.

If you have any questions or comments, please contact me at your convenience.

Yours truly,

Daniel P. Steele, P.Eng., M.B.A.
Director of Engineering

copy: Alex Bystrin

Appendix 4



*Oakville Hydro Corporation
Transformer Station Supply Options Study
May 2009*

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Age Group	Percentage
18-24	85
25-34	75
35-44	65
45-54	55
55-64	45
65-74	35
75-84	25
85+	15

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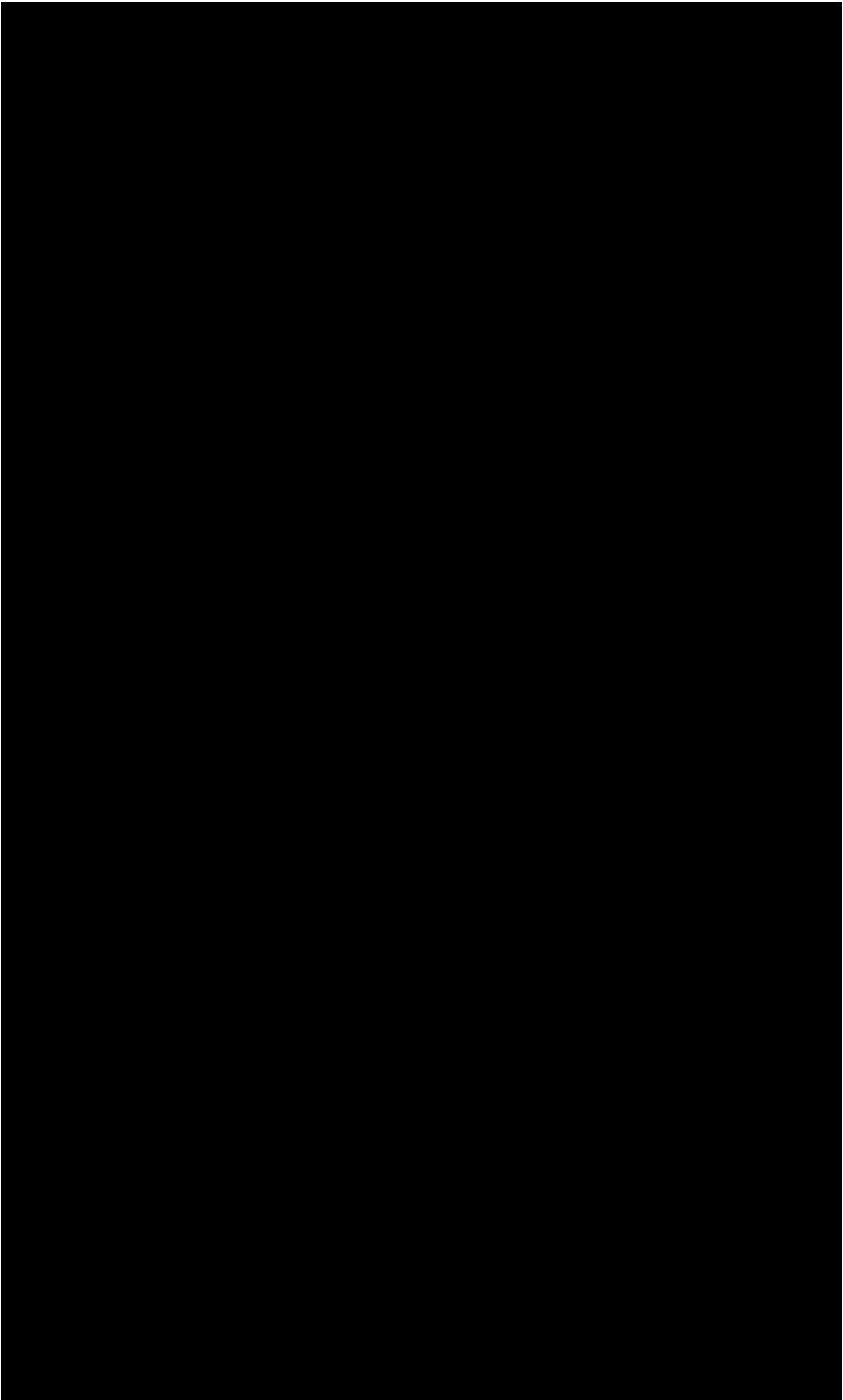
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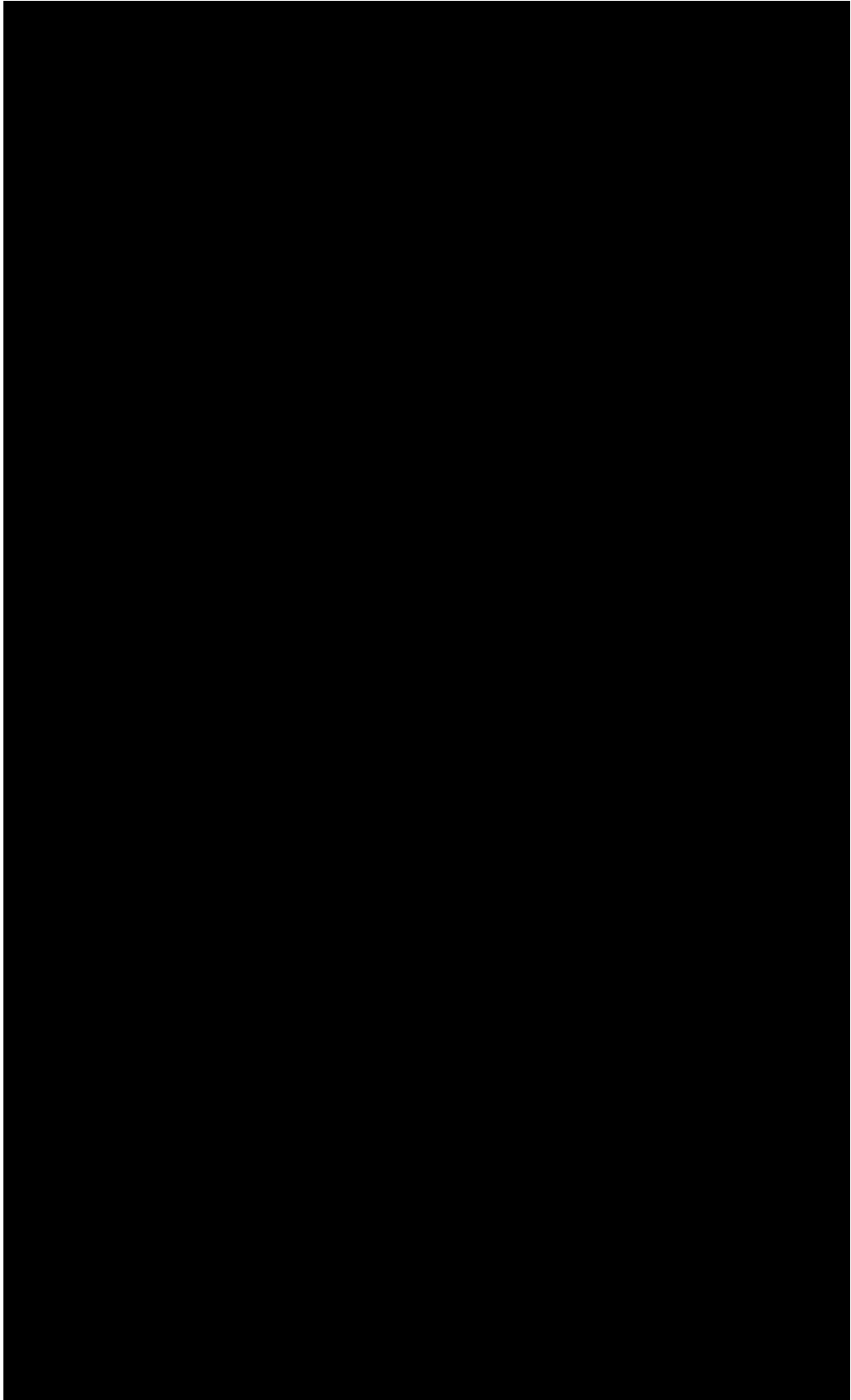
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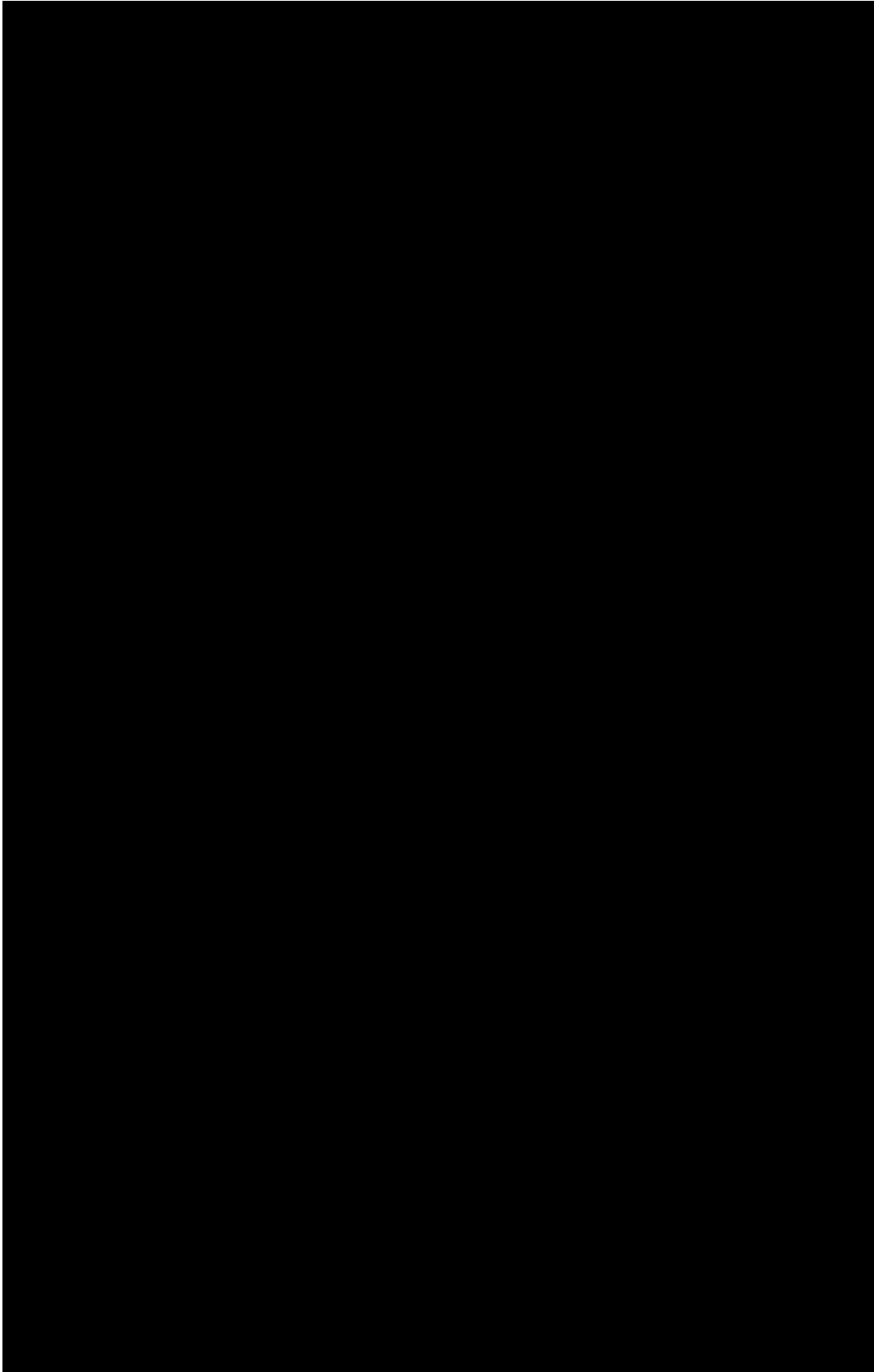
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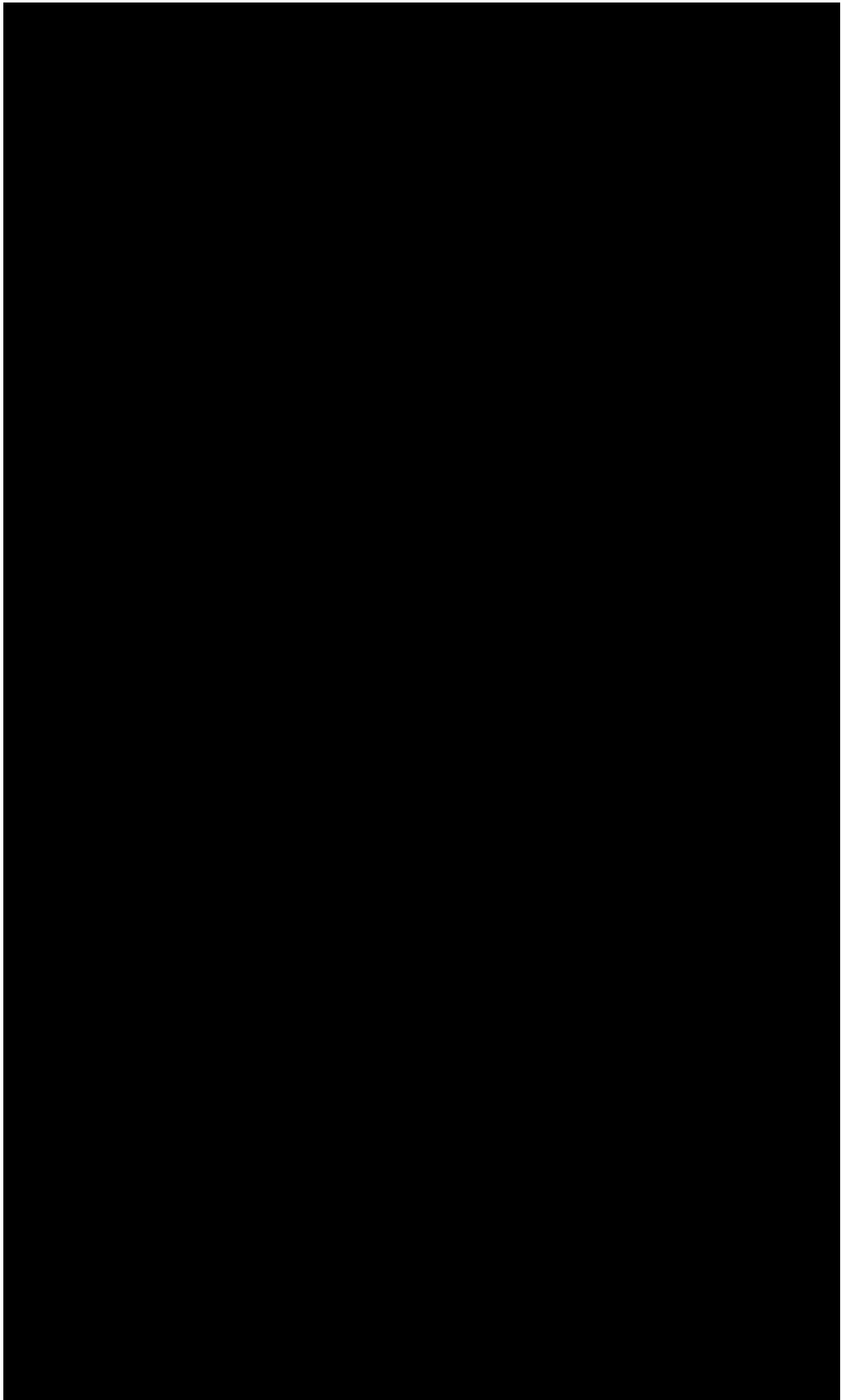
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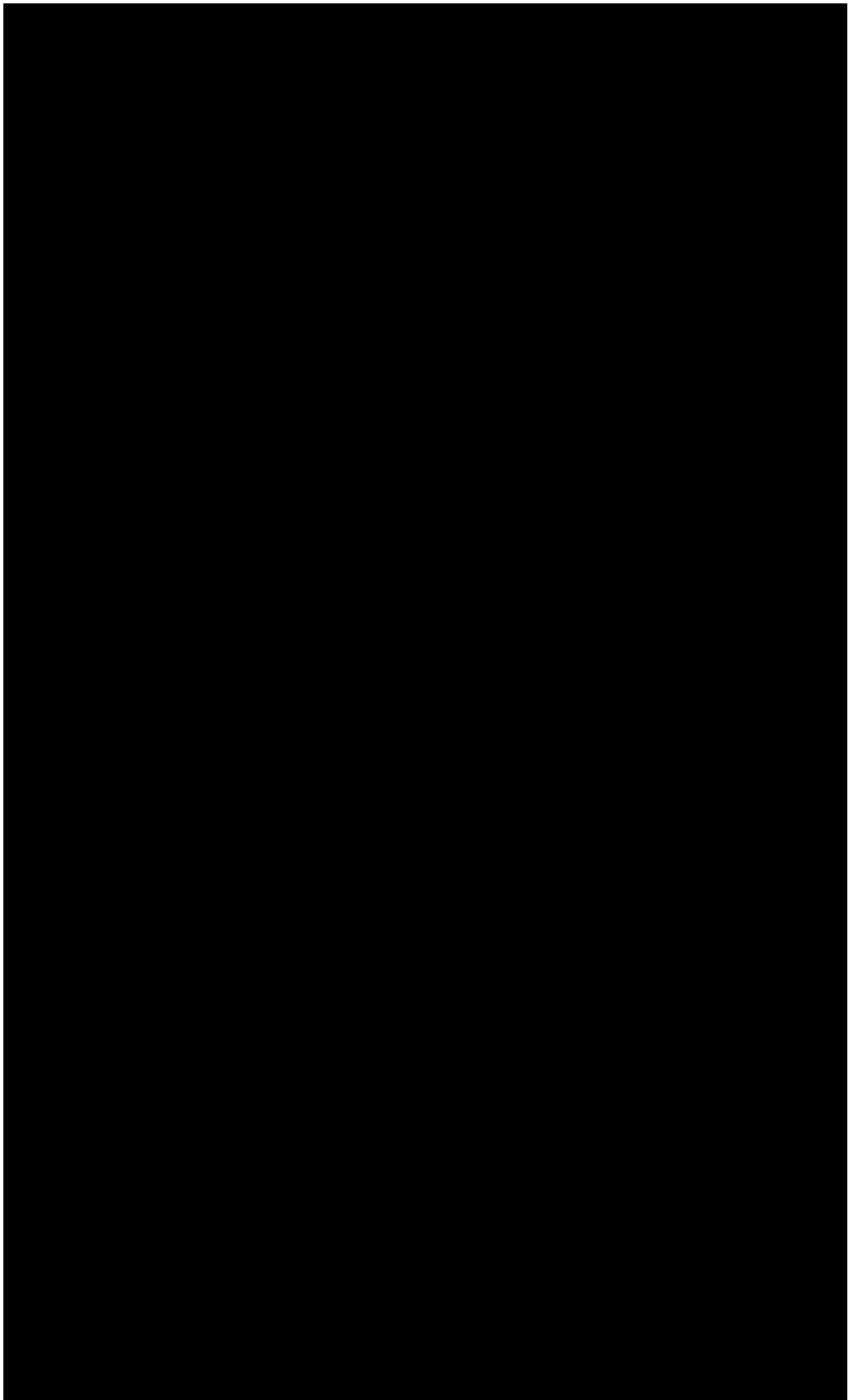
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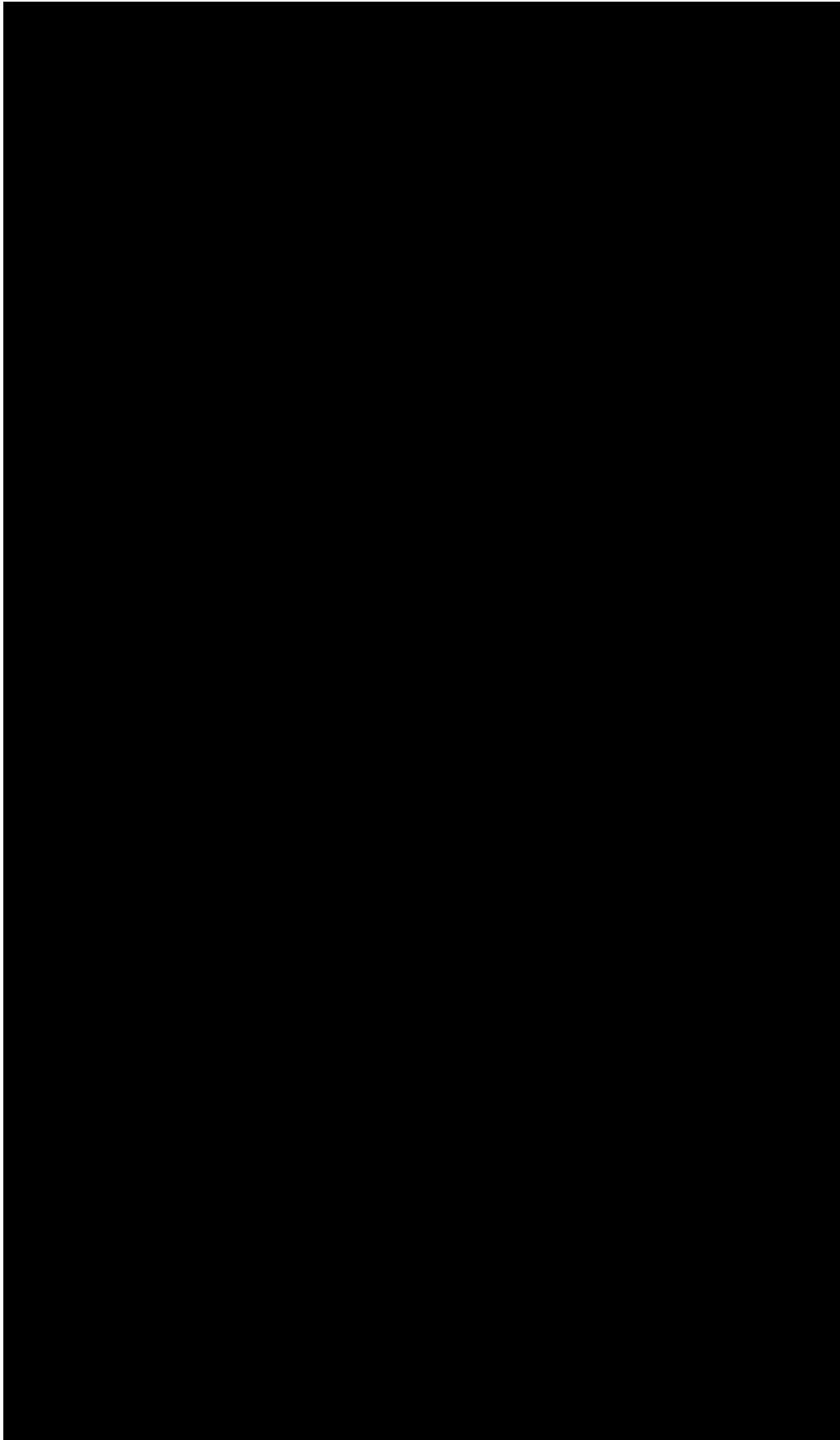


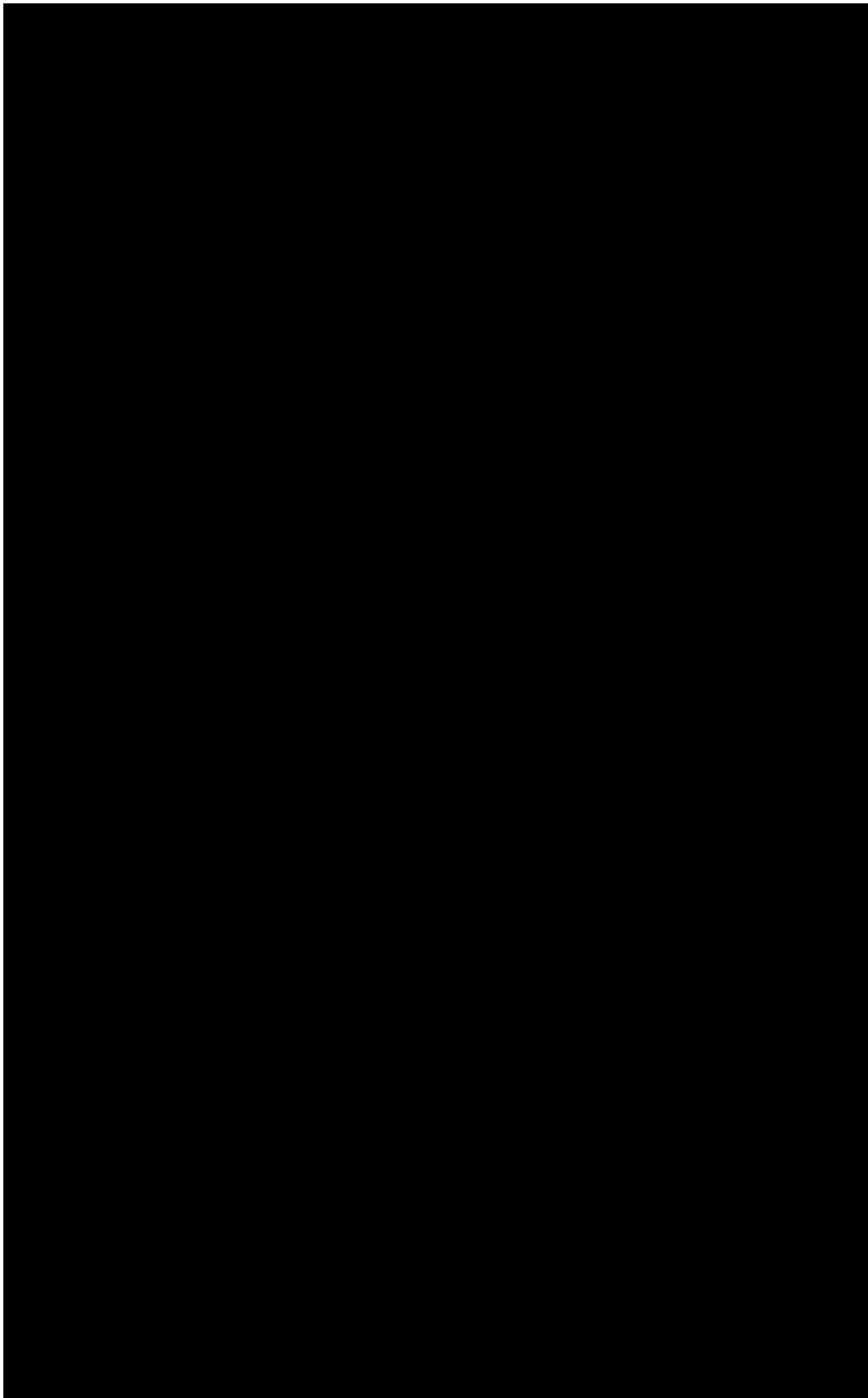


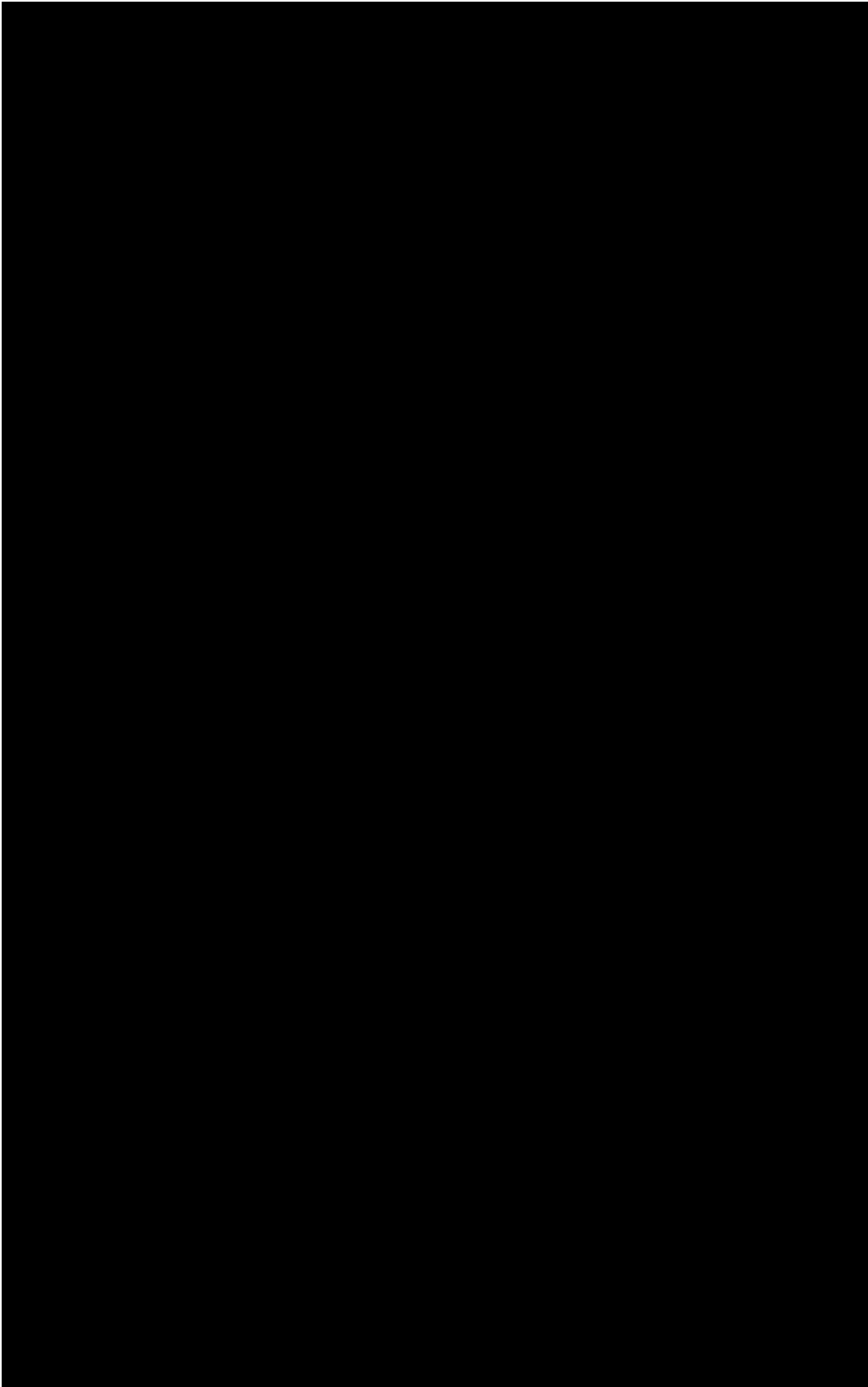


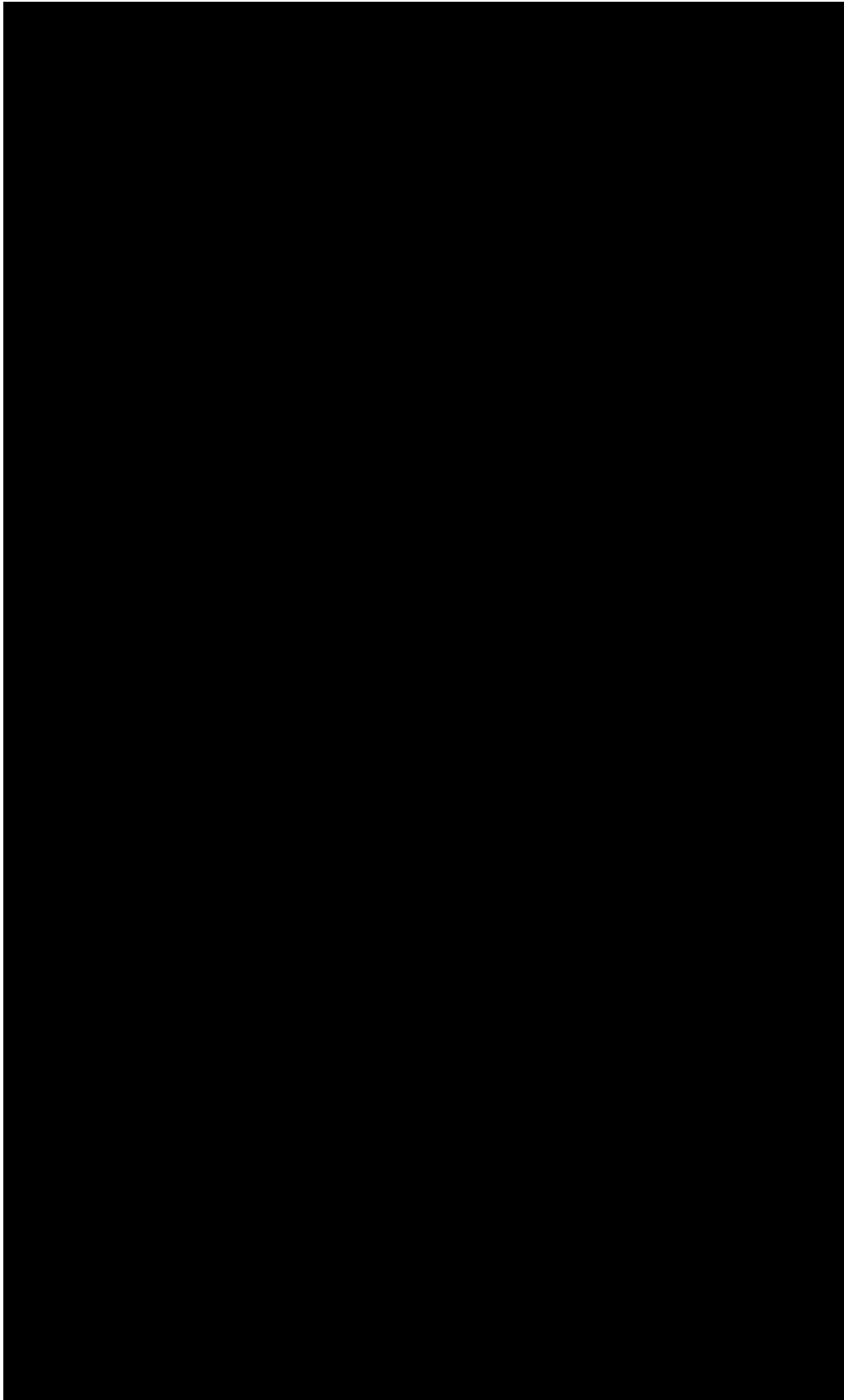


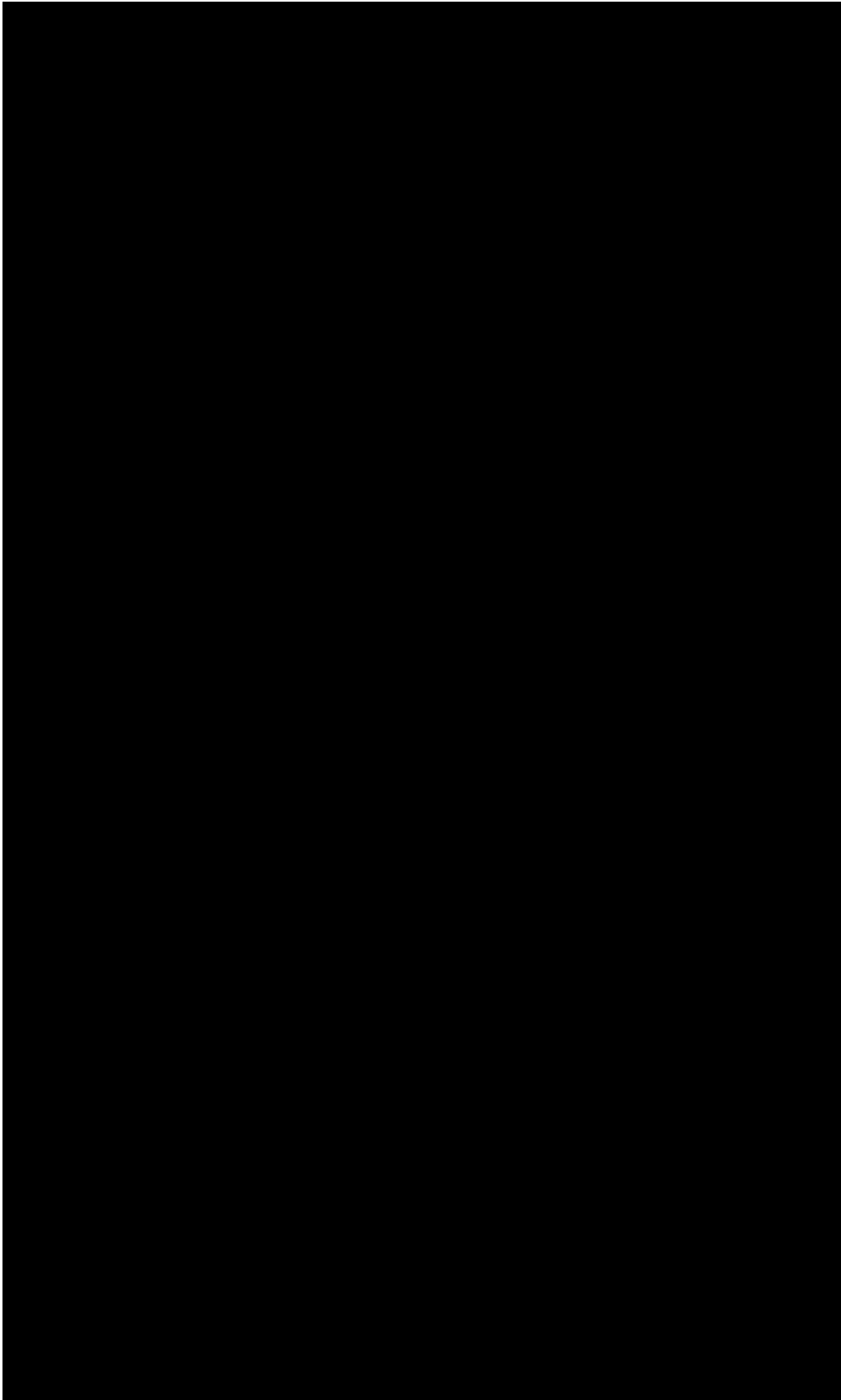


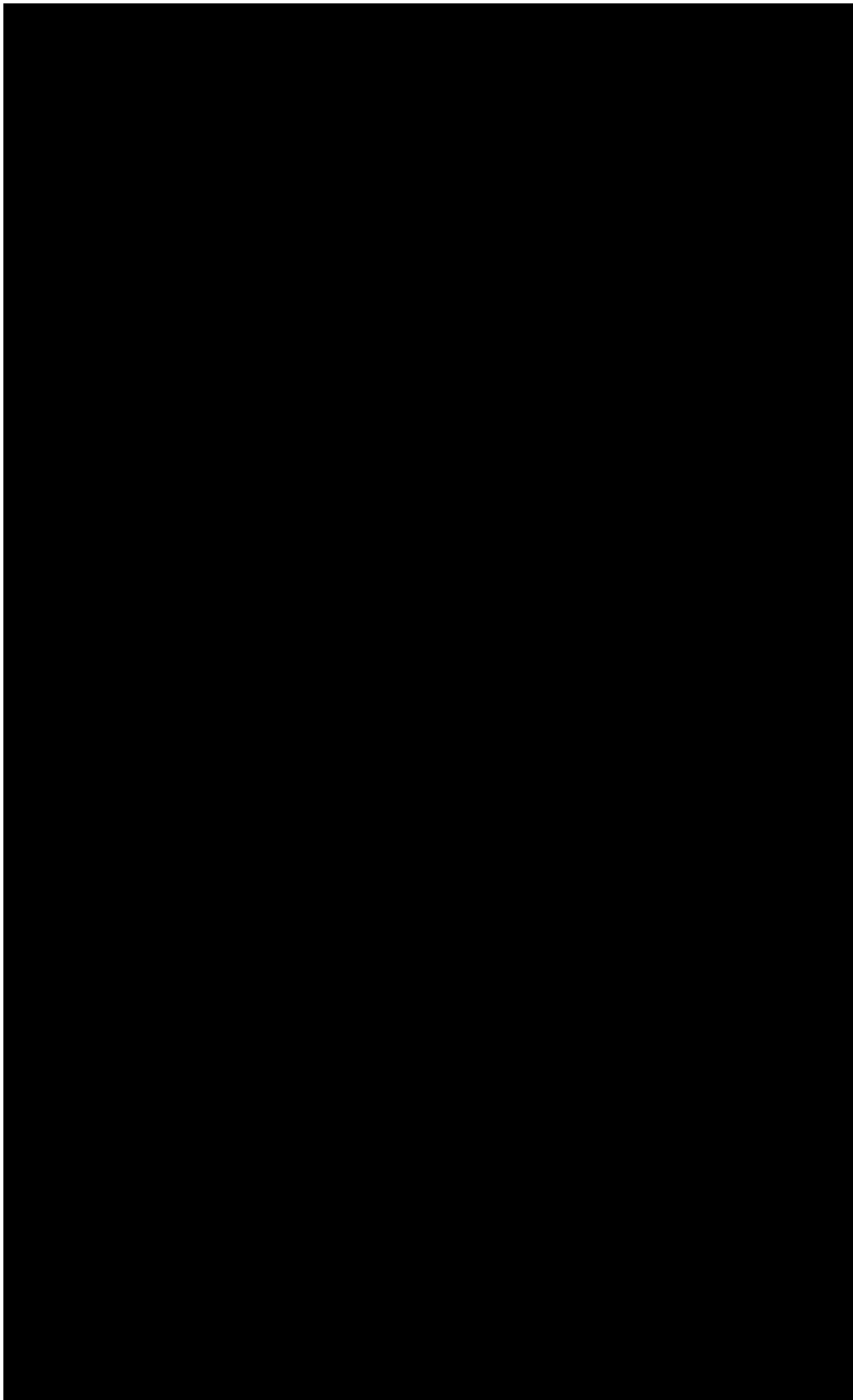


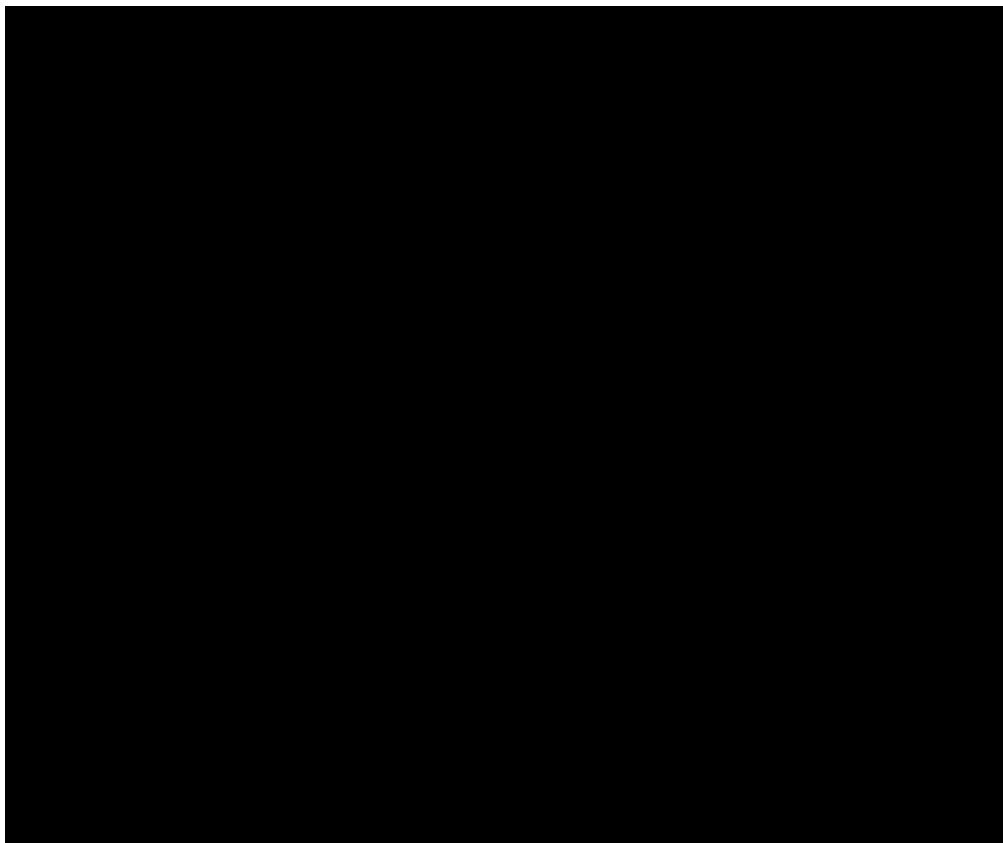












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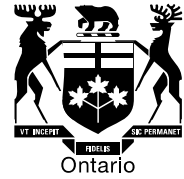
Appendix 5

OEB Letter from the Chair

Regulatory Framework for Approval of Investment in Infrastructure by Electricity Transmitters and Distributors

Ontario Energy Board
P.O. Box 2319
27th Floor
2300 Yonge Street
Toronto ON M4P 1E4
Telephone: 416- 481-1967
Facsimile: 416- 440-7656
Toll free: 1-888-632-6273

Commission de l'énergie de l'Ontario
C.P. 2319
27e étage
2300, rue Yonge
Toronto ON M4P 1E4
Téléphone: 416- 481-1967
Télécopieur: 416- 440-7656
Numéro sans frais: 1-888-632-6273



BY EMAIL AND WEB POSTING

STATEMENT FROM THE CHAIR

April 3, 2009

To: All Licensed Electricity Distributors
All Licensed Transmitters
All Other Interested Parties

Re: Regulatory Framework for Approval of Investment in Infrastructure by Electricity Transmitters and Distributors

Ontario's electricity utilities are presently investing substantial amounts of capital to replace aging infrastructure, deploy smart meters, connect new load, and maintain system operability and reliability. In 2008, total capital expenditures by electricity transmission and distribution utilities totaled some \$2.2 billion and expenditures in 2009 are expected to total \$2.6 billion. If passed, Bill 150, the *Green Energy and Green Economy Act, 2009*, will further increase utility infrastructure investment. Ontario's electricity utilities will be charged with planning for and connecting renewable distributed electricity generation. They will also be given responsibility to implement the smart grid and to take a lead role creating a conservation culture through the implementation of conservation and demand management programs.

The magnitude of current and future utility infrastructure investment has led me to consider how the Board could create conditions which would foster timely investment by utilities in required infrastructure.

In particular, I am of the opinion that electricity utilities may need greater regulatory certainty prior to making significant capital investments. This would require consideration of whether modifications to the Board's approach to cost recovery for capital investment could better facilitate utility infrastructure investments. Accordingly, I wish to advise that the Board intends to examine whether alternatives to the current approach to cost recovery from ratepayers for capital investment are required.

A number of other energy regulators are considering their approach to cost recovery for capital investment, with a view to better facilitating such investment. Examples of some of the tools that other regulators are using or proposing to use include:

- the ability to recover construction costs while construction is in progress;
- the ability to recover certain project costs as they are incurred or based on the achievement of certain milestones;
- the ability of a utility to apply to the regulator outside of the normal rate application cycle for a rate increase as a result of a single capital project; or
- the imposition of rate riders or surcharges to allow for the recovery of certain specific cost increases without the need for a general rate case.

I should emphasize that these regulatory approaches should not be considered as discreet tools; rather, they should be considered and assessed as possible elements of an integrated cost recovery approach for infrastructure costs, one that would move beyond the traditional practice with which we are familiar.

In considering these issues, I remain committed to the Board's objectives as set out in the Ontario Energy Board Act, including the requirement to set just and reasonable rates and to balance the interests of ratepayers and utilities. At the same time, I must consider the new objectives in Bill 150 which, if passed, will require significant investment in new infrastructure. In my view this is an opportune time for the Board to ensure that the proper cost recovery approach is in place to encourage needed investment while protecting the interests of ratepayers.

The Board will initiate its consideration of these issues shortly. Please expect future communications from the Board accordingly.

Yours truly,

Original signed by

Howard Wetston, Q.C.
Chair

Appendix 7

Financial Impact Data

Appendix 7 Contents

- 1 Oakville MTS Project Budget
- 2 Present Value of Shareholder Return
- 3 Present Value of Avoided Transmission Charges
- 4 Distribution Rates – Bill Impacts

Approximate Present Value of Shareholder Return

Assumptions:	WACC	7.2%
	Depreciation	2.5%
	Discount Rate	6.0%

Single Station - Oakville Alone						
Year	Gross Asset Value	Accum Depreciation	NBV	Capitol Revenue Req't	OMA	Total Recovered
2008						
2009						
2010						
2011				\$ (20,493,000.00)		\$ (20,493,000.00)
2012	20,493,000.00	512,325.00	19,980,675.00	\$ 1,438,608.60	\$ 512,325.00	\$ 1,950,933.60
2013	20,493,000.00	1,024,650.00	19,468,350.00	\$ 1,401,721.20	\$ 512,325.00	\$ 1,914,046.20
2014	20,493,000.00	1,536,975.00	18,956,025.00	\$ 1,364,833.80	\$ 512,325.00	\$ 1,877,158.80
2015	20,493,000.00	2,049,300.00	18,443,700.00	\$ 1,327,946.40	\$ 512,325.00	\$ 1,840,271.40
2016	20,493,000.00	2,561,625.00	17,931,375.00	\$ 1,291,059.00	\$ 512,325.00	\$ 1,803,384.00
2017	20,493,000.00	3,073,950.00	17,419,050.00	\$ 1,254,171.60	\$ 512,325.00	\$ 1,766,496.60
2018	20,493,000.00	3,586,275.00	16,906,725.00	\$ 1,217,284.20	\$ 512,325.00	\$ 1,729,609.20
2019	20,493,000.00	4,098,600.00	16,394,400.00	\$ 1,180,396.80	\$ 512,325.00	\$ 1,692,721.80
2020	20,493,000.00	4,610,925.00	15,882,075.00	\$ 1,143,509.40	\$ 512,325.00	\$ 1,655,834.40
2021	20,493,000.00	5,123,250.00	15,369,750.00	\$ 1,106,622.00	\$ 512,325.00	\$ 1,618,947.00
2022	20,493,000.00	5,635,575.00	14,857,425.00	\$ 1,069,734.60	\$ 512,325.00	\$ 1,582,059.60
2023	20,493,000.00	6,147,900.00	14,345,100.00	\$ 1,032,847.20	\$ 512,325.00	\$ 1,545,172.20
2024	20,493,000.00	6,660,225.00	13,832,775.00	\$ 995,959.80	\$ 512,325.00	\$ 1,508,284.80
2025	20,493,000.00	7,172,550.00	13,320,450.00	\$ 959,072.40	\$ 512,325.00	\$ 1,471,397.40
2026	20,493,000.00	7,684,875.00	12,808,125.00	\$ 922,185.00	\$ 512,325.00	\$ 1,434,510.00
2027	20,493,000.00	8,197,200.00	12,295,800.00	\$ 885,297.60	\$ 512,325.00	\$ 1,397,622.60
2028	20,493,000.00	8,709,525.00	11,783,475.00	\$ 848,410.20	\$ 512,325.00	\$ 1,360,735.20
2029	20,493,000.00	9,221,850.00	11,271,150.00	\$ 811,522.80	\$ 512,325.00	\$ 1,323,847.80
2030	20,493,000.00	9,734,175.00	10,758,825.00	\$ 774,635.40	\$ 512,325.00	\$ 1,286,960.40
2031	20,493,000.00	10,246,500.00	10,246,500.00	\$ 737,748.00	\$ 512,325.00	\$ 1,250,073.00
2032	20,493,000.00	10,758,825.00	9,734,175.00	\$ 700,860.60	\$ 512,325.00	\$ 1,213,185.60
2033	20,493,000.00	11,271,150.00	9,221,850.00	\$ 663,973.20	\$ 512,325.00	\$ 1,176,298.20
2034	20,493,000.00	11,783,475.00	8,709,525.00	\$ 627,085.80	\$ 512,325.00	\$ 1,139,410.80
2035	20,493,000.00	12,295,800.00	8,197,200.00	\$ 590,198.40	\$ 512,325.00	\$ 1,102,523.40
2036	20,493,000.00	12,808,125.00	7,684,875.00	\$ 553,311.00	\$ 512,325.00	\$ 1,065,636.00
2037	20,493,000.00	13,320,450.00	7,172,550.00	\$ 516,423.60	\$ 512,325.00	\$ 1,028,748.60
2038	20,493,000.00	13,832,775.00	6,660,225.00	\$ 479,536.20	\$ 512,325.00	\$ 991,861.20
2039	20,493,000.00	14,345,100.00	6,147,900.00	\$ 442,648.80	\$ 512,325.00	\$ 954,973.80
2040	20,493,000.00	14,857,425.00	5,635,575.00	\$ 405,761.40	\$ 512,325.00	\$ 918,086.40
2041	20,493,000.00	15,369,750.00	5,123,250.00	\$ 368,874.00	\$ 512,325.00	\$ 881,199.00
2042	20,493,000.00	15,882,075.00	4,610,925.00	\$ 331,986.60	\$ 512,325.00	\$ 844,311.60
2043	20,493,000.00	16,394,400.00	4,098,600.00	\$ 295,099.20	\$ 512,325.00	\$ 807,424.20
2044	20,493,000.00	16,906,725.00	3,586,275.00	\$ 258,211.80	\$ 512,325.00	\$ 770,536.80
2045	20,493,000.00	17,419,050.00	3,073,950.00	\$ 221,324.40	\$ 512,325.00	\$ 733,649.40
2046	20,493,000.00	17,931,375.00	2,561,625.00	\$ 184,437.00	\$ 512,325.00	\$ 696,762.00
2047	20,493,000.00	18,443,700.00	2,049,300.00	\$ 147,549.60	\$ 512,325.00	\$ 659,874.60
2048	20,493,000.00	18,956,025.00	1,536,975.00	\$ 110,662.20	\$ 512,325.00	\$ 622,987.20
2049	20,493,000.00	19,468,350.00	1,024,650.00	\$ 73,774.80	\$ 512,325.00	\$ 586,099.80
2050	20,493,000.00	19,980,675.00	512,325.00	\$ 36,887.40	\$ 512,325.00	\$ 549,212.40
2051	20,493,000.00	20,493,000.00	-	\$ -	\$ 512,325.00	\$ 512,325.00
Gross Shareholder Return				\$ 8,279,172.00		\$ 28,772,172.00
NPV of Shareholder Return				(\$5,383,709.08)		\$1,888,549.45

Single Station - With Milton				shareholder		
Year	Gross Asset Value	Accum Depreciation	NBV	Return	OMA	Total Recovered
2008						
2009						
2010						
2011				\$ (10,246,500.00)		\$ (10,246,500.00)
2012	10,246,500.00	256,162.50	9,990,337.50	\$ 719,304.30	\$ 256,162.50	\$ 975,466.80
2013	10,246,500.00	512,325.00	9,734,175.00	\$ 700,860.60	\$ 256,162.50	\$ 957,023.10
2014	10,246,500.00	768,487.50	9,478,012.50	\$ 682,416.90	\$ 256,162.50	\$ 938,579.40
2015	10,246,500.00	1,024,650.00	9,221,850.00	\$ 663,973.20	\$ 256,162.50	\$ 920,135.70
2016	10,246,500.00	1,280,812.50	8,965,687.50	\$ 645,529.50	\$ 256,162.50	\$ 901,692.00
2017	10,246,500.00	1,536,975.00	8,709,525.00	\$ 627,085.80	\$ 256,162.50	\$ 883,248.30
2018	10,246,500.00	1,793,137.50	8,453,362.50	\$ 608,642.10	\$ 256,162.50	\$ 864,804.60
2019	10,246,500.00	2,049,300.00	8,197,200.00	\$ 590,198.40	\$ 256,162.50	\$ 846,360.90
2020	10,246,500.00	2,305,462.50	7,941,037.50	\$ 571,754.70	\$ 256,162.50	\$ 827,917.20
2021	10,246,500.00	2,561,625.00	7,684,875.00	\$ 553,311.00	\$ 256,162.50	\$ 809,473.50
2022	10,246,500.00	2,817,787.50	7,428,712.50	\$ 534,867.30	\$ 256,162.50	\$ 791,029.80
2023	10,246,500.00	3,073,950.00	7,172,550.00	\$ 516,423.60	\$ 256,162.50	\$ 772,586.10
2024	10,246,500.00	3,330,112.50	6,916,387.50	\$ 497,979.90	\$ 256,162.50	\$ 754,142.40
2025	10,246,500.00	3,586,275.00	6,660,225.00	\$ 479,536.20	\$ 256,162.50	\$ 735,698.70
2026	10,246,500.00	3,842,437.50	6,404,062.50	\$ 461,092.50	\$ 256,162.50	\$ 717,255.00
2027	10,246,500.00	4,098,600.00	6,147,900.00	\$ 442,648.80	\$ 256,162.50	\$ 698,811.30
2028	10,246,500.00	4,354,762.50	5,891,737.50	\$ 424,205.10	\$ 256,162.50	\$ 680,367.60
2029	10,246,500.00	4,610,925.00	5,635,575.00	\$ 405,761.40	\$ 256,162.50	\$ 661,923.90
2030	10,246,500.00	4,867,087.50	5,379,412.50	\$ 387,317.70	\$ 256,162.50	\$ 643,480.20
2031	10,246,500.00	5,123,250.00	5,123,250.00	\$ 368,874.00	\$ 256,162.50	\$ 625,036.50
2032	10,246,500.00	5,379,412.50	4,867,087.50	\$ 350,430.30	\$ 256,162.50	\$ 606,592.80
2033	10,246,500.00	5,635,575.00	4,610,925.00	\$ 331,986.60	\$ 256,162.50	\$ 588,149.10
2034	10,246,500.00	5,891,737.50	4,354,762.50	\$ 313,542.90	\$ 256,162.50	\$ 569,705.40
2035	10,246,500.00	6,147,900.00	4,098,600.00	\$ 295,099.20	\$ 256,162.50	\$ 551,261.70
2036	10,246,500.00	6,404,062.50	3,842,437.50	\$ 276,655.50	\$ 256,162.50	\$ 532,818.00
2037	10,246,500.00	6,660,225.00	3,586,275.00	\$ 258,211.80	\$ 256,162.50	\$ 514,374.30
2038	10,246,500.00	6,916,387.50	3,330,112.50	\$ 239,768.10	\$ 256,162.50	\$ 495,930.60
2039	10,246,500.00	7,172,550.00	3,073,950.00	\$ 221,324.40	\$ 256,162.50	\$ 477,486.90
2040	10,246,500.00	7,428,712.50	2,817,787.50	\$ 202,880.70	\$ 256,162.50	\$ 459,043.20
2041	10,246,500.00	7,684,875.00	2,561,625.00	\$ 184,437.00	\$ 256,162.50	\$ 440,599.50
2042	10,246,500.00	7,941,037.50	2,305,462.50	\$ 165,993.30	\$ 256,162.50	\$ 422,155.80
2043	10,246,500.00	8,197,200.00	2,049,300.00	\$ 147,549.60	\$ 256,162.50	\$ 403,712.10
2044	10,246,500.00	8,453,362.50	1,793,137.50	\$ 129,105.90	\$ 256,162.50	\$ 385,268.40
2045	10,246,500.00	8,709,525.00	1,536,975.00	\$ 110,662.20	\$ 256,162.50	\$ 366,824.70
2046	10,246,500.00	8,965,687.50	1,280,812.50	\$ 92,218.50	\$ 256,162.50	\$ 348,381.00
2047	10,246,500.00	9,221,850.00	1,024,650.00	\$ 73,774.80	\$ 256,162.50	\$ 329,937.30
2048	10,246,500.00	9,478,012.50	768,487.50	\$ 55,331.10	\$ 256,162.50	\$ 311,493.60
2049	10,246,500.00	9,734,175.00	512,325.00	\$ 36,887.40	\$ 256,162.50	\$ 293,049.90
2050	10,246,500.00	9,990,337.50	256,162.50	\$ 18,443.70	\$ 256,162.50	\$ 274,606.20
2051	10,246,500.00	10,246,500.00	-	\$ -	\$ 256,162.50	\$ 256,162.50
Gross Shareholder Return				\$ 4,139,586.00		\$ 14,386,086.00
NPV of Shareholder Return				(\$2,691,854.54)		\$944,274.73

Costello Associates

Confidential

December 18 2008

Approximate Present Value of Avoided Transformation Charges

Assumptions: Discount Rate 6%
Transformation Tariff 1.65
Rate escalation 0%
Peak Load Index 80%

Single Station		MTS #1	TX Rate	Avoided Transformation Charges
Year	Oakville Load	Load		
2008	348.8	0.0		
2009	352.2	0.0		
2010	355.6	0.0		
2011	363.4	0.0		
2012	371.2	0.0		
2013	380.8	6.8	1.65	107,775
2014	397.3	23.3	1.65	368,819
2015	407.3	33.3	1.65	527,377
2016	418.1	44.1	1.65	698,481
2017	428.9	54.9	1.65	869,584
2018	439.7	65.7	1.65	1,040,688
2019	450.5	76.5	1.65	1,211,792
2020	461.3	87.3	1.65	1,382,895
2021	465.2	91.2	1.65	1,445,337
2022	469.2	95.2	1.65	1,507,778
2023	473.1	99.1	1.65	1,570,219
2024	477.1	103.1	1.65	1,632,660
2025	481.0	107.0	1.65	1,695,102
2026	485.0	111.0	1.65	1,757,543
2027	488.9	114.9	1.65	1,819,984
2028	492.8	118.8	1.65	1,882,426
2029	496.8	122.8	1.65	1,944,867
2030	500.7	126.7	1.65	2,007,308
2031	504.7	130.7	1.65	2,070,417
2032	508.7	134.7	1.65	2,134,202
2033	509.1	135.1	1.65	2,140,559
2034	509.5	135.5	1.65	2,146,923
2035	509.9	135.9	1.65	2,153,292
2036	510.3	136.3	1.65	2,159,668
2037	510.7	136.7	1.65	2,166,051
NPV of Avoided Transformation Charges				\$16,493,984.95
in 2013				

Two Stations		Milton Load	MTS #1	TX Rate	Avoided Transformation Charges	MTS #2	Avoided Transformation Charges
Oakville Load	Load					Load	
348.8	28.3	0.0					
352.2	32.2	0.0					
355.6	36.7	0.0					
363.4	42.8	0.0					
371.2	49.5	0.0					
380.8	55.9	11.7			1.65	185,391.36	0
397.3	61.7	34.0			1.65	538,306.56	0
407.3	67.8	50.1			1.65	793,488.96	0
418.1	73.6	66.7			1.65	1,056,464.64	0
428.9	79.6	83.5			1.65	1,322,608.32	0
439.7	85.4	100.1			1.65	1,585,584.00	0
450.5	91.5	117.0			1.65	1,853,311.68	0
461.3	97.3	133.6			1.65	2,116,287.36	0
465.2	103.6	143.8			1.65	2,278,520.64	0
469.2	112.3	153.0			1.65	2,423,520.00	3.5
473.1	121	153.0			1.65	2,423,520.00	16.1
477.1	129.7	153.0			1.65	2,423,520.00	28.8
481.0	138.4	153.0			1.65	2,423,520.00	41.4
485.0	147.1	153.0			1.65	2,423,520.00	54.1
488.9	155.8	153.0			1.65	2,423,520.00	66.7
492.8	164.5	153.0			1.65	2,423,520.00	79.3
496.8	173.2	153.0			1.65	2,423,520.00	92.0
500.7	181.9	153.0			1.65	2,423,520.00	104.6
504.7	190.6	153.0			1.65	2,423,520.00	117.3
508.7	191.95	153.0			1.65	2,423,520.00	122.7
509.1	193.3	153.0			1.65	2,423,520.00	124.4
509.5	194.65	153.0			1.65	2,423,520.00	126.2
509.9	196	153.0			1.65	2,423,520.00	127.9
510.3	197.35	153.0			1.65	2,423,520.00	129.7
510.7	198.705	153.0			1.65	2,423,520.00	131.5
NPV of Avoided Transformation Charges					\$22,668,817.95		\$7,013,089.10
in 2013							

Costello Associates

Confidential

December 18 2008

Approximate Present Value of Avoided Transformation Charges

Assumptions: Discount Rate 6%
Transformation Tariff 1.65
Rate escalation 2%
Peak Load Index 80%

Single Station		MTS #1 Load	TX Rate	Avoided Transformation Charges
Year	Oakville Load			
2008	348.8	-25.2		
2009	352.2	-21.8		
2010	355.6	-18.4		
2011	363.4	-10.6		
2012	371.2	-2.8		
2013	380.8	6.8	1.65	107,775
2014	397.3	23.3	1.68	376,195
2015	407.3	33.3	1.72	548,683
2016	418.1	44.1	1.75	741,233
2017	428.9	54.9	1.79	941,266
2018	439.7	65.7	1.82	1,149,004
2019	450.5	76.5	1.86	1,364,674
2020	461.3	87.3	1.90	1,588,512
2021	465.2	91.2	1.93	1,693,442
2022	469.2	95.2	1.97	1,801,934
2023	473.1	99.1	2.01	1,914,088
2024	477.1	103.1	2.05	2,030,008
2025	481.0	107.0	2.09	2,149,799
2026	485.0	111.0	2.13	2,273,569
2027	488.9	114.9	2.18	2,401,431
2028	492.8	118.8	2.22	2,533,497
2029	496.8	122.8	2.27	2,669,885
2030	500.7	126.7	2.31	2,810,716
2031	504.7	130.7	2.36	2,957,066
2032	508.7	134.7	2.40	3,109,130
2033	509.1	135.1	2.45	3,180,758
2034	509.5	135.5	2.50	3,254,018
2035	509.9	135.9	2.55	3,328,946
2036	510.3	136.3	2.60	3,405,579
2037	510.7	136.7	2.65	3,483,956
NPV of Avoided Transformation Charges in 2013				\$21,226,482.35

Two Stations		Milton Load	MTS #1 Load	TX Rate	Avoided Transformation Charges	MTS #2 Load	Avoided Transformation Charges
Oakville Load							
348.8	28.3	0.0					
352.2	32.2	0.0					
355.6	36.7	0.0					
363.4	42.8	0.0					
371.2	49.5	0.0					
380.8	55.9	11.7			1.65	185,391.36	0
397.3	61.7	34.0			1.68	549,072.69	0
407.3	67.8	50.1			1.72	825,545.91	0
418.1	73.6	66.7			1.75	1,121,128.73	0
428.9	79.6	83.5			1.79	1,431,633.78	0
439.7	85.4	100.1			1.82	1,750,612.86	0
450.5	91.5	117.0			1.86	2,087,129.97	0
461.3	97.3	133.6			1.90	2,430,948.96	0
465.2	103.6	143.8			1.93	2,669,650.08	0
469.2	112.3	153.0			1.97	2,896,330.74	3.5
473.1	121	153.0			2.01	2,954,257.36	16.1
477.1	129.7	153.0			2.05	3,013,342.50	28.8
481.0	138.4	153.0			2.09	3,073,609.35	41.4
485.0	147.1	153.0			2.13	3,135,081.54	54.1
488.9	155.8	153.0			2.18	3,197,783.17	66.7
492.8	164.5	153.0			2.22	3,261,738.84	79.3
496.8	173.2	153.0			2.27	3,326,973.61	92.0
500.7	181.9	153.0			2.31	3,393,513.08	104.6
504.7	190.6	153.0			2.36	3,461,383.35	117.3
508.7	191.95	153.0			2.40	3,530,611.01	122.7
509.1	193.3	153.0			2.45	3,601,223.23	124.4
509.5	194.65	153.0			2.50	3,673,247.70	126.2
509.9	196	153.0			2.55	3,746,712.65	127.9
510.3	197.35	153.0			2.60	3,821,646.90	129.7
510.7	198.705	153.0			2.65	3,898,079.84	131.5
NPV of Avoided Transformation Charges in 2013					\$28,740,134.01		\$10,028,576.72

RESIDENTIAL

Consumption	1,000	kWh
RPP Tier One	600	kWh

Loss Factor **1.0525**

With Milton- Option 2- TS impact (lines excluded)

4.40%

	<u>2009 Rates</u>			<u>Increased Rates</u>			Bill Impact \$	Bill Impact %
	Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$		
Energy First Tier (kWh)	600	0.0560	33.60	600	0.0560	33.60	0.00	0.00%
Energy Second Tier (kWh)	400	0.0650	26.00	400	0.0650	26.00	0.00	0.00%
Sub-Total: Energy			59.60			59.60	0.00	0.00%
Service Charge	1	14.75	14.75	1	15.40	15.40	0.65	
Distribution Volumetric Rate	1,000	0.0150	15.00	1,000	0.0157	15.66	0.66	4.40%
Total: Distribution			29.75			31.06	1.31	4.40%
Retail Transmission Rate – Network Service Rate	1,053	0.0053	5.58	1,053	0.0053	5.58	0.00	0.00%
Retail Transmission Rate – Line and Transformation Connection Service	1,053	0.0051	5.37	1,053	0.0051	5.37	0.00	0.00%
Total: Retail Transmission			10.95			10.95	0.00	0.00%
Sub-Total: Delivery (Distribution and Retail Transmission)			40.70			42.01	1.31	3.22%
Wholesale Market Service Rate	1,053	0.0052	5.47	1,053	0.0052	5.47	0.00	0.00%
Rural Rate Protection Charge	1,053	0.0013	1.37	1,053	0.0013	1.37	0.00	0.00%
Standard Supply Service – Administration Charge (if applicable)	1	0.25	0.25	1	0.25	0.25	0.00	0.00%
Sub-Total: Regulatory			7.09			7.09	0.00	0.00%
Debt Retirement Charge (DRC)	1,000	0.00700	7.00	1,000	0.00700	7.00	0.00	0.00%
Total Bill before Taxes			114.39			115.70	1.31	1.15%
GST	0.00	5%	0.00	0.01	5%	0.00	0.00	0.00%
			114.39			115.70	1.31	1.15%

RESIDENTIAL

Consumption	1,000	kWh
RPP Tier One	600	kWh

Loss Factor **1.0525**

With Milton -Option 2- TS+Lines

5.64%

	2009 Rates			Increased Rates				Bill Impact \$	Bill Impact %
	Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$			
Energy First Tier (kWh)	600	0.0560	33.60	600	0.0560	33.60		0.00	0.00%
Energy Second Tier (kWh)	400	0.0650	26.00	400	0.0650	26.00		0.00	0.00%
Sub-Total: Energy			59.60			59.60		0.00	0.00%
Service Charge	1	14.75	14.75	1	15.58	15.58		0.83	5.63%
Distribution Volumetric Rate	1,000	0.0150	15.00	1,000	0.0158	15.85		0.85	5.67%
Total: Distribution			29.75			31.43		1.68	5.65%
Retail Transmission Rate – Network Service Rate	1,053	0.0053	5.58	1,053	0.0053	5.58		0.00	0.00%
Retail Transmission Rate – Line and Transformation Connection Serv	1,053	0.0051	5.37	1,053	0.0051	5.37		0.00	0.00%
Total: Retail Transmission			10.95			10.95		0.00	0.00%
Sub-Total: Delivery (Distribution and Retail Transmission)			40.70			42.38		1.68	4.13%
Wholesale Market Service Rate	1,053	0.0052	5.47	1,053	0.0052	5.47		0.00	0.00%
Rural Rate Protection Charge	1,053	0.0013	1.37	1,053	0.0013	1.37		0.00	0.00%
Standard Supply Service – Administration Charge (if applicable)	1	0.25	0.25	1	0.25	0.25		0.00	0.00%
Sub-Total: Regulatory			7.09			7.09		0.00	0.00%
Debt Retirement Charge (DRC)	1,000	0.00700	7.00	1,000	0.00700	7.00		0.00	0.00%
Total Bill before Taxes			114.39			116.07		1.68	1.47%
GST	0.00	5%	0.00	0.01	5%	0.00		0.00	0.00%
			114.39			116.07		1.68	1.47%

Oakville MTS #1
Distribution Rates Bill Impacts

With Milton - Option 2

Oakville only

	2011 & 2012 costs for TS only (Lines excluded)	2011 & 2012 costs TS & Lines	2011 & 2012 costs for TS only (Lines excluded)	2011 & 2012 costs TS & Lines
Capitla Expenditures	\$10,246,500	\$13,154,500	\$20,493,000	\$23,401,000
Gross Fixed Assets	\$10,246,500	\$13,154,500	\$20,493,000	\$23,401,000
Accum Depr	-\$331,163	-\$435,063	-\$637,325	-\$741,225
Net Fixed Assets	\$9,915,338	\$12,719,438	\$19,855,675	\$22,659,775
Average Rate Base	\$9,915,338	\$12,719,438	\$19,855,675	\$22,659,775
COP	\$0	\$0	\$0	\$0
Expenses	\$0	\$0	\$0	\$0
Total Working Capital	\$0	\$0	\$0	\$0
15%	\$0	\$0	\$0	\$0
Rate Base	\$9,915,338	\$12,719,438	\$19,855,675	\$22,659,775
Equity	40.00%	40.00%	40.00%	40.00%
Debt	60.00%	60.00%	60.00%	60.00%
Equity Return	9.00%	9.00%	9.00%	9.00%
Debt Return	6.00%	6.00%	6.00%	6.00%
Rate of Return on Rate Base	7.20%	7.20%	7.20%	7.20%
Equity Return	\$356,952	\$457,900	\$714,804	\$815,752
PILs Tax Rate	33.0%	33.0%	33.0%	33.0%
Revenue Requirement				
Return	\$713,904	\$915,800	\$1,429,609	\$1,631,504
O&M	\$40,000	\$40,000	\$80,000	\$80,000
Depr	\$331,163	\$435,063	\$637,325	\$741,225
PILs	\$175,812	\$225,533	\$352,068	\$401,788
Total	\$1,260,879	\$1,616,395	\$2,499,001	\$2,854,517
Approved 2009 Rev. Req.	\$28,670,876	\$28,670,876	\$28,670,876	\$28,670,876
Distribution Rate Impact	4.40%	5.64%	8.72%	9.96%
Bill Impact - Residential 1000 kWh/month	1.15%	1.47%	2.27%	2.59%

Eligibility for Incremental capital

Approved rate Base	\$108,603,990	\$108,603,990		\$108,603,990	\$108,603,990
Incremental Capital Cost	\$9,915,338	\$12,719,438		\$19,855,675	\$22,659,775
Incremental Capital Cost Threshold	\$11,712,501	\$11,712,501		\$11,712,501	\$11,712,501
Qualifies?	No	Yes		Yes	Yes
The amount to apply for	\$0	\$1,006,937		\$8,143,174	\$10,947,274

Approved rate Base	\$108,603,990	\$108,603,990		\$108,603,990	\$108,603,990
Incremental CC=					
Annual(\$12,000,000)+TS	\$21,915,338	\$24,719,438		\$31,855,675	\$34,659,775
Incremental Capital Cost Threshold	\$11,712,501	\$11,712,501		\$11,712,501	\$11,712,501
Qualifies?	Yes	Yes		Yes	Yes
The amount to apply for	\$10,202,837	\$13,006,937		\$20,143,174	\$22,947,274

IRM - Incremental Capital scenarios

$$\text{Threshold Value} = 1 + \left(\frac{\text{RB}}{d} \right) * (g + \text{PCI} * (1 + g)) + 20\%$$

Where:

RB = rate base included in base rates (\$);
d = depreciation expense included in base rates (\$);
g = distribution revenue change from load growth (%); and
PCI = price cap index (% inflation less productivity factor less stretch factor).



Assumptions

RB	\$108,603,990
d	\$7,502,631
g	1.50%
PCI	0.98%
dead band	20%

2006 EDR depreciation	\$42,586,510
	\$66,482,616.34

Threshold Value **156.11%**

The OEB expects us to manage a CAPEX level of up to
We can recover (rate adders) the difference

2009IRM - PCI given by default

Price Cap Index

Price Escalator (GDP-IPI)	2.10%
Less Productivity Factor	-0.72%
Less Stretch Factor	-0.40%

Price Cap Index

0.98%

The materiality Threshold is **\$11,712,501**

\$11,712,501 before being eligible to recover incremental amount

If Rebased and approved in 2010 for a RB of \$135,000,000

RB	\$135,000,000
d	\$7,502,631
g	1.50%
PCI	0.98%
db dead band	20%

Threshold Value **164.89%**

The OEB expects us to manage a CAPEX level of up to
We can recover (rate adders) the difference

The materiality Threshold is **\$12,371,002**

\$12,371,002 before being eligible to recover incremental amount

RESIDENTIAL

Consumption	1,000	kWh
RPP Tier One	600	kWh

Loss Factor **1.0525**

Oakville only -Option 1- TS (lines excluded)

8.72%

	2009 Rates			Increased Rates			Bill Impact \$	Bill Impact %
	Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$		
Energy First Tier (kWh)	600	0.0560	33.60	600	0.0560	33.60	0.00	0.00%
Energy Second Tier (kWh)	400	0.0650	26.00	400	0.0650	26.00	0.00	0.00%
Sub-Total: Energy			59.60			59.60	0.00	0.00%
Service Charge	1	14.75	14.75	1	16.04	16.04	1.29	8.75%
Distribution Volumetric Rate	1,000	0.0150	15.00	1,000	0.0163	16.31	1.31	8.73%
Total: Distribution			29.75			32.35	2.60	8.74%
Retail Transmission Rate – Network Service Rate	1,053	0.0053	5.58	1,053	0.0053	5.58	0.00	0.00%
Retail Transmission Rate – Line and Transformation Connection Service	1,053	0.0051	5.37	1,053	0.0051	5.37	0.00	0.00%
Total: Retail Transmission			10.95			10.95	0.00	0.00%
Sub-Total: Delivery (Distribution and Retail Transmission)			40.70			43.30	2.60	6.39%
Wholesale Market Service Rate	1,053	0.0052	5.47	1,053	0.0052	5.47	0.00	0.00%
Rural Rate Protection Charge	1,053	0.0013	1.37	1,053	0.0013	1.37	0.00	0.00%
Standard Supply Service – Administration Charge (if applicable)	1	0.25	0.25	1	0.25	0.25	0.00	0.00%
Sub-Total: Regulatory			7.09			7.09	0.00	0.00%
Debt Retirement Charge (DRC)	1,000	0.00700	7.00	1,000	0.00700	7.00	0.00	0.00%
Total Bill before Taxes			114.39			116.99	2.60	2.27%
GST	0.00	5%	0.00	0.02	5%	0.00	0.00	0.00%
			114.39			116.99	2.60	2.27%

RESIDENTIAL

Consumption	1,000	kWh
RPP Tier One	600	kWh

Loss Factor 1.0525

Oakville only -Option 1- TS + Lines

9.96%

	2009 Rates			Increased Rates				Bill Impact \$	Bill Impact %
	Volume	RATE \$	CHARGE \$	Volume	RATE \$	CHARGE \$			
Energy First Tier (kWh)	600	0.0560	33.60	600	0.0560	33.60		0.00	0.00%
Energy Second Tier (kWh)	400	0.0650	26.00	400	0.0650	26.00		0.00	0.00%
Sub-Total: Energy			59.60			59.60		0.00	0.00%
Service Charge	1	14.75	14.75	1	16.22	16.22		1.47	9.97%
Distribution Volumetric Rate	1,000	0.0150	15.00	1,000	0.0165	16.49		1.49	9.93%
Total: Distribution			29.75			32.71		2.96	9.95%
Retail Transmission Rate – Network Service Rate	1,053	0.0053	5.58	1,053	0.0053	5.58		0.00	0.00%
Retail Transmission Rate – Line and Transformation Connection Serv	1,053	0.0051	5.37	1,053	0.0051	5.37		0.00	0.00%
Total: Retail Transmission			10.95			10.95		0.00	0.00%
Sub-Total: Delivery (Distribution and Retail Transmission)			40.70			43.66		2.96	7.27%
Wholesale Market Service Rate	1,053	0.0052	5.47	1,053	0.0052	5.47		0.00	0.00%
Rural Rate Protection Charge	1,053	0.0013	1.37	1,053	0.0013	1.37		0.00	0.00%
Standard Supply Service – Administration Charge (if applicable)	1	0.25	0.25	1	0.25	0.25		0.00	0.00%
Sub-Total: Regulatory			7.09			7.09		0.00	0.00%
Debt Retirement Charge (DRC)	1,000	0.00700	7.00	1,000	0.00700	7.00		0.00	0.00%
Total Bill before Taxes			114.39			117.35		2.96	2.59%
GST	0.00	5%	0.00	0.03	5%	0.00		0.00	0.00%
			114.39			117.35		2.96	2.59%

Oakville Hydro Corporation
Transformer Station Supply Options Study
May 2009

Oakville MTS #1 – Project Budget

170 MVA Station with 12 feeders			
1	Land – Assume 3 acres @ \$600,000/acre	\$1,800,000	\$1,800,000
2	Engineering & Design		
	Preliminary engineering	\$20,000	
	Impact Assessment & Fees	\$80,000	
	Environmental Assessment	\$100,000	
	Soils and grounding	\$40,000	
	Detailed engineering	\$700,000	
	Site supervision	\$100,000	\$1,040,000
3	Major equipment		
	Transformers	\$7,000,000	
	Switchgear	\$2,500,000	
	Protection & Control	\$700,000	
	230 kV switches	\$70,000	
	Grounding reactors	\$60,000	
	DC system	\$60,000	
	Primary Metering	\$200,000	
	Capacitor Banks	\$250,000	
	Feeders	\$480,000	\$10,590,000
4	Civil Construction		
	Mobilization	\$50,000	
	Yard Structures	\$80,000	
	Switchgear Building	\$1,200,000	
	Oil containment	\$150,000	
	Duct banks	\$360,000	
	Concrete foundations	\$20,000	
	Fence and stone	\$50,000	
	Other	\$650,000	\$2,560,000
5	Electrical		
	Grounding	\$50,000	
	230 kV Buswork	\$200,000	
	Station Service	\$200,000	
	Control Cabling	\$240,000	
	Cable Pulling & Termination	\$120,000	
	Commissioning	\$150,000	
	Other	\$300,000	\$1,260,000
	Sub-total		\$17,250,000
	Contingency		\$1,725,000
	Total		\$18,975,000
	PST (8%)		\$1,518,000
	Budget Amount		\$20,493,000

Appendix 8

Engineering Services RFP

Oakville Hydro

Municipal Transformer Station (MTS) #1 Project

Request for Proposals

Professional Engineering Services

May 11, 2009

Prepared by

Costello Associates

Sudbury, ON

TABLE OF CONTENTS

1. INTRODUCTION.....	1
1.1. BACKGROUND	1
1.2. REQUIREMENT FOR PROFESSIONAL ENGINEERING SERVICES.....	1
1.3. PROJECT DESCRIPTION.....	1
1.4. SCHEDULE	1
2. DESCRIPTION OF MAJOR EQUIPMENT	2
2.1. 230KV YARD EQUIPMENT	2
2.2. 230/28-28 KV POWER TRANSFORMERS.....	3
2.3. MEDIUM VOLTAGE SWITCHGEAR	3
2.4. POWER FACTOR CORRECTION.....	3
2.5. INTEGRATED SUBSTATION CONTROL SYSTEM.....	3
2.6. REVENUE METERING	3
2.7. SWITCHGEAR AND CONTROL BUILDING AND SITE DEVELOPMENT	4
2.8. DUCT STRUCTURES & CABLE SYSTEMS.....	4
2.9. D.C. AUXILIARY SYSTEM.....	4
2.10. STATION SERVICE TRANSFORMERS.....	4
3. OVERVIEW OF ENGINEERING SERVICES	4
3.1. MATERIAL SPECIFICATIONS AND CONSTRUCTION PROPOSALS	4
3.2. FACTORY TESTS AND INSPECTION	5
3.3. CONTRACT MANAGEMENT	5
3.4. ON SITE INSPECTION.....	5
3.5. DOCUMENTS	5
3.6. DRAWINGS	5
4. OTHER WORKS IN CONTRACT.....	5
5. COORDINATION AND LIAISON	6
6. REFERENCE DOCUMENTS	6
7. FORM OF PROPOSAL.....	6
8. SCHEDULE	8
8.1. MANDATORY MEETING	8
8.2. RESPONSE TO TECHNICAL QUESTIONS	8
8.3. RESPONSE TO REQUEST FOR PROPOSAL	8

1. INTRODUCTION

1.1. BACKGROUND

Oakville Hydro (hereafter called "the Owner") plans to design, construct, and operate a new 170 MVA municipal transformer station in north Oakville. This facility is planned to be in service no later than spring 2011.

1.2. REQUIREMENT FOR PROFESSIONAL ENGINEERING SERVICES

The intent of this RFP is to solicit proposals from multi-discipline Engineering Consultants (hereafter called "the Consultant") with demonstrated experience in similar work within the Province of Ontario. All work shall be done in accordance with the requirements of the Transmission System Code, the Independent Electricity System Operator (IESO), Hydro One Networks Inc. (HONI), the Electric Safety Authority (ESA), the Ministry of Environment (MOE), and other local regulatory agencies.

The Owner shall have the primary responsibility for project management and general oversight of the project.

Respondents shall provide pricing for all engineering activities on an hourly basis with a specified maximum upset limit. Allowances may be provided for work that could not reasonably be expected. Consultants shall include a 10% contingency allowance in their bid for unforeseen minor work.

1.3. PROJECT DESCRIPTION

The proposed station will be a 230/27.6 kV 170 MVA Bermondsey municipal transformer station, located in north Oakville adjacent to the existing transmission corridor. It is anticipated that the station will be built with two (2) 75/100/125 MVA three-phase 215.5/28-28 kV transformers with a minimum summer ten (10) day LTR of 170 MVA and twelve feeder positions.

1.4. SCHEDULE

The engineering work will be conducted in two phases, as follows:

Phase 1 (to start immediately after award):

- a) Review of the conceptual station design to ensure compatibility with the Oakville Hydro distribution system, meet the technical requirements of the transmitter, and relevant safety standards.
- b) Review the technical requirements of major equipment.
- c) Development of project budget.
- d) Develop specifications and quotation documents for the power transformers and

assist in the evaluation of quotations.

- e) Complete necessary applications with the IESO and Hydro One Networks.
- f) Perform Class Environmental Assessment in accordance with the Class environmental Assessment for Minor Transmission Facilities (Class EA) (1992), approved under the *Environmental Assessment Act*.

Phase 2 (to start following management's final decision to proceed with project):

- a) Perform detailed engineering.
- b) Development of specifications and quotation documents.
- c) Contract Management
- d) On-site inspections
- e) Protection and control relay settings.
- e) Completion of As-built drawings.

Separate pricing shall be provided for Phase 1 and Phase 2 work. In the event that Owner elects not to build the station at the conclusion of the Phase 1 work, the Owner shall have no further obligation for any costs in the Phase 2 portion of the project.

2. D DESCRIPTION OF MAJOR EQUIPMENT

The Consultant shall review the technical requirements for all station equipment and provide detailed specifications. The Owner shall provide substantial input into the technical requirements of this equipment. The following descriptions are preliminary only, and are subject to detailed review and confirmation by the Consultant.

2.1. 230KV YARD EQUIPMENT

The high voltage switchyards shall be air insulated, outdoor type bus work. The successful Consultant will be required to provide complete detailed designs for all 230 kV yard structures, lightning masts, busses, switches, transformer foundations, transformer oil containment, and transformer fire barrier.

Connections to the HONI transmission system 230kV system will be designed and installed under this contract and in accordance with IESO/OEB/HONI requirements. Connection of the transformers to the IESO –controlled grid is to be provided by motorized disconnect.

Geotechnical soil investigation and legal/courtesy site survey shall be arranged and coordinated on behalf of the Owner. A permanent local benchmark shall be established at each site.

2.2. 230/28-28 KV POWER TRANSFORMERS

The station will be built comprising two (2) 75/100/125 MVA, three (3) phase 215.5/28-28 kV transformers with a minimum summer 10-Day LTR of 170 MVA. The transformers will be configured wye grounded on the high voltage (HV) side and zigzag-zigzag grounded on the low voltage (LV) side. The two LV neutrals of each transformer will be grounded via 1.5 ohm neutral reactors. Each neutral reactor will have a continuous current rating of 1000 A and a 15 second current rating of 6000 A.

Voltage control of the LV buses is to be provided via a HV under-load tap changer (ULTC) rated at 215.5 kV with a range of +/-40 kV in sixteen (16) plus and sixteen (16) minus step positions (33 positions in total).

Transformers are to be constructed in accordance with Hydro M-125 standards.

2.3. MEDIUM VOLTAGE SWITCHGEAR

It is anticipated that the station will utilize 36 kV indoor medium voltage gas insulated switchgear (GIS), designed and built to IEC standards, and certified for use in Ontario by either CSA or the Electrical Safety Authority. The switchgear shall be of a double-bus design, with four (4) main breakers, twelve (12) feeder breakers, two (2) station service breakers, two (2) capacitor bank breakers, and one (1) bus tie breaker.

2.4. POWER FACTOR CORRECTION

The Consultant shall evaluate the need for power factor correction equipment, and design and specify any necessary capacitors, reactors, breakers, cables, and enclosures.

2.5. INTEGRATED SUBSTATION CONTROL SYSTEM

An integrated substation control system (ISCS) is required. This system may consist of a station remote terminal unit (RTU), a human machine interface (HMI), protective relays, and intelligent electronic devices (IED's). The Owner is willing to consider modern alternatives, such as the use of 61850 devices to eliminate copper control wiring and reduce costs.

The Consultant will have overall design responsibility of the protection system, including the protection and coordination study and determination of relay settings. It is intended that the Consultant help develop the functional specifications for the ISCS. Responsibility for detailed design of the control elements and SCADA integration shall be included in a separate ISCS Contract.

The protection components shall meet all of the requirements of the IESO and HONI. The Consultant shall be responsible for making all necessary submissions and obtaining approvals from the IESO and HONI.

2.6. REVENUE METERING

All metering shall be compliant with the latest market rules as specified by the IESO. The

Consultant will evaluate the benefits of primary or secondary metering, and make recommendations to the Owner.

2.7. SWITCHGEAR AND CONTROL BUILDING AND SITE DEVELOPMENT

The Consultant shall be responsible for all civil, structural, and mechanical engineering required for site development and the switchgear and control building. This includes the creation and necessary approvals of the site plan, storm water management, landscape architecture, and coordination of underground utilities (water, sewer, gas, electric duct banks).

The Consultant shall also be responsible for the detailed design of the switchgear and control building. It is anticipated that an architecturally designed building will be required to meet local approvals. The building shall be equipped with a full-height basement for feeder cable egress, separate rooms for switchgear and control equipment, office space, two ventilated battery rooms, washroom, overhead door, and floor door.

2.8. DUCT STRUCTURES & CABLE SYSTEMS

Feeder duct bank structures shall be designed under this contract. Structures shall be concrete encased, 100mm PVC Type II duct. Feeders from opposite busses shall not be placed in the same duct structure.

Thermal capacity analysis shall be performed for multiple feeder structures that are not standard configurations addressed by IEEE standards.

2.9. D.C. AUXILIARY SYSTEM

The D.C. auxiliary system shall consist of a single battery system, with a charger/battery system and panel board. The Consultant shall evaluate the benefits of a second battery system for Bermondsey stations.

2.10. STATION SERVICE TRANSFORMERS

A three-phase station service pad-mounted transformer shall be supplied for each main low voltage bus. The transformers may be equipped with a load break switch, interlocked as necessary with the medium voltage switchgear device that supplies it. Low voltage panel boards shall have sufficient short circuit interrupting ratings. A tie-breaker shall be supplied in each low voltage panel board. Tie-breakers shall be key interlocked.

3. OVERVIEW OF ENGINEERING SERVICES

The following is the minimum scope of work in completing design:

3.1. MATERIAL SPECIFICATIONS AND CONSTRUCTION QUOTATIONS

The successful Consultant shall prepare necessary specifications for all equipment and services required.

The successful Consultant shall create, subject to Owner review and approval, up to 10

complete construction bid packages (construction quotations) for the work defined and assist in the evaluation once responses have been received.

3.2. FACTORY TESTS AND INSPECTION

The Consultant shall attend factory testing at the request of the Owner, on a fee for service basis. Hourly rates for various levels of expertise shall be supplied with the Consultant's bid. Bidders shall provide an estimate of the hours required for specific factory testing. The Owner intends to witness testing of critical components.

3.3. CONTRACT MANAGEMENT

It is the intent of the Owner that the Consulting firm should administer the construction contract for the work designed under this RFP. This will require at least the following:

- Review and approval for progress and progress invoicing, subject to final approval and payment by the Owner
- Preparation and publication of Substantial Completion documents
- Preparation of contractor deficiency items and follow-up discussions / meetings
- Reviews of contract extra claims and assessment for payment by Owner.
- Provide ongoing cost management throughout the project, comparing the original budget costs with committed spending. Reports shall be provided at least on a monthly basis.

3.4. ON SITE INSPECTION

The successful Consultant shall monitor performance of the construction work relating to the scope of work on the contract, to assure the Owner that the work is in compliance with the specifications.

3.5. DOCUMENTS

The successful Consultant shall prepare a Class 2 budget (10%) for the work defined within three (3) weeks of award of the Engineering Contract.

3.6. DRAWINGS

The successful Consultant shall provide the Owner with a complete set of design drawings in AutoCAD format. The Consultant shall also provide the Owner with three (3) complete sets of As Built drawings and in AutoCAD format within one month of energization.

4. OTHER WORKS IN CONTRACT

The scope of work includes the following activities:

- Review of conceptual design and project options
- Storm water management design
- Access road and parking design

- Water/sewer connections
- Landscaping
- Design, specification, procurement, and construction of embedded ground grid system and crushed stone
- Specification, procurement, and commissioning of fire and security systems (including fire barrier between transformers where applicable)
- Class environmental assessment
- Protection study to determine all protective relay settings. All settings to be reviewed and approved by the IESO and HONI (Consultant's responsibility).
- Coordination of SCADA telemetry, relay event log, and oscillography settings with Owner and ICS contractor

5. C COORDINATION AND LIAISON

The proposal must include an allowance for signification coordination and liaison activities. This should include:

- Weekly meetings with the Owner in the definitive early stages of design
- Design review meetings at key milestones in drawing or specification preparations
- Coordination meetings as required with the Owner and the approval authorities
- Clarification and amendment to the bid package through the contractor preparation period
- Periodic coordination meetings on site between the Owner, Consultant, and Contractor

6. R REFERENCE DOCUMENTS

Associated with this Request for Proposal are following reference documents:

- OH C1 Single Line Diagram
- OH C2 Map of Area

7. F FORM OF PROPOSAL

The Proposal shall provide the following information:

- Interest in this project
- A concise summary of similar, recent projects
- A list of any firms acting as subcontractors
- Resumes of senior individuals who will actually perform the work
- Detailed schedule for all Phase 1 and 2 engineering activities
- Exceptions and assumptions
- An applicable fee schedule
- A maximum Upset Charge for the work as described, broken down by Phase 1 and Phase 2

work tasks.

- A work hour estimate providing the following functional breakdown (Consultants are encouraged to provide further breakdown)

	Technical Work Hours	Drafting Work Hours	Clerical Work Hours
Creation of Specifications			
Structural and Yard Design			
High Voltage Electrical Equipment			
Medium Voltage Equipment			
ISCS Protection & Control System			
Switchgear and Control Building			
Evaluation of Tenders/Contract Management			
Onsite Inspection			
Other (Specify)			
Total Work Hours			
10% Contingency Allowance			
Total Cost Estimate			

- Unit costs for additional hours of work by:

Electrical		Civil	Structural
Senior Engineer			
Junior Engineer			
Technician			
Draftsperson			
Clerical Support Staff			

- Estimate of Factory Testing Hours

Equipment Hours		Average Rate	Cost
1. Power Transformers			
2. Switchgear			
3. Control Systems			
4. Other			

8. SCHEDULE

8.1. MANDATORY MEETING

No meeting is scheduled at this time; however one may be scheduled if necessary.

8.2. RESPONSE TO TECHNICAL QUESTIONS

Technical questions relevant to the bid preparation should be directed in writing to:

Mr. Jeff Mocha
Oakville Hydro Electricity Distribution Inc.
861 Redwood Square
Oakville, ON L6J 5E3
Telephone: (905) 825-6366
Fax: (519) 825-4449
Email: jmocha@oakvillehydro.com

OR

Mr. Stephen Costello
Costello Associates
158 Pond Hollow Drive
Sudbury, ON P3E 6L2
Telephone/Fax: (705) 522-0501
Email: stephen@costelloassociates.ca

8.3. RESPONSE TO REQUEST FOR PROPOSAL

Proposals must be submitted no later than 12:00 noon, Friday May 29, 2009.

Deliver to:

Mr. Jeff Mocha
Oakville Hydro Electricity Distribution Inc.
861 Redwood Square
Oakville, ON L6J 5E3

Proposals are required to be submitted in plain envelopes, clearly marked:

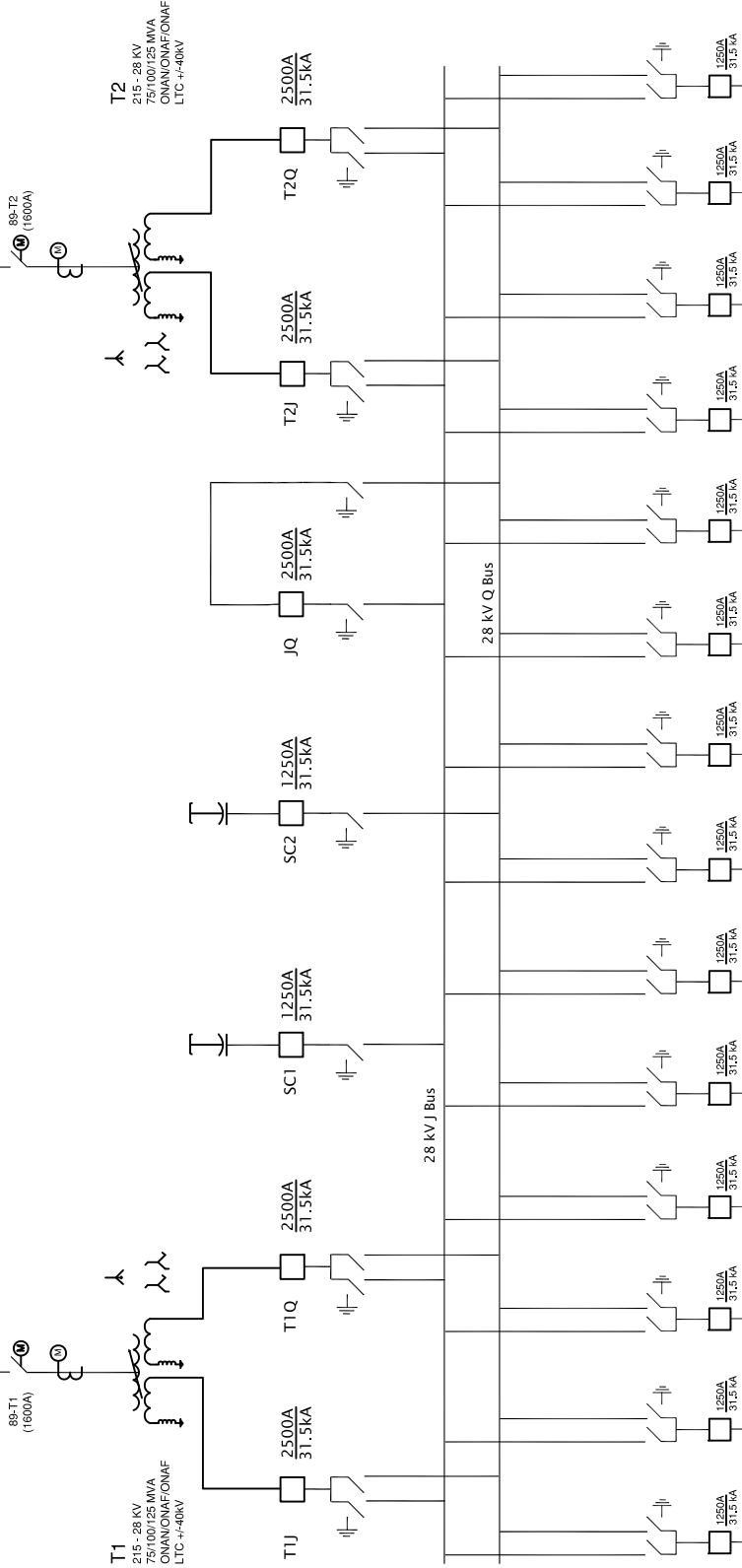
**Oakville Hydro MTS #1 Project
Professional Engineering Services**

All submissions will be confidential. Pricing information will not be released to respondents or the public.

Reference Drawings

230 kV CIRCUIT
XXXX

230 kV CIRCUIT
XXXX



KEY MAP

NOTES

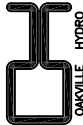
1. Conceptual drawing only, Not for construction.
2. All nomenclature is conceptual only.

NOT FOR CONSTRUCTION

NO DATE REVISION MADE BY

1 4/08/08 Added double bus SC

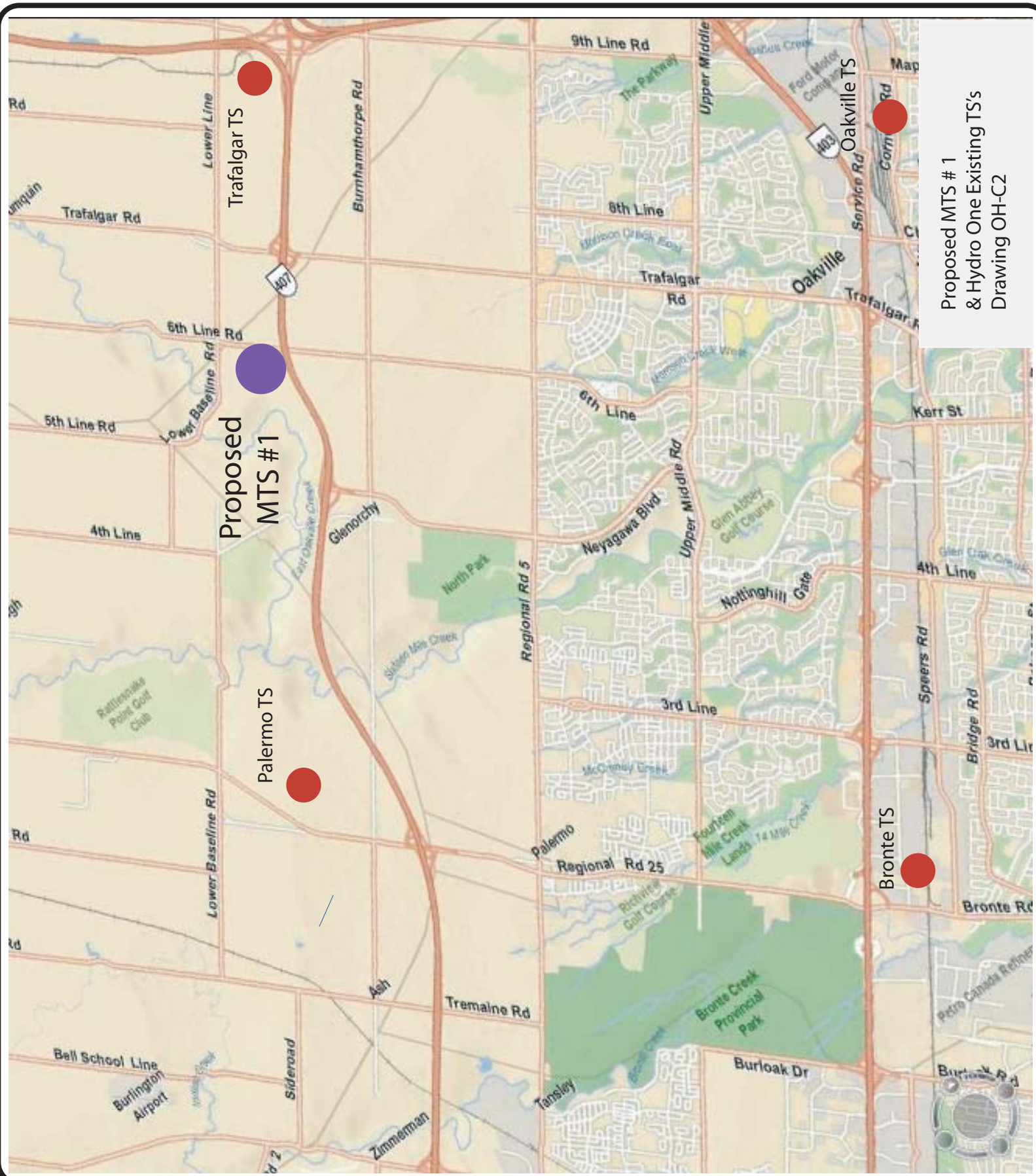
REVISIONS



Oakville Hydro MTS #1 Project
Costella Associates Inc.
230 kV Bernardsville Station
MV-GIS Switchgear
175 MVA LTR Capacity

DESIGNED BY: S. Costello DATE: Aug 11, 2008 REVIEWED BY: NTS

APPROVED BY: OH C1



Proposed MTS # 1
& Hydro One Existing TS's
Drawing OH-C2

Rate Generator and Supplemental Modules



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

LDC Information

Applicant Name	Oakville Hydro Electricity Distribution Inc.
Application Type	IRM3
OEB Application Number	EB-2010-0104
Tariff Effective Date	May 1, 2011
LDC Licence Number	ED-2003-0135
Notice Publication Language	English
DRC Rate	0.00700
Customer Bills	12 per year
Distribution Demand Bill Determinant	kW
Stretch Factor Group	II
Stretch Factor Value	0.4%
Last COS Re-based Year	2010
Last COS OEB Application Number	EB-2009-0271
Special Purpose Charge - Current	Yes
Special Purpose Charge - Applied	Yes
<u>Application Contact Information</u>	
Name:	Maryanne Wilson
Title:	Manager, Regulatory Affairs
Phone Number:	905-825-4422
E-Mail Address:	mwilson@oakvillehydro.com

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Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Table of Contents

Sheet Name	Purpose of Sheet
A1.1 LDC Information	Enter LDC Data
A2.1 Table of Contents	Table of Contents
A3.1 Sheet Selection	Show or Hide Sheet Selection
B1.1 Curr&Appl Rt Class General	Set up Tariff Sheet Rate Classes
C1.1 Smart Meter Funding Adder	Enter Current Tariff Sheet Smart Meter Funding Adder
C2.3 Def Var Disp 2010	Deferral Variance Account Disposition (2010)
C2.4 LRAMSSM Recovery RateRider	Lost Revenue Adjustment Mechanism (LRAM) Recovery/Shared Savings Mechanism (SSM) Recovery Rate Rider
C3.1 Curr Low Voltage Vol Rt	Current Low Voltage Volumetric Rate
C3.2 Global Adjustment Elect	Rate Rider for Global Adjustment Sub-Account Disposition- Electricity Component
C4.1 Curr Rates & Chgs General	Enter Current Tariff Sheet Rates
C7.1 Base Dist Rates Gen	Calculation of Base Distribution Rates
D1.2 Revenue Cost Ratio Adj	Revenue Cost Ratio Adjustment
E1.1 Rate Reb Base Dist Rts Gen	Rate Rebalanced Base Distribution Rates
F1.1 GDP-IPI PCI Adjustment WS	GDP-IPI Price Cap Adjustment Work Sheet
F1.2 GDP-IPI PCI Adjust to Rate	GDP-IPI Price Cap Adjustment To Rates
G1.1 Aft PrcCp Base Dst Rts Gen	Base Distribution Rates after Price Cap Adjustment
J1.1 Smart Meter Funding Adder	Enter Proposed Tariff Sheet Smart Meter Rate Adder
J2.3 Def Var Disp 2010	Deferral Variance Account Disposition (2010)
J2.5 LRAMSSM Recovery RateRider	Lost Revenue Adjustment Mechanism (LRAM) Recovery/Shared Savings Mechanism (SSM) Recovery Rate Rider
J2.7 Tax Change Rate Rider	Tax Change Rate Rider
J2.8 Incr Capital Rate Rider	Incremental Capital Rate Rider
J3.1 App For Low Voltage Vol Rt	Applied for Low Voltage Volumetric Rate
J3.2 Global Adjust Elec 2010	Applied for Rate Rider for Global Adjustment Sub-Account Disposition- Electricity Component 2010
L1.1 Appl For TX Network	Applied For RTSR - Network
L2.1 Appl For TX Connect	Applied For RTSR - Connection
M4.1 microFIT Generator	Applied for microFIT Generator
N1.1 Appl For Mthly R&C General	Monthly Rates and Charges
N3.1 Curr&Appl For Loss Factor	Enter Loss Factors From Current Tariff Sheet
O1.1 Sum of Chgs To MSC&DX Gen	Shows Summary of Changes To General Service Charge and Distribution Volumetric Charge
O1.2 Sum of Tariff Rate Adders	Shows Summary of Changes To Tariff Rate Adders
O1.3 Sum of Tariff Rate Rider	Shows Summary of Changes To Tariff Rate Riders
O2.1 Calculation of Bill Impact	Bill Impact Calculations
P1.1 Curr&Appl For Allowances	Enter Allowances from Current Tariff Sheets
P2.1 Curr&Appl For Spc Srv Chg	Enter Specific Service Charges from Current Tariff Sheets
P3.1 Curr&Appl For Rtl Srv Chg	Enter Retail Service Charges from Current Tariff Sheets



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Show or Hide Sheet Selection

Sheet	Show / Hide	Purpose of Sheet
C2.1 Def Var Disp 2008	Hide	To be used by distributor that had a Rate Rider for Deferral Variance Account Disposition (2008)
C2.2 Def Var Disp 2009	Hide	To be used by distributor that had a Rate Rider for Deferral Variance Account Disposition (2009)
C2.3 Def Var Disp 2010	Show	To be used by distributor that had a Rate Rider for Deferral Variance Account Disposition (2010)
C2.4 LRAMSSM Recovery RateRider	Show	To be used by distributor that had a Rate Rider for LRAM/SSM
C2.5 ForegoneRevenue Rate Rider	Hide	To be used by distributor that had a Rate Rider for Foregone Revenue
C2.6 Tax Change Rate Rider	Hide	To be used by distributor that had a Rate Rider for Shared Tax Savings
C3.1 Curr Low Voltage Vol Rt	Show	To be used by distributor that had a Rate Rider for Low Voltage Volumetric Rate
C3.2 Global Adjustment Elect	Show	To be used by distributor that had a Rate Rider for GA Sub-Acct - Electricity
C3.3 Global Adjustment Del	Hide	To be used by distributor that had a Rate Rider for GA Sub-Acct - Delivery
D1.2 Revenue Cost Ratio Adj	Show	To be used by distributor that has a Revenue Cost Ratio Adjustment
J1.2 Smrt Grid Renew Gen Rt Add	Hide	To be used by distributor that is applying for a Rate Rider for Smart Grid / Renewable Generation Rate Adder
J2.1 Def Var Disp 2008	Hide	To be used by distributor that is applying for a Rate Rider for Deferral Variance Account Disposition (2008)
J2.2 Def Var Disp 2009	Hide	To be used by distributor that is applying for a Rate Rider for Deferral Variance Account Disposition (2009)
J2.3 Def Var Disp 2010	Show	To be used by distributor that is applying for a Rate Rider for Deferral Variance Account Disposition (2010)
J2.4 Def Var Disp 2011	Hide	To be used by distributor that is applying for a Rate Rider for Deferral Variance Account Disposition (2011)
J2.5 LRAMSSM Recovery RateRider	Show	To be used by distributor that is applying for a Rate Rider for LRAM/SSM
J2.6 ForegoneRevenue Rate Rider	Hide	To be used by distributor that is continuing a Rate Rider for Foregone Revenue
J2.7 Tax Change Rate Rider	Show	To be used by distributor that is applying for a Rate Rider for Shared Tax Savings
J2.8 Incr Capital Rate Rider	Show	To be used by distributor that is applying for a Rate Rider for Incremental Capital
J3.1 App For Low Voltage Vol Rt	Show	To be used by distributor that is applying for a Rate Rider for Low Voltage Volumetric Rate
J3.2 Global Adjust Elec 2010	Show	To be used by distributor that is applying for a Rate Rider for GA Sub-Acct - Electricity 2010
J3.21 Global Adjust Elec 2011	Hide	To be used by distributor that is applying for a Rate Rider for GA Sub-Acct - Electricity 2011
J3.3 Global Adjust Del 2010	Hide	To be used by distributor that is applying for a Rate Rider for GA Sub-Acct - Delivery 2010
J3.31 Global Adjust Del 2011	Hide	To be used by distributor that is applying for a Rate Rider for GA Sub-Acct - Delivery 2011



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Current and Applied For Rate Classes

Rate Group	Rate Class	Fixed Metric	Vol Metric
RES	Residential	Customer - 12 per year	kWh
GSLT50	General Service Less Than 50 kW	Customer - 12 per year	kWh
GSGT50	General Service 50 to 999 kW	Customer per 30 days	kW
GSGT50	General Service Greater Than 1,000 kW	Customer - 12 per year	kW
USL	Unmetered Scattered Load	Connection -12 per year	kWh
Sen	Sentinel Lighting	Connection - 12 per year	kW
SL	Street Lighting	Connection - 12 per year	kW
NA	Rate Class 8	NA	NA
NA	Rate Class 9	NA	NA
NA	Rate Class 10	NA	NA
NA	Rate Class 11	NA	NA
NA	Rate Class 12	NA	NA
NA	Rate Class 13	NA	NA
NA	Rate Class 14	NA	NA
NA	Rate Class 15	NA	NA
NA	Rate Class 16	NA	NA
NA	Rate Class 17	NA	NA
NA	Rate Class 18	NA	NA
NA	Rate Class 19	NA	NA
NA	Rate Class 20	NA	NA
NA	Rate Class 21	NA	NA
NA	Rate Class 22	NA	NA
NA	Rate Class 23	NA	NA
NA	Rate Class 24	NA	NA
NA	Rate Class 25	NA	NA

EMB
Embedded Distributor
Low Voltage Wheeling Charge Rate

SB
Stand-By
Standby Pr
Standby Pr
Standby Pr
Standby - (
Standby Pr
Standby - (
Standby Pr
Standby - I
Standby Pr
Standby Di



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Current Smart Meter Funding Adder

Rate Adder	Smart Meters				
Tariff Sheet Disclosure	Yes				
Metric Applied To	Metered Customers				
Method of Application	Uniform Service Charge				
Uniform Service Charge Amount	1.69				
Rate Class	Applied to Class	Fixed Amount	Fixed Metric	Vol Amount	Vol Metric
Residential	Yes	1.690000	Customer - 12 per year	0.000000	kWh
General Service Less Than 50 kW	Yes	1.690000	Customer - 12 per year	0.000000	kWh
General Service 50 to 999 kW	Yes	1.690000	Customer per 30 days	0.000000	kW
General Service Greater Than 1,000 kW	Yes	1.690000	Customer - 12 per year	0.000000	kW



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Deferral Variance Account Disposition (2010)

Rate Rider Def Var Disp 2010
Sunset Date April 30, 2013
Metric Applied To DOMMYYYY
Method of Application All Customers
Distinct Volumetric

Rate Class	Applied to Class	Fixed Amount	Fixed Metric	Vol Amount	Vol Metric
Residential	Yes	0.000000	Customer - 12 per year	-0.001500	kWh
General Service Less Than 50 kW	Yes	0.000000	Customer - 12 per year	-0.001500	kWh
General Service 50 to 999 kW	Yes	0.000000	Customer per 30 days	-0.599700	kW
General Service Greater Than 1,000 kW	Yes	0.000000	Customer - 12 per year	-0.941000	kW
Unmetered Scattered Load	Yes	0.000000	Connection - 12 per year	-0.001500	kWh
Sentinel Lighting	Yes	0.000000	Connection - 12 per year	-0.754900	kW
Street Lighting	Yes	0.000000	Connection - 12 per year	-0.704100	kW



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

**Lost Revenue
Adjustment
Mechanism (LRAM)
Recovery/Shared
Savings Mechanism
(SSM) Recovery Rate
Rider**

Rate Rider	Lost Revenue Adjustment Mechanism (LRAM) Recovery/Shared Savings Mechanism (SSM) Recovery
Sunset Date	DD/MM/YYYY April 30, 2014
Metric Applied To	All Customers
Method of Application	Distinct Volumetric

Rate Class	Applied to Class	Fixed Amount	Fixed Metric	Vol Amount	Vol Metric
Residential	Yes	0.000000	Customer - 12 per year	0.000300	kWh
General Service Less Than 50 kW	No	0.000000	Customer - 12 per year	0.000000	kWh
General Service 50 to 999 kW	Yes	0.000000	Customer per 30 days	0.003300	kW
General Service Greater Than 1,000 kW	Yes	0.000000	Customer - 12 per year	-0.001400	kW
Unmetered Scattered Load	No	0.000000	Connection - 12 per year	0.000000	kWh
Sentinel Lighting	No	0.000000	Connection - 12 per year	0.000000	kW
Street Lighting	No	0.000000	Connection - 12 per year	0.000000	kW



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Current Low Voltage Volumetric Rate

Rate Description	Low Voltage Volumetric Rate
Select Tariff Sheet Disclosure	Yes - Shown on Tariff Sheet
Metric Applied To	All Customers
Method of Application	Distinct Volumetric

Rate Class		Current Low Voltage
Residential	kWh	0.000200
General Service Less Than 50 kW	kWh	0.000200
General Service 50 to 999 kW	kW	0.063800
General Service Greater Than 1,000 kW	kW	0.063800
Unmetered Scattered Load	kWh	0.000200
Sentinel Lighting	kW	0.012400
Street Lighting	kW	0.051600



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Current Rate Rider for Global Adjustment Sub-Account Disposition- Electricity Component

Rate Rider	GA Sub-Acct - Electricity
Sunset Date	April 30, 2013 DDMMYYYY
Metric Applied To	All Customers
Method of Application	Distinct Volumetric

Rate Class	Applied to Class	Fixed Amount	Fixed Metric	Vol Amount	Vol Metric
Residential	Yes	0.000000	Customer - 12 per year	-0.000100	kWh
General Service Less Than 50 kW	Yes	0.000000	Customer - 12 per year	-0.000100	kWh
General Service 50 to 999 kW	Yes	0.000000	Customer per 30 days	-0.000100	kWh
General Service Greater Than 1,000 kW	Yes	0.000000	Customer - 12 per year	-0.000100	kWh
Unmetered Scattered Load	Yes	0.000000	Connection - 12 per year	-0.000100	kWh
Sentinel Lighting	Yes	0.000000	Connection - 12 per year	-0.000100	kWh
Street Lighting	Yes	0.000000	Connection - 12 per year	-0.000100	kWh



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Current Rates and Charges

Rate Class

Residential

Rate Description	Metric	Rate
Service Charge	\$	13.25
Service Charge Smart Meters	\$	1.69
Distribution Volumetric Rate	\$/kWh	0.0145
Low Voltage Volumetric Rate	\$/kWh	0.0002
Distribution Volumetric Def Var Disp 2010 – effective until April 30, 2013	\$/kWh	(0.00150)
Distribution Volumetric Lost Revenue Adjustment Mechanism (LRAM) Recovery/Shared Savings Mechanism (SSM) Recovery – effective until April 30, 2014	\$/kWh	0.00030
Retail Transmission Rate – Network Service Rate	\$/kWh	0.0055
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0046
Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

Rate Class

General Service Less Than 50 kW

Rate Description	Metric	Rate
Service Charge	\$	32.54
Service Charge Smart Meters	\$	1.69
Distribution Volumetric Rate	\$/kWh	0.0143
Low Voltage Volumetric Rate	\$/kWh	0.0002
Distribution Volumetric Def Var Disp 2010 – effective until April 30, 2013	\$/kWh	(0.00150)
Retail Transmission Rate – Network Service Rate	\$/kWh	0.0051
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0042

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

Rate Class

General Service 50 to 999 kW

Rate Description	Metric	Rate
Service Charge	\$	116.64
Service Charge Smart Meters	\$	1.69
Distribution Volumetric Rate	\$/kW	3.6216
	\$/kW	
Low Voltage Volumetric Rate	\$/kW	0.0638
Distribution Volumetric Def Var Disp 2010 – effective until April 30, 2013	\$/kW	(0.59970)
Distribution Volumetric Lost Revenue Adjustment Mechanism (LRAM) Recovery/Shared Savings Mechanism (SSM) Recovery – effective until April 30, 2014	\$/kW	0.00330
Retail Transmission Rate – Network Service Rate	\$/kW	1.9161
Retail Transmission Rate – Network Service Rate – Interval metered (if applicable)	\$/kW	1.9781
	\$/kW	0.0000
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	1.5762
Retail Transmission Rate – Line and Transformation Connection Service Rate – Interval metered (if applicable)	\$/kW	1.6273
	\$/kW	0.0000
Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

Rate Class

General Service Greater Than 1,000 kW

Rate Description	Metric	Rate
Service Charge	\$	3,417.13
Service Charge Smart Meters	\$	1.69
Distribution Volumetric Rate	\$/kW	1.8664
	\$/kW	0.0000
Low Voltage Volumetric Rate	\$/kW	0.0638
Distribution Volumetric Def Var Disp 2010 – effective until April 30, 2013	\$/kW	(0.94100)
Distribution Volumetric Lost Revenue Adjustment Mechanism (LRAM) Recovery/Shared Savings Mechanism (SSM) Recovery – effective until April 30, 2014	\$/kW	(0.00140)
Retail Transmission Rate – Network Service Rate	\$/kW	1.9781
	\$/kW	0.0000
	\$/kW	0.0000
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	1.6273
	\$/kW	0.0000
	\$/kW	0.0000
Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

Rate Class

Unmetered Scattered Load

Rate Description	Metric	Rate
Service Charge (per connection)	\$	11.40
Distribution Volumetric Rate	\$/kWh	0.0106
Low Voltage Volumetric Rate	\$/kWh	0.0002
Distribution Volumetric Def Var Disp 2010 – effective until April 30, 2013	\$/kWh	(0.00150)
Retail Transmission Rate – Network Service Rate	\$/kWh	0.0051
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0042
Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

Rate Class

Sentinel Lighting

Rate Description	Metric	Rate
Service Charge (per connection)	\$	1.48
Distribution Volumetric Rate	\$/kW	25.0161
Low Voltage Volumetric Rate	\$/kW	0.0124
Distribution Volumetric Def Var Disp 2010 – effective until April 30, 2013	\$/kW	(0.75490)
Retail Transmission Rate – Network Service Rate	\$/kW	0.3841
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	0.3159
Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

Rate Class

Street Lighting

Rate Description	Metric	Rate
Service Charge (per connection)	\$	1.70
Distribution Volumetric Rate	\$/kW	10.3987
Low Voltage Volumetric Rate	\$/kW	0.0516
Distribution Volumetric Def Var Disp 2010 – effective until April 30, 2013	\$/kW	(0.70410)
Retail Transmission Rate – Network Service Rate	\$/kW	1.5986
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	1.3150
Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Base Distribution Rates

Service Charge

Class	Metric	Current Rates	Current Base Rates
Residential	Customer - 12 per year	13.250000	13.250000
General Service Less Than 50 kW	Customer - 12 per year	32.540000	32.540000
General Service 50 to 999 kW	Customer per 30 days	116.640000	116.640000
General Service Greater Than 1,000 kW	Customer - 12 per year	3,417.130000	3,417.130000
Unmetered Scattered Load	Connection - 12 per year	11.400000	11.400000
Sentinel Lighting	Connection - 12 per year	1.480000	1.480000
Street Lighting	Connection - 12 per year	1.700000	1.700000

Distribution Volumetric Rate

Class	Metric	Current Rates	Current Base Rates
Residential	kWh	0.014500	0.014500
General Service Less Than 50 kW	kWh	0.014300	0.014300
General Service 50 to 999 kW	kW	3.621600	3.621600
General Service Greater Than 1,000 kW	kW	1.866400	1.866400
Unmetered Scattered Load	kWh	0.010600	0.010600
Sentinel Lighting	kW	25.016100	25.016100
Street Lighting	kW	10.398700	10.398700



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Revenue Cost Ratio Adjustment

Rate Rebalancing Adjustment

Revenue Cost Ratio

Metric Applied To

All Customers

Method of Application

Both Distinct\$

Monthly Service Charge

Class	Metric	Base Rate	\$ Adjustment	Adj To Base
Residential	Customer - 12 per year	13.250000	- 0.193402 -	0.193402
General Service Less Than 50 kW	Customer - 12 per year	32.540000	0.000000	0.000000
General Service 50 to 999 kW	Customer per 30 days	116.640000	0.000000	0.000000
General Service Greater Than 1,000 kW	Customer - 12 per year	3417.130000	- 48.995415 -	48.995415
Unmetered Scattered Load	Connection - 12 per year	11.400000	0.000000	0.000000
Sentinel Lighting	Connection - 12 per year	1.480000	0.668595	0.668595
Street Lighting	Connection - 12 per year	1.700000	0.624791	0.624791

Volumetric Distribution Charge

Class	Metric	Base Rate	\$ Adjustment	Adj To Base
Residential	kWh	0.014500	- 0.000212 -	0.000212
General Service Less Than 50 kW	kWh	0.014300	0.000000	0.000000
General Service 50 to 999 kW	kW	3.621600	0.000000	0.000000
General Service Greater Than 1,000 kW	kW	1.866400	- 0.026761 -	0.026761
Unmetered Scattered Load	kWh	0.010600	0.000000	0.000000
Sentinel Lighting	kW	25.016100	11.301112	11.301112
Street Lighting	kW	10.398700	3.821775	3.821775



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Rate Rebalanced Base Distribution Rates

Monthly Service Charge

Class	Metric	Base Rate	Revenue Cost Ratio	Rate ReBal Base
Residential	Customer - 12 per year	13.250000	-0.193402	13.056598
General Service Less Than 50 kW	Customer - 12 per year	32.540000	0.000000	32.540000
General Service 50 to 999 kW	Customer per 30 days	116.640000	0.000000	116.640000
General Service Greater Than 1,000 kW	Customer - 12 per year	3,417.130000	-48.995415	3,368.134585
Unmetered Scattered Load	Connection -12 per year	11.400000	0.000000	11.400000
Sentinel Lighting	Connection - 12 per year	1.480000	0.668595	2.148595
Street Lighting	Connection - 12 per year	1.700000	0.624791	2.324791

Volumetric Distribution Charge

Class	Metric	Base Rate	Revenue Cost Ratio	Rate ReBal Base
Residential	kWh	0.014500	-0.000212	0.014288
General Service Less Than 50 kW	kWh	0.014300	0.000000	0.014300
General Service 50 to 999 kW	kW	3.621600	0.000000	3.621600
General Service Greater Than 1,000 kW	kW	1.866400	-0.026761	1.839639
Unmetered Scattered Load	kWh	0.010600	0.000000	0.010600
Sentinel Lighting	kW	25.016100	11.301112	36.317212
Street Lighting	kW	10.398700	3.821775	14.220475



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

GDP-IPI Price Cap Adjustment Worksheet

Price Cap Index

Price Escalator (GDP-IPI)	1.30%
Less Productivity Factor	-0.72%
Less Stretch Factor	-0.40%

Price Cap Index **0.18%**



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

GDP-IPI Price Cap Adjustment to Rates

Price Cap Adjustment

Price Cap Adjustment

Metric Applied To

All Customers

Method of Application

Both Uniform%

Uniform Service Charge Percent

0.180%

Uniform Volumetric Charge Percent 0.180% kWh
0.180% kW

Monthly Service Charge

Class	Metric	Base Rate	To This Class	% Adjustment	Adj To Base
Residential	Customer - 12 per year	13.056598	Yes	0.180%	0.023502
General Service Less Than 50 kW	Customer - 12 per year	32.540000	Yes	0.180%	0.058572
General Service 50 to 999 kW	Customer per 30 days	116.640000	Yes	0.180%	0.209952
General Service Greater Than 1,000 kW	Customer - 12 per year	3368.134585	Yes	0.180%	6.062642
Unmetered Scattered Load	Connection - 12 per year	11.400000	Yes	0.180%	0.020520
Sentinel Lighting	Connection - 12 per year	2.148595	Yes	0.180%	0.003867
Street Lighting	Connection - 12 per year	2.324791	Yes	0.180%	0.004185

Volumetric Distribution Charge

Class	Metric	Base Rate	To This Class	% Adjustment	Adj To Base
Residential	kWh	0.014288	Yes	0.180%	0.000026
General Service Less Than 50 kW	kWh	0.014300	Yes	0.180%	0.000026
General Service 50 to 999 kW	kW	3.621600	Yes	0.180%	0.006519
General Service Greater Than 1,000 kW	kW	1.839639	Yes	0.180%	0.003311
Unmetered Scattered Load	kWh	0.010600	Yes	0.180%	0.000019
Sentinel Lighting	kW	36.317212	Yes	0.180%	0.065371
Street Lighting	kW	14.220475	Yes	0.180%	0.025597



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

After Price Cap Base Distribution Rates General

Monthly Service Charge

Class	Metric	Base Rate	Price Cap Adjustment	After Price Cape Base
Residential	Customer - 12 per year	13.056598	0.023502	13.080100
General Service Less Than 50 kW	Customer - 12 per year	32.540000	0.058572	32.598572
General Service 50 to 999 kW	Customer per 30 days	116.640000	0.209952	116.849952
General Service Greater Than 1,000 kW	Customer - 12 per year	3368.134585	6.062642	3374.197227
Unmetered Scattered Load	Connection -12 per year	11.400000	0.020520	11.420520
Sentinel Lighting	Connection - 12 per year	2.148595	0.003867	2.152462
Street Lighting	Connection - 12 per year	2.324791	0.004185	2.328976

Volumetric Distribution Charge

Class	Metric	Base Rate	Price Cap Adjustment	After Price Cape Base
Residential	kWh	0.014288	0.000026	0.014314
General Service Less Than 50 kW	kWh	0.014300	0.000026	0.014326
General Service 50 to 999 kW	kW	3.621600	0.006519	3.628119
General Service Greater Than 1,000 kW	kW	1.839639	0.003311	1.842950
Unmetered Scattered Load	kWh	0.010600	0.000019	0.010619
Sentinel Lighting	kW	36.317212	0.065371	36.382583
Street Lighting	kW	14.220475	0.025597	14.246072



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Applied For Smart Meter Funding Adder

Rate Adder

Smart Meters

Tariff Sheet Disclosure

Yes

Metric Applied To

Metered Customers

Method of Application

Uniform Service Charge

Uniform Service Charge Amount

1.69

Rate Class	Applied to Class	Fixed Amount	Fixed Metric	Vol Amount	Vol Metric
Residential	Yes	1.690000	Customer - 12 per year	0.000000	kWh
General Service Less Than 50 kW	Yes	1.690000	Customer - 12 per year	0.000000	kWh
General Service 50 to 999 kW	Yes	1.690000	Customer per 30 days	0.000000	kW
General Service Greater Than 1,000 kW	Yes	1.690000	Customer - 12 per year	0.000000	kW



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Deferral Variance Account Disposition (2010)

Rate Rider

Def Var Disp 2010

Sunset Date

30/04/2013

DD/MM/YYYY

Metric Applied To

All Customers

Method of Application

Distinct Volumetric

Rate Class	Applied to Class	Fixed Amount	Fixed Metric	Vol Amount	Vol Metric
Residential	Yes	0.000000	Customer - 12 per year	-0.001500	kWh
General Service Less Than 50 kW	Yes	0.000000	Customer - 12 per year	-0.001500	kWh
General Service 50 to 999 kW	Yes	0.000000	Customer per 30 days	-0.599700	kW
General Service Greater Than 1,000 kW	Yes	0.000000	Customer - 12 per year	-0.941000	kW
Unmetered Scattered Load	Yes	0.000000	Connection -12 per year	-0.001500	kWh
Sentinel Lighting	Yes	0.000000	Connection - 12 per year	-0.754900	kW
Street Lighting	Yes	0.000000	Connection - 12 per year	-0.704100	kW



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Lost Revenue Adjustment Mechanism (LRAM) Recovery/Shared Savings Mechanism (SSM) Recovery Rate Rider

Rate Rider	Lost Revenue Adjustment Mechanism (LRAM) Recovery/Shared Savings Mechanism (SSM) Recovery
Sunset Date	April 30, 2014 DD/MM/YYYY
Metric Applied To	All Customers
Method of Application	Distinct Volumetric

Rate Class	Applied to Class	Fixed Amount	Fixed Metric	Vol Amount	Vol Metric
Residential	Yes	0.000000	Customer - 12 per year	0.000300	kWh
General Service Less Than 50 kW	No	0.000000	Customer - 12 per year	0.000000	kWh
General Service 50 to 999 kW	Yes	0.000000	Customer per 30 days	0.003300	kW
General Service Greater Than 1,000 kW	Yes	0.000000	Customer - 12 per year	-0.001400	kW
Unmetered Scattered Load	No	0.000000	Connection -12 per year	0.000000	kWh
Sentinel Lighting	No	0.000000	Connection - 12 per year	0.000000	kW
Street Lighting	No	0.000000	Connection - 12 per year	0.000000	kW



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Tax Change Rate Rider

Rate Rider

Tax Change

Sunset Date

30/04/2012
DD/MM/YYYY

Metric Applied To

All Customers

Method of Application

Distinct Volumetric

Rate Class	Applied to Class	Fixed Amount	Fixed Metric	Vol Amount	Vol Metric
Residential	Yes	0.000000	Customer - 12 per year	-0.000200	kWh
General Service Less Than 50 kW	Yes	0.000000	Customer - 12 per year	-0.000100	kWh
General Service 50 to 999 kW	Yes	0.000000	Customer per 30 days	-0.024800	kW
General Service Greater Than 1,000 kW	Yes	0.000000	Customer - 12 per year	-0.022100	kW
Unmetered Scattered Load	Yes	0.000000	Connection - 12 per year	-0.000200	kWh
Sentinel Lighting	Yes	0.000000	Connection - 12 per year	-0.202900	kW
Street Lighting	Yes	0.000000	Connection - 12 per year	-0.118500	kW



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Incremental Capital Rate Rider

Rate Rider

Incremental Capital

Sunset Date

April 30, 2013
DD/MM/YYYY

Metric Applied To

All Customers

Method of Application

Both Distinct

Rate Class	Applied to Class	Fixed Amount	Fixed Metric	Vol Amount	Vol Metric
Residential	Yes	0.000000	Customer - 12 per year	0.001900	kWh
General Service Less Than 50 kW	Yes	0.000000	Customer - 12 per year	0.001600	kWh
General Service 50 to 999 kW	Yes	0.000000	Customer per 30 days	0.260700	kW
General Service Greater Than 1,000 kW	Yes	0.000000	Customer - 12 per year	0.231600	kW
Unmetered Scattered Load	Yes	0.000000	Connection -12 per year	0.002100	kWh
Sentinel Lighting	Yes	0.000000	Connection - 12 per year	2.135000	kW
Street Lighting	Yes	0.000000	Connection - 12 per year	1.247000	kW



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Applied For Low Voltage Volumetric Rate

Rate Description	Low Voltage Volumetric Rate
Select Tariff Sheet Disclosure	Shown on Tariff Sheet
Metric Applied To	All Customers
Method of Application	Distinct Volumetric

Rate Class		Applied for Low Voltage
Residential	kWh	0.000200
General Service Less Than 50 kW	kWh	0.000200
General Service 50 to 999 kW	kW	0.063800
General Service Greater Than 1,000 kW	kW	0.063800
Unmetered Scattered Load	kWh	0.000200
Sentinel Lighting	kW	0.012400
Street Lighting	kW	0.051600



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Applied For Rate Rider for Global Adjustment Sub-Account Disposition- Electricity Component 2010

Rate Rider

GA Sub-Acct - Electricity 2010

Sunset Date

April 30, 2013

DD/MM/YYYY

Metric Applied To

All Customers

Method of Application

Distinct Volumetric

Rate Class	Applied to Class	Fixed Amount	Fixed Metric	Vol Amount	Vol Metric
Residential	Yes	0.000000	Customer - 12 per year	-0.000100	kWh
General Service Less Than 50 kW	Yes	0.000000	Customer - 12 per year	-0.000100	kWh
General Service 50 to 999 kW	Yes	0.000000	Customer per 30 days	-0.000100	kWh
General Service Greater Than 1,000 kW	Yes	0.000000	Customer - 12 per year	-0.000100	kWh
Unmetered Scattered Load	Yes	0.000000	Connection -12 per year	-0.000100	kWh
Sentinel Lighting	Yes	0.000000	Connection - 12 per year	-0.000100	kWh
Street Lighting	Yes	0.000000	Connection - 12 per year	-0.000100	kWh



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Applied For RTSR - Network

Method of Application

Distinct Dollar

Rate Class	Applied to Class				
Residential	Yes				
Rate Description	Vol Metric	Current Amount	% Adjustment	\$ Adjustment	Final Amount
Retail Transmission Rate – Network Service Rate	\$/kWh	0.005500	0.000%	0.000581	0.006081
Rate Class	Applied to Class				
General Service Less Than 50 kW	Yes				
Rate Description	Vol Metric	Current Amount	% Adjustment	\$ Adjustment	Final Amount
Retail Transmission Rate – Network Service Rate	\$/kWh	0.005100	0.000%	0.000538	0.005638
Rate Class	Applied to Class				
General Service 50 to 999 kW	Yes				
Rate Description	Vol Metric	Current Amount	% Adjustment	\$ Adjustment	Final Amount
Retail Transmission Rate – Network Service Rate	\$/kW	1.916100	0.000%	0.202306	2.118406
Retail Transmission Rate – Network Service Rate – Interval metered (if applicable)	\$/kW	1.978100	0.000%	0.208852	2.186952
Rate Class	Applied to Class				
General Service Greater Than 1,000 kW	Yes				
Rate Description	Vol Metric	Current Amount	% Adjustment	\$ Adjustment	Final Amount
Retail Transmission Rate – Network Service Rate	\$/kW	1.978100	0.000%	0.208852	2.186952
Rate Class	Applied to Class				
Unmetered Scattered Load	Yes				
Rate Description	Vol Metric	Current Amount	% Adjustment	\$ Adjustment	Final Amount
Retail Transmission Rate – Network Service Rate	\$/kWh	0.005100	0.000%	0.000538	0.005638
Rate Class	Applied to Class				
Sentinel Lighting	Yes				
Rate Description	Vol Metric	Current Amount	% Adjustment	\$ Adjustment	Final Amount
Retail Transmission Rate – Network Service Rate	\$/kW	0.384100	0.000%	0.040554	0.424654
Rate Class	Applied to Class				
Street Lighting	Yes				
Rate Description	Vol Metric	Current Amount	% Adjustment	\$ Adjustment	Final Amount
Retail Transmission Rate – Network Service Rate	\$/kW	1.598600	0.000%	0.168784	1.767384



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Applied For RTSR - Connection

Method of Application

Distinct Dollar

Rate Class	Applied to Class					
Residential	Yes					
Rate Description	Vol Metric	Current Amount	% Adjustment	\$ Adjustment	Final Amount	
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.004600	0.000%	-0.000234	0.004366	
Rate Class	Applied to Class					
General Service Less Than 50 kW	Yes					
Rate Description	Vol Metric	Current Amount	% Adjustment	\$ Adjustment	Final Amount	
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.004200	0.000%	-0.000214	0.003986	
Rate Class	Applied to Class					
General Service 50 to 999 kW	Yes					
Rate Description	Vol Metric	Current Amount	% Adjustment	\$ Adjustment	Final Amount	
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	1.576200	0.000%	-0.080283	1.495917	
Retail Transmission Rate – Line and Transformation Connection Service Rate – Interval metered (if applicable)	\$/kW	1.627300	0.000%	-0.082885	1.544415	
Rate Class	Applied to Class					
General Service Greater Than 1,000 kW	Yes					
Rate Description	Vol Metric	Current Amount	% Adjustment	\$ Adjustment	Final Amount	
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	1.627300	0.000%	-0.082885	1.544415	
Rate Class	Applied to Class					
Unmetered Scattered Load	Yes					
Rate Description	Vol Metric	Current Amount	% Adjustment	\$ Adjustment	Final Amount	
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.004200	0.000%	-0.000214	0.003986	
Rate Class	Applied to Class					
Sentinel Lighting	Yes					
Rate Description	Vol Metric	Current Amount	% Adjustment	\$ Adjustment	Final Amount	
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	0.315900	0.000%	-0.016090	0.299810	
Rate Class	Applied to Class					
Street Lighting	Yes					
Rate Description	Vol Metric	Current Amount	% Adjustment	\$ Adjustment	Final Amount	
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	1.315000	0.000%	-0.066979	1.248021	



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

microFIT Generator

Rate Class

microFIT Generator

Rate Description
Service Charge

Fixed Metric	Rate
\$	5.25



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Applied For Monthly Rates and Charges

Rate Class

Residential

Rate Description	Metric	Rate
Service Charge	\$	13.08
Service Charge Smart Meters	\$	1.69
Distribution Volumetric Rate	\$/kWh	0.0143
Low Voltage Volumetric Rate	\$/kWh	0.0002
Distribution Volumetric Def Var Disp 2010 – effective until April 30, 2013	\$/kWh	(0.00150)
Distribution Volumetric Lost Revenue Adjustment Mechanism (LRAM) Recovery/Shared Savings Mechanism (SS)	\$/kWh	0.00030
Distribution Volumetric Tax Change – effective until April 30, 2012	\$/kWh	(0.00020)
Distribution Volumetric Incremental Capital – effective until April 30, 2013	\$/kWh	0.00190
Retail Transmission Rate – Network Service Rate	\$/kWh	0.0061
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0044
Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

Rate Class

General Service Less Than 50 kW

Rate Description	Metric	Rate
Service Charge	\$	32.60
Service Charge Smart Meters	\$	1.69
Distribution Volumetric Rate	\$/kWh	0.0143
Low Voltage Volumetric Rate	\$/kWh	0.0002
Distribution Volumetric Def Var Disp 2010 – effective until April 30, 2013	\$/kWh	(0.00150)
Distribution Volumetric Tax Change – effective until April 30, 2012	\$/kWh	(0.00010)
Distribution Volumetric Incremental Capital – effective until April 30, 2013	\$/kWh	0.00160
Retail Transmission Rate – Network Service Rate	\$/kWh	0.0056
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0040
Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

Rate Class

General Service 50 to 999 kW

Rate Description	Metric	Rate
Service Charge	\$	116.85
Service Charge Smart Meters	\$	1.69
Distribution Volumetric Rate	\$/kW	3.6281
Low Voltage Volumetric Rate	\$/kW	0.0638
Distribution Volumetric Def Var Disp 2010 – effective until April 30, 2013	\$/kW	(0.59970)
Distribution Volumetric Lost Revenue Adjustment Mechanism (LRAM) Recovery/Shared Savings Mechanism (SS	\$/kW	0.00330
Distribution Volumetric Tax Change – effective until April 30, 2012	\$/kW	(0.02480)
Distribution Volumetric Incremental Capital – effective until April 30, 2013	\$/kW	0.26070
Retail Transmission Rate – Network Service Rate	\$/kW	2.1184
Retail Transmission Rate – Network Service Rate – Interval metered (if applicable)	\$/kW	2.1870
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	1.4959
Retail Transmission Rate – Line and Transformation Connection Service Rate – Interval metered (if applicable)	\$/kW	1.5444
Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

Rate Class

General Service Greater Than 1,000 kW

Rate Description	Metric	Rate
Service Charge	\$	3,374.20
Service Charge Smart Meters	\$	1.69
Distribution Volumetric Rate	\$/kW	1.8430
Low Voltage Volumetric Rate	\$/kW	0.0638
Distribution Volumetric Def Var Disp 2010 – effective until April 30, 2013	\$/kW	(0.94100)
Distribution Volumetric Lost Revenue Adjustment Mechanism (LRAM) Recovery/Shared Savings Mechanism (SS	\$/kW	(0.00140)
Distribution Volumetric Tax Change – effective until April 30, 2012	\$/kW	(0.02210)
Distribution Volumetric Incremental Capital – effective until April 30, 2013	\$/kW	0.23160
Retail Transmission Rate – Network Service Rate	\$/kW	2.1870
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	1.5444
Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

Rate Class

Unmetered Scattered Load

Rate Description	Metric	Rate
Service Charge (per connection)	\$	11.42
Distribution Volumetric Rate	\$/kWh	0.0106
Low Voltage Volumetric Rate	\$/kWh	0.0002
Distribution Volumetric Def Var Disp 2010 – effective until April 30, 2013	\$/kWh	(0.00150)
Distribution Volumetric Tax Change – effective until April 30, 2012	\$/kWh	(0.00020)
Distribution Volumetric Incremental Capital – effective until April 30, 2013	\$/kWh	0.00210
Retail Transmission Rate – Network Service Rate	\$/kWh	0.0056
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kWh	0.0040
Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

Rate Class

Sentinel Lighting

Rate Description	Metric	Rate
Service Charge (per connection)	\$	2.15
Distribution Volumetric Rate	\$/kW	36.3826
Low Voltage Volumetric Rate	\$/kW	0.0124
Distribution Volumetric Def Var Disp 2010 – effective until April 30, 2013	\$/kW	(0.75490)
Distribution Volumetric Tax Change – effective until April 30, 2012	\$/kW	(0.20290)
Distribution Volumetric Incremental Capital – effective until April 30, 2013	\$/kW	2.13500
Retail Transmission Rate – Network Service Rate	\$/kW	0.4247
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	0.2998
Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25

Rate Class

Street Lighting

Rate Description	Metric	Rate
Service Charge (per connection)	\$	2.33
Distribution Volumetric Rate	\$/kW	14.2461
Low Voltage Volumetric Rate	\$/kW	0.0516
Distribution Volumetric Def Var Disp 2010 – effective until April 30, 2013	\$/kW	(0.70410)
Distribution Volumetric Tax Change – effective until April 30, 2012	\$/kW	(0.11850)
Distribution Volumetric Incremental Capital – effective until April 30, 2013	\$/kW	1.24700
Retail Transmission Rate – Network Service Rate	\$/kW	1.7674
Retail Transmission Rate – Line and Transformation Connection Service Rate	\$/kW	1.2480
Wholesale Market Service Rate	\$/kWh	0.0052
Rural Rate Protection Charge	\$/kWh	0.0013
Standard Supply Service – Administrative Charge (if applicable)	\$	0.25



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

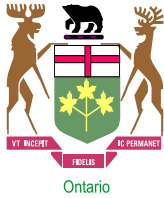
Current and Applied For Loss Factors

LOSS FACTORS

Current

Total Loss Factor - Secondary Metered Customer < 5,000 kW
Total Loss Factor - Secondary Metered Customer > 5,000 kW
Total Loss Factor - Primary Metered Customer < 5,000 kW
Total Loss Factor - Primary Metered Customer > 5,000 kW

1.0377
1.0147
1.0273
1.0047



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Summary of Changes To Service Charge and Distributi

	Fixed (\$)	Volumetric \$/kWh
Residential		
Current Tariff Distribution Rates	13.25	0.0145
Current Base Distribution Rates	13.25	0.0145
Rate Rebalancing Adjustments		
Revenue Cost Ratio	-0.19	-0.0002
Total Rate Rebalancing Adjustments	-0.19	-0.0002
Price Cap Adjustments		
Price Cap Adjustment	0.02	0.0000
Total Price Cap Adjustments	0.02	0.0000
Applied For Base Distribution Rates	13.08	0.0143
Applied For Tariff Distribution Rates	13.08	0.0143
	0.00	0.0000

	Fixed (\$)	Volumetric \$/kWh
General Service Less Than 50 kW		
Current Tariff Rates	32.54	0.0143
Current Base Distribution Rates	32.54	0.01
Price Cap Adjustments		
Price Cap Adjustment	0.06	0.0000
Total Price Cap Adjustments	0.06	0.0000
Applied For Base Distribution Rates	32.60	0.0143
Applied For Tariff Distribution Rates	32.60	0.0143
	0.00	0.0000

	Fixed (\$)	Volumetric \$/kW
General Service 50 to 999 kW		
Current Tariff Rates	116.64	3.6216
Current Base Distribution Rates	116.64	3.62
Price Cap Adjustments		
Price Cap Adjustment	0.21	0.0065
Total Price Cap Adjustments	0.21	0.0065
Applied For Base Distribution Rates	116.85	3.6281
Applied For Tariff Distribution Rates	116.85	3.6281
	0.00	0.0000

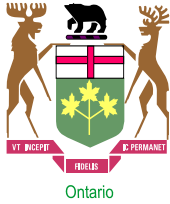
	Fixed (\$)	Volumetric \$/kW
General Service Greater Than 1,000 kW		
Current Tariff Rates	3,417.13	1.8664
Current Base Distribution Rates	3,417.13	1.87
Rate Rebalancing Adjustments		
Revenue Cost Ratio	-49.00	-0.0268
Total Rate Rebalancing Adjustments	-49.00	-0.0268

Price Cap Adjustments		
Price Cap Adjustment	6.06	0.0033
Total Price Cap Adjustments	6.06	0.0033
Applied For Base Distribution Rates	3,374.20	1.8430
Applied For Tariff Distribution Rates	3,374.20	1.8430
	0.00	0.0000

	Fixed	Volumetric
	(\$)	\$/kWh
Unmetered Scattered Load		
Current Tariff Rates	11.40	0.0106
Current Base Distribution Rates	11.40	0.01
Price Cap Adjustments		
Price Cap Adjustment	0.02	0.0000
Total Price Cap Adjustments	0.02	0.0000
Applied For Base Distribution Rates	11.42	0.0106
Applied For Tariff Distribution Rates	11.42	0.0106
	0.00	0.0000

	Fixed	Volumetric
	(\$)	\$/kW
Sentinel Lighting		
Current Tariff Rates	1.48	25.0161
Current Base Distribution Rates	1.48	25.02
Rate Rebalancing Adjustments		
Revenue Cost Ratio	0.67	11.3011
Total Rate Rebalancing Adjustments	0.67	11.3011
Price Cap Adjustments		
Price Cap Adjustment	0.00	0.0654
Total Price Cap Adjustments	0.00	0.0654
Applied For Base Distribution Rates	2.15	36.3172
Applied For Tariff Distribution Rates	2.15	36.3826
	0.00	0.0000

	Fixed	Volumetric
	(\$)	\$/kW
Street Lighting		
Current Tariff Rates	1.70	10.3987
Current Base Distribution Rates	1.70	10.40
Rate Rebalancing Adjustments		
Revenue Cost Ratio	0.62	3.8218
Total Rate Rebalancing Adjustments	0.62	3.8218
Price Cap Adjustments		
Price Cap Adjustment	0.00	0.0256
Total Price Cap Adjustments	0.00	0.0256
Applied For Base Distribution Rates	2.33	14.2461
Applied For Tariff Distribution Rates	2.33	14.2461
	0.00	0.0000



Name of LDC: Oakville Hydro Electricity Distribution Inc
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Summary of Changes To Tariff Rate Adder

	Fixed	Volumetric
Residential	(\$)	\$/kWh
Current Tariff Rates Adders		
Smart Meters	1.69	0.0000
Total Current Tariff Rates Adders	1.69	0.0000

	Fixed	Volumetric
Residential	(\$)	\$/kWh
Proposed Tariff Rates Adders		
Smart Meters	1.69	0.0000
Total Proposed Tariff Rates Adders	1.69	0.0000

	Fixed	Volumetric
General Service Less Than 50 kW	(\$)	\$/kWh
Current Tariff Rates Adders		
Smart Meters	1.69	0.0000
Total Current Tariff Rates Adders	1.69	0.0000

	Fixed	Volumetric
General Service Less Than 50 kW	(\$)	\$
Proposed Tariff Rates Adders		
Smart Meters	1.69	0.0000
Total Proposed Tariff Rates Adders	1.69	0.0000

	Fixed	Volumetric
General Service 50 to 999 kW	(\$)	\$
Current Tariff Rates Adders		
Smart Meters	1.69	0.0000
Total Current Tariff Rates Adders	1.69	0.0000

	Fixed	Volumetric
General Service 50 to 999 kW	(\$)	\$
Proposed Tariff Rates Adders		
Smart Meters	1.69	0.0000
Total Proposed Tariff Rates Adders	1.69	0.0000

	Fixed	Volumetric
General Service Greater Than 1,000 kW	(\$)	\$/kWh
Current Tariff Rates Adders		
Smart Meters	1.69	0.0000
Total Current Tariff Rates Adders	1.69	0.0000

	Fixed	Volumetric
General Service Greater Than 1,000 kW	(\$)	0
Proposed Tariff Rates Adders		
Smart Meters	1.69	0.0000
Total Proposed Tariff Rates Adders	1.69	0.0000

	Fixed	Volumetric
Unmetered Scattered Load	(\$)	\$/kWh
Current Tariff Rates Adders		
Total Current Tariff Rates Adders	0.00	0.0000

	Fixed	Volumetric
Unmetered Scattered Load	(\$)	0
Proposed Tariff Rates Adders		
Total Proposed Tariff Rates Adders	0.00	0.0000

	Fixed	Volumetric
Sentinel Lighting	(\$)	0
Current Tariff Rates Adders		
Total Current Tariff Rates Adders	0.00	0.0000

	Fixed	Volumetric
Sentinel Lighting	(\$)	\$/kW
Proposed Tariff Rates Adders		
Total Proposed Tariff Rates Adders	0.00	0.0000

	Fixed	Volumetric
Street Lighting	(\$)	\$/kW
Current Tariff Rates Adders		
Total Current Tariff Rates Adders	0.00	0.0000

	Fixed	Volumetric
Street Lighting	(\$)	0
Proposed Tariff Rates Adders		
Total Proposed Tariff Rates Adders	0.00	0.0000



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Summary of Changes To Tariff Rate Riders

	Fixed	Volumetric
	(\$)	\$/kWh
Residential		
Current Tariff Rates Riders		
Def Var Disp 2010	0.00	-0.0015
Lost Revenue Adjustment Mechanism (LRAM) Recovery/Shared Savings Mechanism (SSM) Recovery	0.00	0.0003
Total Current Tariff Rates Riders	0.00	-0.0012

	Fixed	Volumetric
	(\$)	\$/kWh
Residential		
Proposed Tariff Rates Riders		
Def Var Disp 2010	0.00	-0.0015
Lost Revenue Adjustment Mechanism (LRAM) Recovery/Shared Savings Mechanism (SSM) Recovery	0.00	0.0003
Tax Change	0.00	-0.0002
Incremental Capital	0.00	0.0019
Total Proposed Tariff Rates Riders	0.00	0.0005

	Fixed	Volumetric
	(\$)	\$/kWh
General Service Less Than 50 kW		
Current Tariff Rates Riders		
Def Var Disp 2010	0.00	-0.0015
Total Current Tariff Rates Riders	0.00	-0.0015

	Fixed	Volumetric
	(\$)	\$
General Service Less Than 50 kW		
Proposed Tariff Rates Riders		
Def Var Disp 2010	0.00	-0.0015
Tax Change	0.00	-0.0001
Incremental Capital	0.00	0.0016
Total Proposed Tariff Rates Riders	0.00	0.0000

	Fixed	Volumetric
	(\$)	\$
General Service 50 to 999 kW		
Current Tariff Rates Riders		
Def Var Disp 2010	0.00	-0.5997
Lost Revenue Adjustment Mechanism (LRAM) Recovery/Shared Savings Mechanism (SSM) Recovery	0.00	0.0033
Total Current Tariff Rates Riders	0.00	-0.5964

	Fixed	Volumetric
	(\$)	\$
General Service 50 to 999 kW		
Proposed Tariff Rates Riders		
Def Var Disp 2010	0.00	-0.5997
Lost Revenue Adjustment Mechanism (LRAM) Recovery/Shared Savings Mechanism (SSM) Recovery	0.00	0.0033
Tax Change	0.00	-0.0248
Incremental Capital	0.00	0.2607
Total Proposed Tariff Rates Riders	0.00	-0.3605

	Fixed	Volumetric
	(\$)	\$/kWh
General Service Greater Than 1,000 kW		
Current Tariff Rates Riders		
Def Var Disp 2010	0.00	-0.9410

Lost Revenue Adjustment Mechanism (LRAM) Recovery/Shared Savings Mechanism (SSM) Recovery	0.00	-0.0014
Total Current Tariff Rates Riders	0.00	-0.9424

	Fixed	Volumetric
	(\$)	
General Service Greater Than 1,000 kW		0
Proposed Tariff Rates Riders		
Def Var Disp 2010	0.00	-0.9410
Lost Revenue Adjustment Mechanism (LRAM) Recovery/Shared Savings Mechanism (SSM) Recovery	0.00	-0.0014
Tax Change	0.00	-0.0221
Incremental Capital	0.00	0.2316
Total Proposed Tariff Rates Riders	0.00	-0.7329

	Fixed	Volumetric
	(\$)	\$/kWh
Unmetered Scattered Load		
Current Tariff Rates Riders		
Def Var Disp 2010	0.00	-0.0015
Total Current Tariff Rates Riders	0.00	-0.0015

	Fixed	Volumetric
	(\$)	
Unmetered Scattered Load		0
Proposed Tariff Rates Riders		
Def Var Disp 2010	0.00	-0.0015
Tax Change	0.00	-0.0002
Incremental Capital	0.00	0.0021
Total Proposed Tariff Rates Riders	0.00	0.0004

	Fixed	Volumetric
	(\$)	
Sentinel Lighting		0
Current Tariff Rates Riders		
Def Var Disp 2010	0.00	-0.7549
Total Current Tariff Rates Riders	0.00	-0.7549

	Fixed	Volumetric
	(\$)	\$/kW
Sentinel Lighting		
Proposed Tariff Rates Riders		
Def Var Disp 2010	0.00	-0.7549
Tax Change	0.00	-0.2029
Incremental Capital	0.00	2.1350
Total Proposed Tariff Rates Riders	0.00	1.1772

	Fixed	Volumetric
	(\$)	\$/kW
Street Lighting		
Current Tariff Rates Riders		
Def Var Disp 2010	0.00	-0.7041
Total Current Tariff Rates Riders	0.00	-0.7041

	Fixed	Volumetric
	(\$)	
Street Lighting		0
Proposed Tariff Rates Riders		
Def Var Disp 2010	0.00	-0.7041
Tax Change	0.00	-0.1185
Incremental Capital	0.00	1.2470
Total Proposed Tariff Rates Riders	0.00	0.4244



Name of LDC: Oshkosh Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Calculation of Bill Impacts

RTSR Loss Adjusted Metered kWh Yes

RTSR Loss Adjusted Metered kW No

Non-Threshold Excess Drop

Street Lighting

Monthly Rates and Charges			
	Units	Current Rate	Applied For Rate
Service Charge	\$	1.75	2.35
Service Charge Rate Adjunct	\$	1.75	2.35
Service Charge Rate Adjunct	\$	1.75	2.35
Distribution Volumetric Rate	\$/kWh	10.3887	14.2481
Distribution Volumetric Rate Adjunct	\$/kWh	0.0018	0.0018
Low Voltage Volumetric Rate	\$/kWh	0.7047	0.4244
Distribution Volumetric Rate Adjunct	\$/kWh	1.0981	1.7913
Retail Transmission Rate - Network Service Rate	\$/kWh	1.3150	1.3480
Retail Transmission Rate - Line and Transformation Connection Service Rate	\$/kWh	0.0052	0.0052
Wholesale Market Service Rate	\$/kWh	0.0013	0.0013
Rural Rate Provision Charge	\$/kWh	0.0004	0.0004
Standard Supply Service - Administration Charge (if applicable)	\$/kWh	0.25	0.25

Consumption	37 kWh	0.10 kW	Loss Factor 1.0377
RPP Tier One	750 kWh	Load Factor 50.7%	

Street Lighting		Volume	RATE	CHARGE	Volume	RATE	CHARGE	\$	%	% of Total Bill	
Energy (First Tier kWh)		37	0.0052	2.54	37	0.0052	2.54	0.00	0.0%	0.31%	
Energy (Second Tier kWh)		0	0.0750	0.00	0	0.0750	0.00	0.00	0.0%	0.00%	
Sub-Total Energy				2.54			2.54	0.00	0.0%	0.31%	
Service Charge		1	1.75	1.75	1	2.35	2.35	0.00	0.0%	27.85%	
Service Charge Rate Adjunct		1	0.00	0.00	1	0.00	0.00	0.00	0.0%	0.00%	
Service Charge Rate Adjunct		1	0.00	0.00	1	0.00	0.00	0.00	0.0%	0.00%	
Distribution Volumetric Rate		0.10	10.3887	1.04	0.10	14.2481	1.42	0.38	36.5%	18.96%	
Distribution Volumetric Rate Adjunct		0.10	0.0000	0.00	0.10	0.0000	0.00	0.00	0.0%	0.00%	
Low Voltage Volumetric Rate		0.10	0.0018	0.00	0.10	0.0018	0.00	0.00	0.0%	0.12%	
Distribution Volumetric Rate Adjunct		0.10	0.0047	0.00	0.10	0.0047	0.00	0.11	10.7%	0.46%	
Sub-Total Distribution				2.68			3.80	5.12	47.8%	45.93%	
Retail Transmission Rate - Network Service Rate		0.10	1.3150	0.13	0.10	1.3480	0.12	0.01	1.2%	1.15%	
Retail Transmission Rate - Line and Transformation Connection Service Rate		0.10	0.0052	0.00	0.10	0.0052	0.00	0.00	0.0%	0.00%	
Sub-Total Retail Transmission				0.25			0.25	0.00	0.0%	2.42%	
Sub-Total Distribution and Retail Transmission				2.93			4.10	5.13	38.2%	48.93%	
Wholesale Market Service Rate		39	0.0052	0.20	39	0.0052	0.20	0.00	0.0%	2.39%	
Rural Rate Provision Charge		39	0.0013	0.05	39	0.0013	0.05	0.00	0.0%	0.60%	
Standard Service Charge - Administration Charge (if applicable)		39	0.0004	0.02	39	0.0004	0.02	0.00	0.0%	0.24%	
Sub-Total Regulatory				0.27			0.27	0.00	0.0%	2.89%	
Debt Retirement Charge (DRC)		37	0.0000	0.00	37	0.0000	0.00	0.00	0.0%	0.00%	
Sub-Total Before Taxes				6.29			7.42	7.42	1.13	18.9%	88.54%
Taxes				0.29			0.29	0.29	0.12	1.4%	1.44%
Total Bill				7.11			7.71	7.71	1.25	17.3%	100.00%

Rate Class Threshold Test

Street Lighting

kWh	37	73	110	146	183
Loss Factor Adjusted kWh	39	76	115	152	190
kW	0.10	0.20	0.30	0.40	0.50
Load Factor	50.7%	50.0%	50.3%	50.0%	50.2%

Energy

Applied For Bill	\$ 2.53	\$ 4.94	\$ 7.47	\$ 9.88	\$12.35
Current Bill	\$ 2.53	\$ 4.94	\$ 7.47	\$ 9.88	\$12.35
\$ Impact	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
% Impact	0.0%	0.0%	0.0%	0.0%	0.0%
% of Total Bill	30.2%	36.1%	39.0%	40.4%	41.4%

Distribution

Applied For Bill	\$ 3.80	\$ 5.27	\$ 6.75	\$ 8.22	\$ 9.69
Current Bill	\$ 2.61	\$ 3.61	\$ 4.63	\$ 5.65	\$ 6.68
\$ Impact	\$ 1.19	\$ 1.66	\$ 2.12	\$ 2.57	\$ 3.01
% Impact	41.9%	44.4%	40.8%	46.8%	47.3%
% of Total Bill	45.4%	38.6%	35.3%	33.6%	32.5%

Retail Transmission

Applied For Bill	\$ 0.26	\$ 0.60	\$ 0.86	\$ 1.21	\$ 1.50
Current Bill	\$ 0.26	\$ 0.60	\$ 0.86	\$ 1.17	\$ 1.46
\$ Impact	\$ 0.00	\$ 0.00	\$ 0.03	\$ 0.04	\$ 0.04
% Impact	3.4%	3.4%	3.4%	3.4%	2.7%
% of Total Bill	3.6%	4.4%	4.7%	5.0%	5.0%

Delivery (Distribution and Retail Transmission)

Applied For Bill	\$ 4.10	\$ 5.87	\$ 7.65	\$ 9.43	\$11.19
Current Bill	\$ 2.87	\$ 4.23	\$ 5.50	\$ 6.77	\$ 8.04
\$ Impact	\$ 1.23	\$ 1.64	\$ 2.15	\$ 2.66	\$ 3.15
% Impact	30.0%	38.8%	39.1%	38.3%	39.2%
% of Total Bill	49.0%	42.9%	40.0%	38.6%	37.5%

Regulatory

Applied For Bill	\$ 0.52	\$ 0.78	\$ 1.05	\$ 1.30	\$ 1.57
Current Bill	\$ 0.52	\$ 0.78	\$ 1.06	\$ 1.30	\$ 1.57
\$ Impact	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
% Impact	0.0%	0.0%	0.0%	0.0%	0.0%
% of Total Bill	6.2%	5.7%	5.5%	5.3%	5.3%

Debt Retirement Charge

Applied For Bill	\$ 0.26	\$ 0.51	\$ 0.77	\$ 1.02	\$ 1.28
Current Bill	\$ 0.26	\$ 0.51	\$ 0.77	\$ 1.02	\$ 1.28
\$ Impact	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
% Impact	0.0%	0.0%	0.0%	0.0%	0.0%
% of Total Bill	3.1%	3.7%	4.0%	4.2%	4.3%

GST

Applied For Bill	\$ 0.96	\$ 1.57	\$ 2.20	\$ 2.81	\$ 3.43
Current Bill	\$ 0.96	\$ 1.58	\$ 2.20	\$ 2.81	\$ 3.43
\$ Impact	\$ 0.00	\$ 0.01	\$ 0.00	\$ 0.00	\$ 0.00
% Impact	0.0%	0.1%	0.0%	0.0%	0.0%
% of Total Bill	11.5%	11.5%	11.5%	11.5%	11.5%

Total Bill

Applied For Bill	\$ 8.37	\$ 13.67	\$ 19.14	\$ 24.44	\$29.82
Current Bill	\$ 7.10	\$ 11.82	\$ 16.71	\$ 21.61	\$26.26
\$ Impact	\$ 1.27	\$ 1.85	\$ 2.43	\$ 2.83	\$ 3.56
% Impact	17.9%	15.7%	14.6%	13.8%	13.6%
% of Total Bill	11.5%	11.5%	11.5%	11.5%	11.5%

Rounding Applied -0.010000
Rounding Current -0.010000



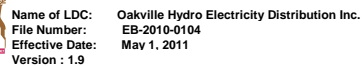
Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Current and Applied For Allowances

Allowances

Transformer Allowance for Ownership - per kW of billing demand/month
Primary Metering Allowance for transformer losses - applied to measured demand and energy

Metric	Current
\$/kW	(0.50)
%	(1.00)

[illegible]



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Effective Date: May 1, 2011
Version : 1.9

Current and Applied For Retail Service Charges

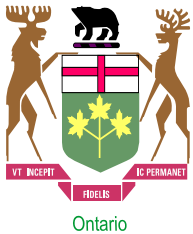
Retail Service Charges (if applicable)

Retail Service Charges refer to services provided by a distributor to retailers or customers related to the supply of competitive electricity

	Metric	Current
One-time charge, per retailer, to establish the service agreement between the distributor and the retailer	\$	100.00
Monthly Fixed Charge, per retailer	\$	20.00
Monthly Variable Charge, per customer, per retailer	\$/cust.	0.50
Distributor-consolidated billing charge, per customer, per retailer	\$/cust.	0.30
Retailer-consolidated billing credit, per customer, per retailer	\$/cust.	(0.30)

Service Transaction Requests (STR)

Request fee, per request, applied to the requesting party	\$	0.25
Processing fee, per request, applied to the requesting party	\$	0.50
Request for customer information as outlined in Section 10.6.3 and Chapter 11 of the Retail Settlement Code directly to retailers and customers, if not delivered electronically through the Electronic Business Transaction (EBT) system, applied to the requesting party		
Up to twice a year		no charge
More than twice a year, per request (plus incremental delivery costs)	\$	2.00



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Version : 1.0

LDC Information

Applicant Name	Oakville Hydro Electricity Distribution Inc.
OEB Application Number	EB-2010-0104
LDC Licence Number	ED-2003-0135
Application Type	IRM3



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Version : 1.0

Table of Contents

Sheet Name

[A1.1 LDC Information](#)

[A2.1 Table of Contents](#)

[B1.1 Rate Class And RTSR Rates](#)

[B1.2 Dist Billing Determinants](#)

[B1.3 UTR's and Sub-Transmission](#)

[C1.1 Historical Wholesale](#)

[C1.2 Current Wholesale](#)

[C1.3 Forecast Wholesale](#)

[D1.1 Adj Network to Curr Whsl](#)

[D1.2 Adj Conn to Curr Whsl](#)

[E1.1 Adj Network to Fcst Whsl](#)

[E1.2 Adj Conn to Fcst Whsl](#)

[F1.1 IRM RTSR Adj - Network](#)

[F1.2 IRM RTSR Adj - Connection](#)

Purpose of Sheet

Enter LDC Data

Table of Contents

Enter Rate Class And RTSR Rates

Enter Distributor Billing Determinants

Current and Forecasted UTR's and Hydro One Sub-Transmission Rates

Enter Historical Wholesale Transmission

Calculates Current Wholesale Transmission

Calculates Forecast Wholesale Transmission

Calculates the Adjustment for RTSR-Network needed to recover Current Wholesale

Calculates the Adjustment for RTSR-Connection needed to recover Current Wholesale

Calculates the Adjustment for RTSR-Network needed to recover Forecast Wholesale

Calculates the Adjustment for RTSR-Connection needed to recover Forecast Wholesale

Calculates the IRM RTSR Adjustment Calculation - Network for Rate Generator

Calculates the IRM RTSR Adjustment Calculation - Connection for Rate Generator



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Version : 1.0

Rate Class And 2010 RTSR Rates

Enter Rate Group and Rate Class in the same order as listed on your current Tariff sheet and Rate Generator.

Enter the RTSR-Network and RTSR-Connection rates as approved on your current Tariff sheet.

Rate Group	Rate Class	Vol Metric	RTSR - Network	RTSR - Connection
RES	Residential	kWh	0.0055	0.0046
GSLT50	General Service Less Than 50 kW	kWh	0.0051	0.0042
GSGT50	General Service 50 to 999 kW	kW	1.9161	1.5762
GSGT50	General Service 50 to 999 kW - Interval Metered	kW	1.9781	1.6273
GSGT50	General Service Greater Than 1,000 kW	kW	1.9781	1.6273
USL	Unmetered Scattered Load	kWh	0.0051	0.0042
Sen	Sentinel Lighting	kW	0.3841	0.3159
SL	Street Lighting	kW	1.5986	1.3150
NA	Rate Class 9	NA		
NA	Rate Class 10	NA		
NA	Rate Class 11	NA		
NA	Rate Class 12	NA		
NA	Rate Class 13	NA		
NA	Rate Class 14	NA		
NA	Rate Class 15	NA		
NA	Rate Class 16	NA		
NA	Rate Class 17	NA		
NA	Rate Class 18	NA		
NA	Rate Class 19	NA		
NA	Rate Class 20	NA		
NA	Rate Class 21	NA		
NA	Rate Class 22	NA		
NA	Rate Class 23	NA		
NA	Rate Class 24	NA		
NA	Rate Class 25	NA		



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Version : 1.0

2009 Distributor Billing Determinants

Enter the most recently reported RRR billing determinants

Loss Adjusted Metered kWh Yes

Loss Adjusted Metered kW No

Rate Class	Vol Metric	Metered kWh A	Metered kW B	Applicable Loss Factor C	Load Factor D = A / (B * 730)	Loss Adjusted Billed kWh E = A * C
Residential	kWh	554,708,652	0	1.0525		583,830,856
General Service Less Than 50 kW	kWh	170,258,503	0	1.0525		179,197,074
General Service 50 to 999 kW	kW	244,636,030	843,980	1.0525	39.73%	257,479,422
General Service 50 to 999 kW - Interval Metered	kW	338,183,781	720,815	1.0525	64.30%	355,938,430
General Service Greater Than 1,000 kW	kW	147,437,802	357,797	1.0525	56.48%	155,178,287
Unmetered Scattered Load	kWh	3,936,855	0	1.0525		4,143,540
Sentinel Lighting	kW	134,739	372	1.0525	49.64%	141,813
Street Lighting	kW	11,085,581	30,957	1.0525	49.08%	11,667,574
Total		1,470,381,942	1,953,921			1,547,576,994



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Version : 1.0

Uniform Transmission and Hydro One Sub-Transmission Rates

Uniform Transmission Rates

Rate Description	Vol Metric	Effective January 1, 2009	Effective July 1, 2009	Effective January 1, 2010	Effective January 1, 2011
		Rate	Rate	Rate	Rate
Network Service Rate	kW	\$ 2.57	\$ 2.66	\$ 2.97	\$ 2.97
Line Connection Service Rate	kW	\$ 0.70	\$ 0.70	\$ 0.73	\$ 0.73
Transformation Connection Service Rate	kW	\$ 1.62	\$ 1.57	\$ 1.71	\$ 1.71

Hydro One Sub-Transmission Rates

Rate Description	Vol Metric	Effective May 1, 2008	Effective May 1, 2009	Effective May 1, 2010	Effective May 1, 2011
		Rate	Rate	Rate	Rate
Network Service Rate	kW	\$ 2.01	\$ 2.24	\$ 2.65	\$ 2.65
Line Connection Service Rate	kW	\$ 0.50	\$ 0.60	\$ 0.64	\$ 0.64
Transformation Connection Service Rate	kW	\$ 1.38	\$ 1.39	\$ 1.50	\$ 1.50
Both Line and Transformation Connection Service Rate	kW	\$ 1.88	\$ 1.99	\$ 2.14	\$ 2.14

Hydro One Sub-Transmission Rate Rider 6A

Rate Description	Vol Metric	Effective May 1, 2008	Effective May 1, 2009	Effective May 1, 2010	Effective May 1, 2011
		Rate	Rate	Rate	Rate
RSVA Transmission network – 4714 – which affects 1584	kW	\$ -	\$ -	\$ 0.0470	\$ 0.0470
RSVA Transmission connection – 4716 – which affects 1586	kW	\$ -	\$ -	-\$ 0.0250	-\$ 0.0250
RSVA LV – 4750 – which affects 1550	kW	\$ -	\$ -	\$ 0.0580	\$ 0.0580
RARA 1 – 2252 – which affects 1590	kW	\$ -	\$ -	-\$ 0.0750	-\$ 0.0750
Hydro One Sub-Transmission Rate Rider 6A	kW	\$ -	\$ -	\$ 0.0050	\$ 0.0050



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Version : 1.0

2009 Historical Wholesale Transmission

Enter billing detail for wholesale transmission for the same reporting period as the billing determinants on sheet B1.2.

IESO

Month	Network			Line Connection			Transformation Connection			Total Line
	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Amount
January	194,588	\$2.57	\$ 500,091	200,065	\$0.70	\$ 140,046	200,065	\$1.62	\$ 324,105	\$ 464,151
February	181,197	\$2.57	\$ 465,676	198,297	\$0.70	\$ 138,808	194,040	\$1.62	\$ 314,345	\$ 453,153
March	183,996	\$2.57	\$ 472,870	185,448	\$0.70	\$ 129,814	185,448	\$1.62	\$ 300,426	\$ 430,239
April	158,711	\$2.57	\$ 407,887	167,444	\$0.70	\$ 117,211	167,444	\$1.62	\$ 271,259	\$ 388,470
May	165,687	\$2.57	\$ 425,816	187,478	\$0.70	\$ 131,235	187,478	\$1.62	\$ 303,714	\$ 434,949
June	221,100	\$2.57	\$ 568,227	224,434	\$0.70	\$ 157,104	225,005	\$1.62	\$ 364,508	\$ 521,612
July	183,726	\$2.66	\$ 488,711	196,773	\$0.70	\$ 137,741	196,773	\$1.57	\$ 308,934	\$ 446,675
August	231,479	\$2.66	\$ 615,734	238,044	\$0.70	\$ 166,631	238,044	\$1.57	\$ 373,729	\$ 540,360
September	170,805	\$2.66	\$ 454,341	194,529	\$0.70	\$ 136,170	194,529	\$1.57	\$ 305,411	\$ 441,581
October	152,344	\$2.66	\$ 405,235	165,164	\$0.70	\$ 115,615	165,164	\$1.57	\$ 259,307	\$ 374,922
November	178,274	\$2.66	\$ 474,209	184,756	\$0.70	\$ 129,329	184,756	\$1.57	\$ 290,067	\$ 419,396
December	193,872	\$2.66	\$ 515,700	213,586	\$0.70	\$ 149,510	213,586	\$1.57	\$ 335,330	\$ 484,840
Total	2,215,779	\$2.62	\$5,794,497	2,356,018	\$0.70	\$1,649,212	2,352,332	\$1.59	\$3,751,135	\$5,400,348

Hydro One

Month	Network			Line Connection			Line Transformation			Total Line
	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Amount
January	59,895	\$2.02	\$ 120,839	59,895	\$1.38	\$ 82,655		\$ -		\$ 82,655
February	56,090	\$2.01	\$ 112,741	56,158	\$1.38	\$ 77,498		\$ -		\$ 77,498
March	53,585	\$2.01	\$ 107,706	54,024	\$1.38	\$ 74,553		\$ -		\$ 74,553
April	53,731	\$2.01	\$ 107,999	53,731	\$1.38	\$ 74,149		\$ -		\$ 74,149
May	57,541	\$2.07	\$ 118,966	57,541	\$1.38	\$ 79,550		\$ -		\$ 79,550
June	90,957	\$2.24	\$ 203,744	90,957	\$1.39	\$ 126,430		\$ -		\$ 126,430
July	84,405	\$2.24	\$ 189,067	84,405	\$1.39	\$ 117,323		\$ -		\$ 117,323
August	104,765	\$2.24	\$ 234,674	104,765	\$1.39	\$ 145,623		\$ -		\$ 145,623
September	78,356	\$2.24	\$ 175,517	78,818	\$1.39	\$ 109,557		\$ -		\$ 109,557
October	63,818	\$2.24	\$ 142,952	65,499	\$1.39	\$ 91,044		\$ -		\$ 91,044
November	54,278	\$2.24	\$ 121,583	54,278	\$1.39	\$ 75,446		\$ -		\$ 75,446
December	60,019	\$2.24	\$ 134,443	60,019	\$1.39	\$ 83,426		\$ -		\$ 83,426
Total	817,440	\$2.17	\$1,770,231	820,090	\$1.39	\$1,137,255	-	\$ -	\$ -	\$1,137,255

Total

Month	Network			Line Connection			Line Transformation			Total Line
	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Amount
January	254,483	\$2.44	\$ 620,930	259,960	\$0.86	\$ 222,701	200,065	\$1.62	\$ 324,105	\$ 546,806
February	237,287	\$2.44	\$ 578,417	254,455	\$0.85	\$ 216,306	194,040	\$1.62	\$ 314,345	\$ 530,651
March	237,581	\$2.44	\$ 580,576	239,472	\$0.85	\$ 204,367	185,448	\$1.62	\$ 300,426	\$ 504,792
April	212,442	\$2.43	\$ 515,887	221,175	\$0.87	\$ 191,360	167,444	\$1.62	\$ 271,259	\$ 462,619
May	223,228	\$2.44	\$ 544,782	245,019	\$0.86	\$ 210,785	187,478	\$1.62	\$ 303,714	\$ 514,499
June	312,057	\$2.47	\$ 771,971	315,391	\$0.90	\$ 283,534	225,005	\$1.62	\$ 364,508	\$ 648,042
July	268,131	\$2.53	\$ 677,778	281,178	\$0.91	\$ 255,064	196,773	\$1.57	\$ 308,934	\$ 563,998
August	336,244	\$2.53	\$ 850,408	342,809	\$0.91	\$ 312,254	238,044	\$1.57	\$ 373,729	\$ 685,983
September	249,161	\$2.53	\$ 629,859	273,347	\$0.90	\$ 245,727	194,529	\$1.57	\$ 305,411	\$ 551,138
October	216,162	\$2.54	\$ 548,187	230,663	\$0.90	\$ 206,658	165,164	\$1.57	\$ 259,307	\$ 465,966
November	232,552	\$2.56	\$ 595,792	239,034	\$0.86	\$ 204,776	184,756	\$1.57	\$ 290,067	\$ 494,843
December	253,891	\$2.56	\$ 650,142	273,605	\$0.85	\$ 232,937	213,586	\$1.57	\$ 335,330	\$ 568,267
Total	3,033,219	\$2.49	\$7,564,727	3,176,108	\$0.88	\$2,786,468	2,352,332	\$1.59	\$3,751,135	\$6,537,603



Name of LDC: Oakville Hydro Electricity Distribution Inc.
 File Number: EB-2010-0104
 Version : 1.0

Current Wholesale Transmission

The purpose of this sheet is to calculate the expected billing when current 2010 UTR rates are applied against historical (2009) transmission units.

IESO

Month	Network			Line Connection			Transformation Connection			Total Line
	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Amount
January	194,588	\$2.9700	\$ 577,926	200,065	\$0.7300	\$ 146,047	200,065	\$1.7100	\$ 342,111	\$ 488,159
February	181,197	\$2.9700	\$ 538,155	198,297	\$0.7300	\$ 144,757	194,040	\$1.7100	\$ 331,808	\$ 476,565
March	183,996	\$2.9700	\$ 546,468	185,448	\$0.7300	\$ 135,377	185,448	\$1.7100	\$ 317,116	\$ 452,493
April	158,711	\$2.9700	\$ 471,372	167,444	\$0.7300	\$ 122,234	167,444	\$1.7100	\$ 286,329	\$ 408,563
May	165,687	\$2.9700	\$ 492,090	187,478	\$0.7300	\$ 136,859	187,478	\$1.7100	\$ 320,587	\$ 457,446
June	221,100	\$2.9700	\$ 656,667	224,434	\$0.7300	\$ 163,837	225,005	\$1.7100	\$ 384,759	\$ 548,595
July	183,726	\$2.9700	\$ 545,666	196,773	\$0.7300	\$ 143,644	196,773	\$1.7100	\$ 336,482	\$ 480,126
August	231,479	\$2.9700	\$ 687,493	238,044	\$0.7300	\$ 173,772	238,044	\$1.7100	\$ 407,055	\$ 580,827
September	170,805	\$2.9700	\$ 507,291	194,529	\$0.7300	\$ 142,006	194,529	\$1.7100	\$ 332,645	\$ 474,651
October	152,344	\$2.9700	\$ 452,462	165,164	\$0.7300	\$ 120,570	165,164	\$1.7100	\$ 282,430	\$ 403,000
November	178,274	\$2.9700	\$ 529,474	184,756	\$0.7300	\$ 134,872	184,756	\$1.7100	\$ 315,933	\$ 450,805
December	193,872	\$2.9700	\$ 575,800	213,586	\$0.7300	\$ 155,918	213,586	\$1.7100	\$ 365,232	\$ 521,150
Total	2,215,779	\$2.9700	\$6,580,863	2,356,018	\$0.7300	\$1,719,893	2,352,332	\$1.7100	\$4,022,488	\$5,742,381

Hydro One

Month	Network			Line Connection			Line Transformation			Total Line
	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Amount
	Includes Hydro One Rate Rider B1.3 UTR's and Sub-Transmission Cell K48			Includes Hydro One Rate Rider B1.3 UTR's and Sub-Transmission Cell K50						
January	59,895	\$2.6970	\$ 161,537	59,895	\$0.6150	\$ 36,835	-	\$1.5000	\$ -	\$ 36,835
February	56,090	\$2.6970	\$ 151,275	56,158	\$0.6150	\$ 34,537	-	\$1.5000	\$ -	\$ 34,537
March	53,585	\$2.6970	\$ 144,519	54,024	\$0.6150	\$ 33,225	-	\$1.5000	\$ -	\$ 33,225
April	53,731	\$2.6970	\$ 144,913	53,731	\$0.6150	\$ 33,045	-	\$1.5000	\$ -	\$ 33,045
May	57,541	\$2.6970	\$ 155,188	57,541	\$0.6150	\$ 35,388	-	\$1.5000	\$ -	\$ 35,388
June	90,957	\$2.6970	\$ 245,311	90,957	\$0.6150	\$ 55,939	-	\$1.5000	\$ -	\$ 55,939
July	84,405	\$2.6970	\$ 227,640	84,405	\$0.6150	\$ 51,909	-	\$1.5000	\$ -	\$ 51,909
August	104,765	\$2.6970	\$ 282,551	104,765	\$0.6150	\$ 64,430	-	\$1.5000	\$ -	\$ 64,430
September	78,356	\$2.6970	\$ 211,326	78,818	\$0.6150	\$ 48,473	-	\$1.5000	\$ -	\$ 48,473
October	63,818	\$2.6970	\$ 172,117	65,499	\$0.6150	\$ 40,282	-	\$1.5000	\$ -	\$ 40,282
November	54,278	\$2.6970	\$ 146,388	54,278	\$0.6150	\$ 33,381	-	\$1.5000	\$ -	\$ 33,381
December	60,019	\$2.6970	\$ 161,871	60,019	\$0.6150	\$ 36,912	-	\$1.5000	\$ -	\$ 36,912
Total	817,440	\$2.6970	\$2,204,636	820,090	\$0.6150	\$ 504,355	-	\$ -	\$ -	\$ 504,355

Total

Month	Network			Line Connection			Line Transformation			Total Line
	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Amount
January	254,483	\$2.9057	\$ 739,463	259,960	\$0.7035	\$ 182,883	200,065	\$1.7100	\$ 342,111	\$ 524,994
February	237,287	\$2.9055	\$ 689,429	254,455	\$0.7046	\$ 179,294	194,040	\$1.7100	\$ 331,808	\$ 511,102
March	237,581	\$2.9084	\$ 690,987	239,472	\$0.7041	\$ 168,602	185,448	\$1.7100	\$ 317,116	\$ 485,718
April	212,442	\$2.9010	\$ 616,284	221,175	\$0.7021	\$ 155,279	167,444	\$1.7100	\$ 286,329	\$ 441,608
May	223,228	\$2.8996	\$ 647,278	245,019	\$0.7030	\$ 172,247	187,478	\$1.7100	\$ 320,587	\$ 492,834
June	312,057	\$2.8904	\$ 901,978	315,391	\$0.6968	\$ 219,775	225,005	\$1.7100	\$ 384,759	\$ 604,534
July	268,131	\$2.8841	\$ 773,307	281,178	\$0.6955	\$ 195,553	196,773	\$1.7100	\$ 336,482	\$ 532,035
August	336,244	\$2.8849	\$ 970,044	342,809	\$0.6949	\$ 238,203	238,044	\$1.7100	\$ 407,055	\$ 645,258
September	249,161	\$2.8841	\$ 718,617	273,347	\$0.6968	\$ 190,479	194,529	\$1.7100	\$ 332,645	\$ 523,124
October	216,162	\$2.8894	\$ 624,579	230,663	\$0.6973	\$ 160,852	165,164	\$1.7100	\$ 282,430	\$ 443,282
November	232,552	\$2.9063	\$ 675,862	239,034	\$0.7039	\$ 168,253	184,756	\$1.7100	\$ 315,933	\$ 484,186
December	253,891	\$2.9055	\$ 737,671	273,605	\$0.7048	\$ 192,829	213,586	\$1.7100	\$ 365,232	\$ 558,062
Total	3,033,219	\$2.8964	\$8,785,499	3,176,108	\$0.7003	\$2,224,248	2,352,332	\$1.7100	\$4,022,488	\$6,246,736



Name of LDC: Oakville Hydro Electricity Distribution Inc.
 File Number: EB-2010-0104
 Version : 1.0

Forecast Wholesale Transmission

The purpose of this sheet is to calculate the expected billing when forecasted 2011 UTR rates are applied against historical (2009) transmission units.

IESO

Month	Network			Line Connection			Transformation Connection			Total Line
	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Amount
January	194,588	\$2.9700	\$ 577,926	200,065	\$0.7300	\$ 146,047	200,065	\$1.7100	\$ 342,111	\$ 488,159
February	181,197	\$2.9700	\$ 538,155	198,297	\$0.7300	\$ 144,757	194,040	\$1.7100	\$ 331,808	\$ 476,565
March	183,996	\$2.9700	\$ 546,468	185,448	\$0.7300	\$ 135,377	185,448	\$1.7100	\$ 317,116	\$ 452,493
April	158,711	\$2.9700	\$ 471,372	167,444	\$0.7300	\$ 122,234	167,444	\$1.7100	\$ 286,329	\$ 408,563
May	165,687	\$2.9700	\$ 492,090	187,478	\$0.7300	\$ 136,859	187,478	\$1.7100	\$ 320,587	\$ 457,446
June	221,100	\$2.9700	\$ 656,667	224,434	\$0.7300	\$ 163,837	225,005	\$1.7100	\$ 384,759	\$ 548,595
July	183,726	\$2.9700	\$ 545,666	196,773	\$0.7300	\$ 143,644	196,773	\$1.7100	\$ 336,482	\$ 480,126
August	231,479	\$2.9700	\$ 687,493	238,044	\$0.7300	\$ 173,772	238,044	\$1.7100	\$ 407,055	\$ 580,827
September	170,805	\$2.9700	\$ 507,291	194,529	\$0.7300	\$ 142,006	194,529	\$1.7100	\$ 332,645	\$ 474,651
October	152,344	\$2.9700	\$ 452,462	165,164	\$0.7300	\$ 120,570	165,164	\$1.7100	\$ 282,430	\$ 403,000
November	178,274	\$2.9700	\$ 529,474	184,756	\$0.7300	\$ 134,872	184,756	\$1.7100	\$ 315,933	\$ 450,805
December	193,872	\$2.9700	\$ 575,800	213,586	\$0.7300	\$ 155,918	213,586	\$1.7100	\$ 365,232	\$ 521,150
Total	2,215,779	\$2.9700	\$6,580,863	2,356,018	\$0.7300	\$1,719,893	2,352,332	\$1.7100	\$4,022,488	\$5,742,381

Hydro One

Month	Network			Line Connection			Line Transformation			Total Line
	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Amount
	Includes Hydro One Rate Rider B1.3 UTR's and Sub-Transmission Cell M48			Includes Hydro One Rate Rider B1.3 UTR's and Sub-Transmission Cell M50						
January	59,895	\$2.6970	\$ 161,537	59,895	\$0.6150	\$ 36,835	-	\$1.5000	\$ -	\$ 36,835
February	56,090	\$2.6970	\$ 151,275	56,158	\$0.6150	\$ 34,537	-	\$1.5000	\$ -	\$ 34,537
March	53,585	\$2.6970	\$ 144,519	54,024	\$0.6150	\$ 33,225	-	\$1.5000	\$ -	\$ 33,225
April	53,731	\$2.6970	\$ 144,913	53,731	\$0.6150	\$ 33,045	-	\$1.5000	\$ -	\$ 33,045
May	57,541	\$2.6970	\$ 155,188	57,541	\$0.6150	\$ 35,388	-	\$1.5000	\$ -	\$ 35,388
June	90,957	\$2.6970	\$ 245,311	90,957	\$0.6150	\$ 55,939	-	\$1.5000	\$ -	\$ 55,939
July	84,405	\$2.6970	\$ 227,640	84,405	\$0.6150	\$ 51,909	-	\$1.5000	\$ -	\$ 51,909
August	104,765	\$2.6970	\$ 282,551	104,765	\$0.6150	\$ 64,430	-	\$1.5000	\$ -	\$ 64,430
September	78,356	\$2.6970	\$ 211,326	78,818	\$0.6150	\$ 48,473	-	\$1.5000	\$ -	\$ 48,473
October	63,818	\$2.6970	\$ 172,117	65,499	\$0.6150	\$ 40,282	-	\$1.5000	\$ -	\$ 40,282
November	54,278	\$2.6970	\$ 146,388	54,278	\$0.6150	\$ 33,381	-	\$1.5000	\$ -	\$ 33,381
December	60,019	\$2.6970	\$ 161,871	60,019	\$0.6150	\$ 36,912	-	\$1.5000	\$ -	\$ 36,912
Total	817,440	\$2.6970	\$2,204,636	820,090	\$0.6150	\$ 504,355	-	\$ -	\$ -	\$ 504,355

Total

Month	Network			Line Connection			Line Transformation			Total Line
	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Units Billed	Rate	Amount	Amount
January	254,483	\$2.9057	\$ 739,463	259,960	\$0.7035	\$ 182,883	200,065	\$1.7100	\$ 342,111	\$ 524,994
February	237,287	\$2.9055	\$ 689,429	254,455	\$0.7046	\$ 179,294	194,040	\$1.7100	\$ 331,808	\$ 511,102
March	237,581	\$2.9084	\$ 690,987	239,472	\$0.7041	\$ 168,602	185,448	\$1.7100	\$ 317,116	\$ 485,718
April	212,442	\$2.9010	\$ 616,284	221,175	\$0.7021	\$ 155,279	167,444	\$1.7100	\$ 286,329	\$ 441,608
May	223,228	\$2.8996	\$ 647,278	245,019	\$0.7030	\$ 172,247	187,478	\$1.7100	\$ 320,587	\$ 492,834
June	312,057	\$2.8904	\$ 901,978	315,391	\$0.6968	\$ 219,775	225,005	\$1.7100	\$ 384,759	\$ 604,534
July	268,131	\$2.8841	\$ 773,307	281,178	\$0.6955	\$ 195,553	196,773	\$1.7100	\$ 336,482	\$ 532,035
August	336,244	\$2.8849	\$ 970,044	342,809	\$0.6949	\$ 238,203	238,044	\$1.7100	\$ 407,055	\$ 645,258
September	249,161	\$2.8841	\$ 718,617	273,347	\$0.6968	\$ 190,479	194,529	\$1.7100	\$ 332,645	\$ 523,124
October	216,162	\$2.8894	\$ 624,579	230,663	\$0.6973	\$ 160,852	165,164	\$1.7100	\$ 282,430	\$ 443,282
November	232,552	\$2.9063	\$ 675,862	239,034	\$0.7039	\$ 168,253	184,756	\$1.7100	\$ 315,933	\$ 484,186
December	253,891	\$2.9055	\$ 737,671	273,605	\$0.7048	\$ 192,829	213,586	\$1.7100	\$ 365,232	\$ 558,062
Total	3,033,219	\$2.8964	\$8,785,499	3,176,108	\$0.7003	\$2,224,248	2,352,332	\$1.7100	\$4,022,488	\$6,246,736



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Version : 1.0

Adjust RTSR-Network to Current Network Wholesale

The purpose of this sheet is to re-align current RTSR-Network to recover current wholesale Network costs.

Rate Class	Vol Metric	Current RTSR - Network	Loss Adjusted Billed kWh	Billed kW	Billed Amount	Billed Amount %	Current Wholesale Billing	Adjusted RTSR - Network
		(A) Column H Sheet B1.1	(B) Column O Sheet B1.2	(C) Column I Sheet B1.2	(D) = (A) * (B) or (A) * (C)	(F) = (D) / (E)	(H) = (G) * (F)	(I) = (H) / (B) or (H) / (C)
Residential	kWh	\$ 0.0055	583,830,856	0	\$ 3,211,070	40.41%	\$ 3,550,102	\$ 0.0061
General Service Less Than 50 kW	kWh	\$ 0.0051	179,197,074	0	\$ 913,905	11.50%	\$ 1,010,397	\$ 0.0056
General Service 50 to 999 kW	kW	\$ 1.9161	257,479,422	843,980	\$ 1,617,150	20.35%	\$ 1,787,893	\$ 2.1184
General Service 50 to 999 kW - Interval Metered	kW	\$ 1.9781	355,938,430	720,815	\$ 1,425,844	17.94%	\$ 1,576,388	\$ 2.1870
General Service Greater Than 1,000 kW	kW	\$ 1.9781	155,178,287	357,797	\$ 707,758	8.91%	\$ 782,485	\$ 2.1870
Unmetered Scattered Load	kWh	\$ 0.0051	4,143,540	0	\$ 21,132	0.27%	\$ 23,363	\$ 0.0056
Sentinel Lighting	kW	\$ 0.3841	141,813	372	\$ 143	0.00%	\$ 158	\$ 0.4247
Street Lighting	kW	\$ 1.5986	11,667,574	30,957	\$ 49,488	0.62%	\$ 54,713	\$ 1.7674
			1,547,576,994	1,953,921	\$ 7,946,490	100.00%	\$ 8,785,499	
					(E)		(G) Cell G73 Sheet C1.2	



Name of LDC: Oakville Hydro Electricity Distribution Inc.
 File Number: EB-2010-0104
 Version : 1.0

Adjust RTSR-Connection to Current Connection Wholesale

The purpose of this sheet is to re-align current RTSR-Connection to recover current wholesale Connection costs.

Rate Class	Vol Metric	Current RTSR - Connection	Loss Adjusted Billed kWh	Billed kW	Billed Amount	Billed Amount %	Current Wholesale Billing	Adjusted RTSR - Connection
		(A) Column J Sheet B1.1	(B) Column O Sheet B1.2	(C) Column I Sheet B1.2	(D) = (A) * (B) or (A) * (C)	(F) = (D) / (E)	(H) = (G) * (F)	(I) = (H) / (B) or (H) / (C)
Residential	kWh	\$ 0.0046	583,830,856	0	\$ 2,685,622	40.80%	\$ 2,548,832	\$ 0.0044
General Service Less Than 50 kW	kWh	\$ 0.0042	179,197,074	0	\$ 752,628	11.43%	\$ 714,293	\$ 0.0040
General Service 50 to 999 kW	kW	\$ 1.5762	257,479,422	843,980	\$ 1,330,281	20.21%	\$ 1,262,524	\$ 1.4959
General Service 50 to 999 kW - Interval Metered	kW	\$ 1.6273	355,938,430	720,815	\$ 1,172,982	17.82%	\$ 1,113,237	\$ 1.5444
General Service Greater Than 1,000 kW	kW	\$ 1.6273	155,178,287	357,797	\$ 582,243	8.85%	\$ 552,587	\$ 1.5444
Unmetered Scattered Load	kWh	\$ 0.0042	4,143,540	0	\$ 17,403	0.26%	\$ 16,516	\$ 0.0040
Sentinel Lighting	kW	\$ 0.3159	141,813	372	\$ 118	0.00%	\$ 112	\$ 0.2998
Street Lighting	kW	\$ 1.3150	11,667,574	30,957	\$ 40,708	0.62%	\$ 38,635	\$ 1.2480
			1,547,576,994	1,953,921	\$ 6,581,985	100.00%	\$ 6,246,736	
					(E)		(G) Cell Q73 Sheet C1.2	



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Version : 1.0

Adjust RTSR-Network to Forecast Network Wholesale

The purpose of this sheet is to update re-aligned RTSR-Network rates to recover forecast wholesale Network costs.

Rate Class	Vol Metric	Adjusted RTSR - Network	Loss Adjusted Billed kWh	Billed kW	Billed Amount	Billed Amount %	Forecast Wholesale Billing	Proposed RTSR - Network
		(A) Column S Sheet D1.1	(B) Column O Sheet B1.2	(C) Column I Sheet B1.2	(D) = (A) * (B) or (A) * (C)	(F) = (D) / (E)	(H) = (G) * (F)	(I) = (H) / (B) or (H) / (C)
Residential	kWh	\$ 0.0061	583,830,856	0	\$ 3,550,102	40.41%	\$ 3,550,102	\$ 0.0061
General Service Less Than 50 kW	kWh	\$ 0.0056	179,197,074	0	\$ 1,010,397	11.50%	\$ 1,010,397	\$ 0.0056
General Service 50 to 999 kW	kW	\$ 2.1184	257,479,422	843,980	\$ 1,787,893	20.35%	\$ 1,787,893	\$ 2.1184
General Service 50 to 999 kW - Interval Metered	kW	\$ 2.1870	355,938,430	720,815	\$ 1,576,388	17.94%	\$ 1,576,388	\$ 2.1870
General Service Greater Than 1,000 kW	kW	\$ 2.1870	155,178,287	357,797	\$ 782,485	8.91%	\$ 782,485	\$ 2.1870
Unmetered Scattered Load	kWh	\$ 0.0056	4,143,540	0	\$ 23,363	0.27%	\$ 23,363	\$ 0.0056
Sentinel Lighting	kW	\$ 0.4247	141,813	372	\$ 158	0.00%	\$ 158	\$ 0.4247
Street Lighting	kW	\$ 1.7674	11,667,574	30,957	\$ 54,713	0.62%	\$ 54,713	\$ 1.7674
			1,547,576,994	1,953,921	\$ 8,785,499	100.00%	\$ 8,785,499	
					(E)		Cell G73 Sheet C1.3	



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104
Version : 1.0

Adjust RTSR-Connection to Forecast Connection Wholesale

The purpose of this sheet is to update re-aligned RTSR-Connection rates to recover forecast wholesale Connection costs.

Rate Class	Vol Metric	Adjusted RTSR - Connection	Loss Adjusted Billed kWh	Billed kW	Billed Amount	Billed Amount %	Forecast Wholesale Billing	Proposed RTSR - Connection
		(A) Column S Sheet D1.2	(B) Column O Sheet B1.2	(C) Column I Sheet B1.2	(D) = (A) * (B) or (A) * (C)	(F) = (D) / (E)	(H) = (G) * (F)	(I) = (H) / (B) or (H) / (C)
Residential	kWh	\$ 0.0044	583,830,856	0	\$ 2,548,832	40.80%	\$ 2,548,832	\$ 0.0044
General Service Less Than 50 kW	kWh	\$ 0.0040	179,197,074	0	\$ 714,293	11.43%	\$ 714,293	\$ 0.0040
General Service 50 to 999 kW	kW	\$ 1.4959	257,479,422	843,980	\$ 1,262,524	20.21%	\$ 1,262,524	\$ 1.4959
General Service 50 to 999 kW - Interval Metered	kW	\$ 1.5444	355,938,430	720,815	\$ 1,113,237	17.82%	\$ 1,113,237	\$ 1.5444
General Service Greater Than 1,000 kW	kW	\$ 1.5444	155,178,287	357,797	\$ 552,587	8.85%	\$ 552,587	\$ 1.5444
Unmetered Scattered Load	kWh	\$ 0.0040	4,143,540	0	\$ 16,516	0.26%	\$ 16,516	\$ 0.0040
Sentinel Lighting	kW	\$ 0.2998	141,813	372	\$ 112	0.00%	\$ 112	\$ 0.2998
Street Lighting	kW	\$ 1.2480	11,667,574	30,957	\$ 38,635	0.62%	\$ 38,635	\$ 1.2480
			1,547,576,994	1,953,921	\$ 6,246,736	100.00%	\$ 6,246,736	
					(E)		Cell Q73 Sheet C1.3	



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: EB-2010-0104

IRM RTSR Adjustment Calculation - Network

The purpose of this sheet is to update re-aligned RTSR-Network rates to recover forecast wholesale Network costs.

Rate Class	Vol Metric	Current RTSR - Network (A) Column H Sheet B1.1	Proposed RTSR - Network (B) Column S Sheet E1.1	RTSR - Network Adjustment C = B - A
Residential	kWh	0.0055	0.0061	0.000580703
General Service Less Than 50 kW	kWh	0.0051	0	0.00053847
General Service 50 to 999 kW	kW	1.9161	2	0.20230627
General Service 50 to 999 kW - Interval Metered	kW	1.9781	2	0.208852373
General Service Greater Than 1,000 kW	kW	1.9781	2	0.208852373
Unmetered Scattered Load	kWh	0.0051	0	0.00053847
Sentinel Lighting	kW	0.3841	0	0.040554166
Street Lighting	kW	1.5986	2	0.168783885

Enter this value into column "G" on sheet "L1.1 Appl For TX Network" of the 2011 Rate Generator



Name of LDC: Oakville Hydro Electricity Distribution Inc.
 File Number: EB-2010-0104

IRM RTSR Adjustment Calculation - Connection

The purpose of this sheet is to update re-aligned RTSR-Network rates to recover forecast wholesale Network costs.

Rate Class	Vol Metric	Current RTSR - Connection (A) Column J Sheet B1.1	Proposed RTSR - Connection (B) Column S Sheet E1.2	RTSR - Network Adjustment C = B - A
Residential	kWh	0.0046	0.0044	-0.000234298
General Service Less Than 50 kW	kWh	0.0042	0.0040	-0.000213924
General Service 50 to 999 kW	kW	1.5762	1.4959	-0.080282707
General Service 50 to 999 kW - Interval Metered	kW	1.6273	1.5444	-0.082885452
General Service Greater Than 1,000 kW	kW	1.6273	1.5444	-0.082885452
Unmetered Scattered Load	kWh	0.0042	0.0040	-0.000213924
Sentinel Lighting	kW	0.3159	0.2998	-0.016090158
Street Lighting	kW	1.3150	1.2480	-0.066978658

Enter this value into
 column "G" on sheet "L2.1
 Appl For TX Connect" of
 the 2011 Rate Generator



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

LDC Information

Applicant Name	Oakville Hydro Electricity Distribution Inc.
OEB Application Number	IRM3
LDC Licence Number	ED-2003-0135
Applied for Effective Date	May 1, 2011
Last COS Re-based Year	2010
Last COS OEB Application Number	EB-2009-0271



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

Table of Contents

Sheet Name

[A1.1 LDC Information](#)

[A2.1 Table of Contents](#)

[B1.1 Re-Based Bill Det & Rates](#)

[B1.3 Re-Based Rev From Rates](#)

[F1.1 Z-Factor Tax Changes](#)

[F1.3 Calc Tax Chg RRider Var](#)

Purpose of Sheet

Enter LDC Data

Table of Contents

Set Up Rate Classes and enter Re-Based Billing Determinants and Tariff Rates

Calculated Re-Based Revenue From Rates

Sharing formula for Tax changes - this is very preliminary

Option B - Calculation of Tax Sharing Rate Rider - Volumetric Allocation



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

Rate Class and Re-Based Billing Determinants & Rates

Last COS Re-based Year

2010

Last COS OEB Application Number

EB-2009-0271

Rate Group	Rate Class	Fixed Metric	Vol Metric	Re-based Billed Customers or Connections A	Re-based Billed kWh B	Re-based Billed kW C	Rate ReBal Base Service Charge D	Rate ReBal Base Distribution Volumetric Rate kWh E	Rate ReBal Base Distribution Volumetric Rate kW F
RES	Residential	Customer	kWh	58,617	557,127,208		13.25	0.0145	
GSLT50	General Service Less Than 50 kW	Customer	kWh	5,109	173,390,609		32.54	0.0143	
GSGT50	General Service 50 to 999 kW	Customer	kW	833	594,844,951	1,670,520	116.64		3.6216
GSGT50	General Service 1,000 to 4,999 kW	Customer	kW	17	147,132,426	353,675	3,417.13		1.8864
USL	Unmetered Scattered Load	Connection	kWh	696	3,881,044		11.40	0.0106	
Sen	Sentinel Lighting	Connection	kW	227	135,511	389	1.48		25.0161
SL	Street Lighting	Connection	kW	16,783	11,730,313	33,349	1.70		10.3987
NA	Rate Class 8	NA	NA						
NA	Rate Class 9	NA	NA						
NA	Rate Class 10	NA	NA						
NA	Rate Class 11	NA	NA						
NA	Rate Class 12	NA	NA						
NA	Rate Class 13	NA	NA						
NA	Rate Class 14	NA	NA						
NA	Rate Class 15	NA	NA						
NA	Rate Class 16	NA	NA						
NA	Rate Class 17	NA	NA						
NA	Rate Class 18	NA	NA						
NA	Rate Class 19	NA	NA						
NA	Rate Class 20	NA	NA						
NA	Rate Class 21	NA	NA						
NA	Rate Class 22	NA	NA						
NA	Rate Class 23	NA	NA						
NA	Rate Class 24	NA	NA						
NA	Rate Class 25	NA	NA						



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

Calculated Re-Based Revenue From Rates

Last COS Re-based Year **2010**

Last COS OEB Application Number **EB-2009-0271**

Rate Class	Re-based Billed Customers or Connections A	Re-based Billed kWh B	Re-based Billed kW C	Rate ReBal Base Service Charge D	Rate ReBal Base Distribution Volumetric Rate kWh E	Rate ReBal Base Distribution Volumetric Rate kW F	Service Charge Revenue G = A * D * 12	Distribution Volumetric Rate Revenue kWh H = B * E	Distribution Volumetric Rate Revenue kW I = C * F	Revenue Requirement from Rates J = G + H + I
Residential	58,617	557,127,208	0	13.25	0.0145	0.0000	9,320,103	8,078,345	0	17,398,448
General Service Less Than 50 kW	5,109	173,390,609	0	32.54	0.0143	0.0000	1,994,962	2,479,486	0	4,474,448
General Service 50 to 999 kW	833	594,844,951	1,670,520	116.64	0.0000	3.6216	1,165,933	0	6,049,955	7,215,889
General Service 1,000 to 4,999 kW	17	147,132,426	353,675	3,417.13	0.0000	1.8864	697,095	0	667,173	1,364,267
Unmetered Scattered Load	696	3,881,044	0	11.40	0.0106	0.0000	95,213	41,139	0	136,352
Sentinel Lighting	227	135,511	389	1.48	0.0000	25.0161	4,032	0	9,731	13,763
Street Lighting	16,783	11,730,313	33,349	1.70	0.0000	10.3987	342,373	0	346,786	689,159
							13,619,711	10,598,969	7,073,645	31,292,325



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

Z-Factor Tax Changes

Summary - Sharing of Tax Change Forecast Amounts

1. Tax Related Amounts Forecast from Capital Tax Rate Changes

	2010	2011	2012
Taxable Capital	\$ 130,871,743	\$ 130,871,743	\$ 130,871,743
Deduction from taxable capital up to \$15,000,000	\$ 15,000,000	\$ 15,000,000	\$ 15,000,000
Net Taxable Capital	\$ 115,871,743	\$ 115,871,743	\$ 115,871,743
Rate	0.150%	0.000%	0.000%
Ontario Capital Tax (Deductible, not grossed-up)	\$ 86,190	\$ -	\$ -

2. Tax Related Amounts Forecast from Income Tax Rate Changes

Regulatory Taxable Income	\$ 4,922,783	\$ 4,922,783	\$ 4,922,783
Corporate Tax Rate	30.99%	28.25%	26.25%
Tax Impact	\$ 1,525,669	\$ 1,390,588	\$ 1,292,181
Grossed-up Tax Amount	\$ 2,210,858	\$ 1,938,047	\$ 1,752,086

Tax Related Amounts Forecast from Capital Tax Rate Changes	\$ 86,190	\$ -	\$ -
Tax Related Amounts Forecast from Income Tax Rate Changes	\$ 2,210,858	\$ 1,938,047	\$ 1,752,086
Total Tax Related Amounts	\$ 2,297,048	\$ 1,938,047	\$ 1,752,086
Incremental Tax Savings		-\$ 359,000	-\$ 544,961
Sharing of Tax Savings (50%)		-\$ 179,500	-\$ 272,481



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

Calculate Tax Change Rate Rider Volumetric

Rate Class	Total Revenue \$ by Rate Class A	Total Revenue % by Rate Class B = A / \$H	Total Z-Factor Tax Change\$ by Rate Class C = \$I * B	Billed kWh D	Billed kW E	Distribution Volumetric Rate kWh Rate Rider F = C / D	Distribution Volumetric Rate kW Rate Rider G = C / E
Residential	\$17,398,447.5160	55.60%	-\$99,802	557,127,208	0	-\$0.0002	
General Service Less Than 50 kW	\$4,474,448	14.30%	-\$25,666	173,390,609	0	-\$0.0001	
General Service 50 to 999 kW	\$7,215,889	23.06%	-\$41,392	594,844,951	1,670,520		-\$0.0248
General Service 1,000 to 4,999 kW	\$1,364,267	4.36%	-\$7,826	147,132,426	353,675		-\$0.0221
Unmetered Scattered Load	\$136,352	0.44%	-\$782	3,881,044	0	-\$0.0002	
Sentinel Lighting	\$13,763	0.04%	-\$79	135,511	389		-\$0.2029
Street Lighting	\$689,159	2.20%	-\$3,953	11,730,313	33,349		-\$0.1185
	\$31,292,325 H	100.00%	-\$179,500 I				

Enter the above value onto Sheet
"J2.7 Tax Change Rate Rider"
of the 2011 IRM3 Rate Generator.



Oakville Hydro Electricity Distribution Inc.

ED-2003-0135

EB-2010-0104

Version : 1.0

Incremental Capital Project Summary

Name or General Description of Project

North Oakville TS Project

Details of Project

Design and construct a municipal transformer station in North Oakville

Asset Component		Capital Cost	Depreciation Rate	CCA Class	CCA Rate	
1	TS Switchgear - Gas, Transformer	11,441,419	3%	47	8%	
2	Substation Equipment, Underground Cable, Meters, Capital Contribution	3,138,676	4%	47	8%	
3	Duct & Civil, Building	4,356,536	2%	47	8%	
4	SCADA & DC Systems	134,371	10%	45	45%	
5	Land	1,417,486				
		2011	2012	2013	2014	2015
Closing Net Fixed Asset		19,919,131	19,349,773	18,780,416	18,211,058	17,641,701
Amortization Expense		569,357	569,357	569,357	569,357	569,357
CCA		1,575,397	1,426,993	1,300,528	1,189,718	1,090,819



Oakville Hydro Electricity Distribution Inc.

ED-2003-0135

EB-2010-0104

Version : 1.0

Fixed Asset Amortization and UCC 1

Name or General Description of Project

North Oakville TS Project

Asset Component

TS Switchgear - Gas, Transformer

Average Net Fixed Assets

Net Fixed Assets

Opening Capital Investment
Capital Investment
Closing Capital Investment

Opening Accumulated Amortization
Amortization
Closing Accumulated Amortization

Opening Net Fixed Assets
Closing Net Fixed Assets
Average Net Fixed Assets

	2011 Forecasted	2012 Forecasted	2013 Forecasted	2014 Forecasted	2015 Forecasted
Opening Capital Investment	\$ -	#####	#####	#####	#####
Capital Investment	##### \$ -	\$ -	\$ -	\$ -	\$ -
Closing Capital Investment	#####	#####	#####	#####	#####
Opening Accumulated Amortization	\$ -	\$ 343,243	\$ 686,485	\$ 1,029,728	\$ 1,372,970
Amortization	3% \$ 343,243	\$ 343,243	\$ 343,243	\$ 343,243	\$ 343,243
Closing Accumulated Amortization	\$ 343,243	\$ 686,485	\$ 1,029,728	\$ 1,372,970	\$ 1,716,213
Opening Net Fixed Assets	\$ -	#####	#####	#####	#####
Closing Net Fixed Assets	#####	#####	#####	#####	\$ 9,725,206
Average Net Fixed Assets	\$ 5,549,088	#####	#####	#####	\$ 9,896,827

For PILs Calculation

UCC

Opening UCC
Capital Additions
UCC Before Half Year Rule
Half Year Rule (1/2 Additions - Disposals)
Reduced UCC
CCA Rate Class
CCA Rate
CCA
Closing UCC

	2011 Forecasted	2012 Forecasted	2013 Forecasted	2014 Forecasted	2015 Forecasted
Opening UCC	\$ -	#####	\$ 9,684,017	\$ 8,909,296	\$ 8,196,552
Capital Additions	##### \$ -	\$ -	\$ -	\$ -	\$ -
UCC Before Half Year Rule	#####	#####	\$ 9,684,017	\$ 8,909,296	\$ 8,196,552
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ -	\$ -
Reduced UCC	#####	#####	\$ 9,684,017	\$ 8,909,296	\$ 8,196,552
CCA Rate Class	47				
CCA Rate	8%				
CCA	\$ 915,314	\$ 842,088	\$ 774,721	\$ 712,744	\$ 655,724
Closing UCC	#####	\$ 9,684,017	\$ 8,909,296	\$ 8,196,552	\$ 7,540,828



Oakville Hydro Electricity Distribution Inc.

ED-2003-0135

EB-2010-0104

Version : 1.0

Fixed Asset Amortization and UCC 1

Name or General Description of Project

North Oakville TS Project

Asset Component

Substation Equipment, Underground Cable, Meters, Capital Contribution

Average Net Fixed Assets

Net Fixed Assets

Opening Capital Investment

Capital Investment

Closing Capital Investment

Opening Accumulated Amortization

Amortization

Closing Accumulated Amortization

Opening Net Fixed Assets

Closing Net Fixed Assets

Average Net Fixed Assets

	2011	2012	2013	2014	2015
	Forecasted	Forecasted	Forecasted	Forecasted	Forecasted
	\$ -	#####	#####	#####	#####
	#####	\$ -	\$ -	\$ -	\$ -
	#####	#####	#####	#####	#####
	\$ -	\$ 125,547	\$ 251,094	\$ 376,641	\$ 502,188
4%	\$ 125,547	\$ 125,547	\$ 125,547	\$ 125,547	\$ 125,547
	\$ 125,547	\$ 251,094	\$ 376,641	\$ 502,188	\$ 627,735
	\$ -	#####	#####	#####	#####
	#####	#####	#####	#####	#####
	#####	#####	#####	#####	#####

For PILs Calculation

UCC

Opening UCC

Capital Additions

UCC Before Half Year Rule

Half Year Rule (1/2 Additions - Disposals)

Reduced UCC

CCA Rate Class

CCA Rate

CCA

Closing UCC

	2011	2012	2013	2014	2015
	Forecasted	Forecasted	Forecasted	Forecasted	Forecasted
	\$ -	#####	#####	#####	#####
	#####	\$ -	\$ -	\$ -	\$ -
	#####	#####	#####	#####	#####
	\$ -	\$ -	\$ -	\$ -	\$ -
	#####	#####	#####	#####	#####
47					
8%	\$ 251,094	\$ 231,007	\$ 212,526	\$ 195,524	\$ 179,882
	#####	#####	#####	#####	#####



Oakville Hydro Electricity Distribution Inc.

ED-2003-0135

EB-2010-0104

Version : 1.0

Fixed Asset Amortization and UCC 1

Name or General Description of Project

North Oakville TS Project

Asset Component

Duct & Civil, Building

Average Net Fixed Assets

Net Fixed Assets

Opening Capital Investment

Capital Investment

Closing Capital Investment

Opening Accumulated Amortization

Amortization

Closing Accumulated Amortization

Opening Net Fixed Assets

Closing Net Fixed Assets

Average Net Fixed Assets

	2011	2012	2013	2014	2015
	Forecasted	Forecasted	Forecasted	Forecasted	Forecasted
	\$ -	#####	#####	#####	#####
	#####	\$ -	\$ -	\$ -	\$ -
	#####	#####	#####	#####	#####
	\$ -	\$ 87,131	\$ 174,261	\$ 261,392	\$ 348,523
2%	\$ 87,131	\$ 87,131	\$ 87,131	\$ 87,131	\$ 87,131
	\$ 87,131	\$ 174,261	\$ 261,392	\$ 348,523	\$ 435,654
	\$ -	#####	#####	#####	#####
	#####	#####	#####	#####	#####
	#####	#####	#####	#####	#####

For PILs Calculation

UCC

Opening UCC

Capital Additions

UCC Before Half Year Rule

Half Year Rule (1/2 Additions - Disposals)

Reduced UCC

CCA Rate Class

CCA Rate

CCA

Closing UCC

	2011	2012	2013	2014	2015
	Forecasted	Forecasted	Forecasted	Forecasted	Forecasted
	\$ -	#####	#####	#####	#####
	#####	\$ -	\$ -	\$ -	\$ -
	#####	#####	#####	#####	#####
	\$ -	\$ -	\$ -	\$ -	\$ -
	#####	#####	#####	#####	#####
47					
8%	\$ 348,523	\$ 320,641	\$ 294,990	\$ 271,391	\$ 249,679
	#####	#####	#####	#####	#####



Oakville Hydro Electricity Distribution Inc.

ED-2003-0135

EB-2010-0104

Version : 1.0

Fixed Asset Amortization and UCC 1

Name or General Description of Project

North Oakville TS Project

Asset Component

SCADA & DC Systems

Average Net Fixed Assets

Net Fixed Assets

Opening Capital Investment

Capital Investment

Closing Capital Investment

Opening Accumulated Amortization

Amortization

Closing Accumulated Amortization

Opening Net Fixed Assets

Closing Net Fixed Assets

Average Net Fixed Assets

	2011	2012	2013	2014	2015
	Forecasted	Forecasted	Forecasted	Forecasted	Forecasted
Opening Capital Investment	\$ -	\$ 134,371	\$ 134,371	\$ 134,371	\$ 134,371
Capital Investment	\$ 134,371	\$ -	\$ -	\$ -	\$ -
Closing Capital Investment	\$ 134,371	\$ 134,371	\$ 134,371	\$ 134,371	\$ 134,371
Opening Accumulated Amortization	\$ -	\$ 13,437	\$ 26,874	\$ 40,311	\$ 53,748
Amortization	\$ 13,437	\$ 13,437	\$ 13,437	\$ 13,437	\$ 13,437
Closing Accumulated Amortization	\$ 13,437	\$ 26,874	\$ 40,311	\$ 53,748	\$ 67,186
Opening Net Fixed Assets	\$ -	\$ 120,934	\$ 107,497	\$ 94,060	\$ 80,623
Closing Net Fixed Assets	\$ 120,934	\$ 107,497	\$ 94,060	\$ 80,623	\$ 67,186
Average Net Fixed Assets	\$ 60,467	\$ 114,215	\$ 100,778	\$ 87,341	\$ 73,904

For PILs Calculation

UCC

Opening UCC

Capital Additions

UCC Before Half Year Rule

Half Year Rule (1/2 Additions - Disposals)

Reduced UCC

CCA Rate Class

CCA Rate

CCA

Closing UCC

	2011	2012	2013	2014	2015
	Forecasted	Forecasted	Forecasted	Forecasted	Forecasted
Opening UCC	\$ -	\$ 73,904	\$ 40,647	\$ 22,356	\$ 12,296
Capital Additions	\$ 134,371	\$ -	\$ -	\$ -	\$ -
UCC Before Half Year Rule	\$ 134,371	\$ 73,904	\$ 40,647	\$ 22,356	\$ 12,296
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -	\$ -	\$ -
Reduced UCC	\$ 134,371	\$ 73,904	\$ 40,647	\$ 22,356	\$ 12,296
CCA Rate Class	45				
CCA Rate	45%				
CCA	\$ 60,467	\$ 33,257	\$ 18,291	\$ 10,060	\$ 5,533
Closing UCC	\$ 73,904	\$ 40,647	\$ 22,356	\$ 12,296	\$ 6,763



Oakville Hydro Electricity Distribution Inc.

ED-2003-0135

EB-2010-0104

Version : 1.0

Fixed Asset Amortization and UCC 5

Name or General Description of Project

North Oakville TS Project

Asset Component

Land

Average Net Fixed Assets

Net Fixed Assets

Opening Capital Investment

Capital Investment

Closing Capital Investment

Opening Accumulated Amortization

Amortization

Closing Accumulated Amortization

Opening Net Fixed Assets

Closing Net Fixed Assets

Average Net Fixed Assets

	2011	2012	2013	2014	2015
	Forecasted	Forecasted	Forecasted	Forecasted	Forecasted
	\$ -	#####	#####	#####	#####
	#####	\$ -	\$ -	\$ -	\$ -
	#####	#####	#####	#####	#####
	\$ -	\$ -	\$ -	\$ -	\$ -
0%	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -	\$ -	\$ -	\$ -	\$ -
	\$ -	#####	#####	#####	#####
	#####	#####	#####	#####	#####
	\$ 708,743	#####	#####	#####	#####

For PILs Calculation

UCC

Opening UCC

Capital Additions

UCC Before Half Year Rule

Half Year Rule (1/2 Additions - Disposals)

Reduced UCC

CCA Rate Class

CCA Rate

CCA

Closing UCC

	2011	2012	2013	2014	2015
	Forecasted	Forecasted	Forecasted	Forecasted	Forecasted
	\$ -	#####	#####	#####	#####
	#####	\$ -	\$ -	\$ -	\$ -
	#####	#####	#####	#####	#####
	\$ -	\$ -	\$ -	\$ -	\$ -
	#####	#####	#####	#####	#####
0					
0%	\$ -	\$ -	\$ -	\$ -	\$ -
	#####	#####	#####	#####	#####



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

LDC Information

Applicant Name	Oakville Hydro Electricity Distribution Inc.
OEB Application Number	IRM3
LDC Licence Number	ED-2003-0135
Applied for Effective Date	May 1, 2011
Stretch Factor Group	II
Stretch Factor Value	0.4%
Last COS Re-based Year	2010
Last COS OEB Application Number	EB-2009-0271
ICM Billing Determinants for Growth - Numerator	2010 Re-Based Forecast
ICM Billing Determinants for Growth - Denominator	2009 Audited RRR



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

Table of Contents

Sheet Name	Purpose of Sheet
A1.1 LDC Information	Enter LDC Data
A2.1 Table of Contents	Table of Contents
B1.1 Re-Based Bill Det & Rates	Set Up Rate Classes and enter Re-Based Billing Determinants and Tariff Rates
B1.2 Removal of Rate Adders	Removal of Rate Adders
B1.3 Re-Based Rev From Rates	Calculated Re-Based Revenue From Rates
B1.4 Re-Based Rev Req	Detailed Re-Based Revenue From Rates
C1.1 Ld Act-Mst Rcent Yr	Enter Billing Determinants for most recent actual year
D1.1 Current Revenue from Rates	Enter Current Rates to calculate current rate allocation
E1.1 Threshold Parameters	Shows calculation of Price Cap and Growth used for incremental capital threshold calculation
E2.1 Threshold Test	Input sheet to calculate Threshold and Incremental Capital
E3.1 Summary of I.C.Projects	Summary of Incremental Capital Projects
E4.1 IncrementalCapitalAdjust	Shows Calculation of Incremental Capital Revenue Requirement
F1.1 Incr Cap RRider Opt A FV	Option A - Calculation of Incremental Capital Rate Rider - Fixed & Variable Split
F1.2 Incr Cap RRider Opt B Var	Option B - Calculation of Incremental Capital Rate Rider - Variable Allocation



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

Rate Class and Re-Based Billing Determinants & Rates

Last COS Re-based Year				2010					
Last COS OEB Application Number				EB-2009-0271					
Rate Group	Rate Class	Fixed Metric	Vol Metric	Re-based Billed Customers or Connections A	Re-based Billed kWh B	Re-based Billed kW C	Re-based Tariff Service Charge D	Re-based Tariff Distribution Volumetric Rate kWh E	Re-based Tariff Distribution Volumetric Rate kW F
RES	Residential	Customer	kWh	58,617	557,127,208		13.25	0.0145	
GSLT50	General Service Less Than 50 kW	Customer	kWh	5,109	173,390,609		32.54	0.0143	
GSGT50	General Service 50 to 999 kW	Customer	kW	833	594,844,951	1,670,520	116.64		3.6216
GSGT50	General Service 1,000 to 4,999 kW	Customer	kW	17	147,132,426	353,675	3,417.13		1.8664
USL	Unmetered Scattered Load	Connection	kWh	696	3,881,044		11.40	0.0106	
Sen	Sentinel Lighting	Connection	kW	227	135,511	389	1.48		25.0161
SL	Street Lighting	Connection	kW	16,783	11,730,313	33,349	1.70		10.3987
NA	Rate Class 8	NA	NA						
NA	Rate Class 9	NA	NA						
NA	Rate Class 10	NA	NA						
NA	Rate Class 11	NA	NA						
NA	Rate Class 12	NA	NA						
NA	Rate Class 13	NA	NA						
NA	Rate Class 14	NA	NA						
NA	Rate Class 15	NA	NA						
NA	Rate Class 16	NA	NA						
NA	Rate Class 17	NA	NA						
NA	Rate Class 18	NA	NA						
NA	Rate Class 19	NA	NA						
NA	Rate Class 20	NA	NA						
NA	Rate Class 21	NA	NA						
NA	Rate Class 22	NA	NA						
NA	Rate Class 23	NA	NA						
NA	Rate Class 24	NA	NA						
NA	Rate Class 25	NA	NA						



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

Removal of Rate Adders

Last COS Re-based Year	2010
Last COS OEB Application Number	EB-2009-0271

Rate Class	Re-based Tariff Service Charge A	Re-based Tariff Distribution Volumetric Rate kWh B	Re-based Tariff Distribution Volumetric Rate kW C	Service Charge Rate Adders D	Distribution Volumetric kWh Rate Adders E	Distribution Volumetric kW Rate Adders F
Residential	13.25	0.0145	0.0000	0.00	0.0000	0.0000
General Service Less Than 50 kW	32.54	0.0143	0.0000	0.00	0.0000	0.0000
General Service 50 to 999 kW	116.64	0.0000	3.6216	0.00	0.0000	0.0000
General Service 1,000 to 4,999 kW	3,417.13	0.0000	1.8664	0.00	0.0000	0.0000
Unmetered Scattered Load	11.40	0.0106	0.0000	0.00	0.0000	0.0000
Sentinel Lighting	1.48	0.0000	25.0161	0.00	0.0000	0.0000
Street Lighting	1.70	0.0000	10.3987	0.00	0.0000	0.0000



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

Calculated Re-Based Revenue From Rates

Last COS Re-based Year 2010

Last COS OEB Application Number EB-2009-0271

Rate Class	Re-based Billed Customers or Connections A	Re-based Billed kWh B	Re-based Billed kW C	Re-based Base Service Charge D	Re-based Base Distribution Volumetric Rate kWh E	Re-based Base Distribution Volumetric Rate kW F	Service Charge Revenue G = A * D * 12	Distribution Volumetric Rate Revenue kWh H = B * E	Distribution Volumetric Rate Revenue kW I = C * F	Revenue Requirement from Rates J = G + H + I
Residential	58,617	557,127,208	0	13.25	0.0145	0.0000	9,320,103	8,078,345	0	17,398,448
General Service Less Than 50 kW	5,109	173,390,609	0	32.54	0.0143	0.0000	1,994,962	2,479,486	0	4,474,448
General Service 50 to 999 kW	833	594,844,951	1,670,520	116.64	0.0000	3.6216	1,165,933	0	6,049,955	7,215,889
General Service 1,000 to 4,999 kW	17	147,132,426	353,675	3,417.13	0.0000	1.8664	697,095	0	660,099	1,357,194
Unmetered Scattered Load	696	3,881,044	0	11.40	0.0106	0.0000	95,213	41,139	0	136,352
Sentinel Lighting	227	135,511	389	1.48	0.0000	25.0161	4,032	0	9,731	13,763
Street Lighting	16,783	11,730,313	33,349	1.70	0.0000	10.3987	342,373	0	346,786	689,159
							13,619,711	10,598,969	7,066,572	31,285,252



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

Detailed Re-Based Revenue From Rates

Last COS Re-based Year 2010

Last COS OEB Application Number EB-2009-0271

Applicants Rate Base

Average Net Fixed Assets

Gross Fixed Assets - Re-based Opening
Add: CWIP Re-based Opening
Re-based Capital Additions
Re-based Capital Disposals
Re-based Capital Retirements
Deduct: CWIP Re-based Closing
Gross Fixed Assets - Re-based Closing
Average Gross Fixed Assets

\$ 187,960,573
\$ 7,285,640
\$ 14,721,227

- \$ 7,285,640
\$ 202,681,800

A
B
C
D
E
F
G

\$ 195,321,187 H = (A + G) / 2

Accumulated Depreciation - Re-based Opening
Re-based Depreciation Expense
Re-based Disposals
Re-based Retirements
Accumulated Depreciation - Re-based Closing
Average Accumulated Depreciation

\$ 79,297,219
\$ 9,807,682

\$ 89,104,901

I
J
K
L
M

\$ 84,201,060 N = (I + M) / 2

Average Net Fixed Assets

\$ 111,120,127 O = H - N

Working Capital Allowance

Working Capital Allowance Base
Working Capital Allowance Rate

\$ 131,677,443
15.0%

P
Q

\$ 19,751,616 R = P * Q

Working Capital Allowance

Rate Base

\$ 130,871,743 S = O + R

Return on Rate Base

Deemed ShortTerm Debt %
Deemed Long Term Debt %
Deemed Equity %

4.00%
56.00%
40.00%

T
U
V

\$ 5,234,870 W = S * T
\$ 73,288,176 X = S * U
\$ 52,348,697 Y = S * V

Short Term Interest

2.07%

Z

\$ 108,362 AC = W * Z

Long Term Interest

5.87%

AA

\$ 4,302,016 AD = X * AA

Return on Equity

9.85%

AB

\$ 5,156,347 AE = Y * AB

Return on Rate Base

\$ 9,566,724 AF = AC + AD + AE

Distribution Expenses

OM&A Expenses
Amortization
Ontario Capital Tax (F1.1 Z-Factor Tax Changes)
Grossed Up PILs (F1.1 Z-Factor Tax Changes)
Low Voltage
Transformer Allowance

\$ 11,839,403
\$ 9,807,682
\$ 86,904
\$ 1,899,098

\$ 113,555

AG
AH
AI
AJ
AK
AL

AM
AN
AO
\$ 23,746,642 AP = SUM (AG : AO)

Revenue Offsets

Specific Service Charges
Late Payment Charges
Other Distribution Income
Other Income and Deductions

-\$ 342,325
-\$ 256,834
-\$ 636,130
-\$ 827,874

AQ
AR
AS
AT

-\$ 2,063,163 AU = SUM (AQ : AT)

Revenue Requirement from Distribution Rates

\$ 31,250,204 AV = AF + AP + AU

Rate Classes Revenue

Rate Classes Revenue - Total (B1.1 Re-based Revenue - Gen)

\$ 31,285,252 AW



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

Load Actual - Most Recent Year

Please enter 2009 Audited RRR on this page

Rate Class	Fixed Metric	Vol Metric	Billed Customers or Connections A	Billed kWh B	Billed kW C	Base Service Charge D	Base Distribution Volumetric Rate kWh E	Base Distribution Volumetric Rate kW F	Service Charge Revenue G = A * D * 12	Distribution Volumetric Rate Revenue kWh H = B * E	Distribution Volumetric Rate Revenue kW I = C * F	Total Revenue by Rate Class J = G + H + I
Residential	Customer	kWh	56,419	555,127,459	0	\$13.25	\$0.0145	\$0.0000	\$8,970,621	\$8,049,348	\$0	\$17,019,969
General Service Less Than 50 kW	Customer	kWh	4,887	170,241,898	0	\$32.54	\$0.0143	\$0.0000	\$1,908,276	\$2,434,459	\$0	\$4,342,735
General Service 50 to 999 kW	Customer	kW	855	584,050,240	1,564,795	\$116.64	\$0.0000	\$3.6216	\$1,196,726	\$0	\$5,667,062	\$6,863,788
General Service 1,000 to 4,999 kW	Customer	kW	18	147,437,802	357,797	\$3,417.13	\$0.0000	\$1.8664	\$738,100	\$0	\$667,792	\$1,405,892
Unmetered Scattered Load	Connection	kWh	679	3,936,855	0	\$11.40	\$0.0106	\$0.0000	\$92,887	\$41,731	\$0	\$134,618
Sentinel Lighting	Connection	kW	163	133,918	30,957	\$1.48	\$0.0000	\$25.0161	\$3,250	\$0	\$774,623	\$777,873
Street Lighting	Connection	kW	16,286	11,085,581	2,363	\$1.70	\$0.0000	\$10.3987	\$332,234	\$0	\$24,572	\$356,807
									\$13,242,095	\$10,525,538	\$7,133,649	\$30,901,482



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

Current Revenue from Rates

This sheet is used to determine the applicants most current allocation of revenues (after the most recent revenue cost ratio adjustment, if applicable) to be used to calculate the incremental capital rate riders.

Rate Class	Fixed Metric	Vol Metric	Current Base Service Charge A	Current Base Distribution Volumetric Rate kWh B	Current Base Distribution Volumetric Rate kW C	Re-based Billed Customers or Connections D	Re-based Billed kWh E	Re-based Billed kW F	Current Base Service Charge Revenue G = A * D * 12	Current Base Distribution Volumetric Rate kWh Revenue H = B * E	Current Base Distribution Volumetric Rate kW Revenue I = C * F	Total Current Base Revenue J = G + H + I	Service Charge % Total Revenue L = G / SK	Distribution Volumetric Rate % Total Revenue M = H / SK	Distribution Volumetric Rate % Total Revenue N = I / SK	Total % Revenue O = J / SK
Residential	Customer	kWh	13.25	0.0145		58,617	557,127,208	0	9,320,103	8,078,345	0	17,398,448	29.8%	25.8%	0.0%	55.6%
General Service Less Than 50 kW	Customer	kWh	32.54	0.0143		5,109	173,390,609	0	1,994,962	2,479,486	0	4,474,448	6.4%	7.9%	0.0%	14.3%
General Service 50 to 999 kW	Customer	kW	116.64		3.6216	833	594,844,951	1,670,520	1,165,933	0	6,049,955	7,215,889	3.7%	0.0%	19.3%	23.1%
General Service 1,000 to 4,999 kW	Customer	kW	3,417.13		1.8664	17	147,132,426	353,675	697,095	0	660,099	1,357,194	2.2%	0.0%	2.1%	4.3%
Unmetered Scattered Load	Connection	kWh	11.40	0.0106		696	3,881,044	0	95,213	41,139	0	136,352	0.3%	0.1%	0.0%	0.4%
Sentinel Lighting	Connection	kW	1.48		25.0161	227	135,511	369	4,032	0	9,731	13,763	0.0%	0.0%	0.0%	0.0%
Street Lighting	Connection	kW	1.70		10.3987	16,783	11,730,313	33,349	342,373	0	346,786	689,159	1.1%	0.0%	1.1%	2.2%
									13,619,711	10,598,969	7,066,572	31,285,252 K	43.5%	33.9%	22.6%	100.0%

Enter the values from Sheet
"C7.1 Base Dist Rates Gen"
of the 2011 OEB IRM3 Rate Generator if no Revenue Cost Ratio Adjustment in 2011
Or
Enter the values from Sheet
"C1.8 Proposed F V Rates"
of the 2011 IRM3 Revenue Cost Ratio Adjustment Workform if Revenue Cost Ratio
Adjustment in 2011



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

Threshold Parameters

Price Cap Index

Price Escalator (GDP-IPI)	1.30%
Less Productivity Factor	-0.72%
Less Stretch Factor	-0.40%

Price Cap Index 0.18%

Growth

ICM Billing Determinants for Growth - Numerator : 2010 Re-Based Forecast	<u>\$31,285,252</u>	A
ICM Billing Determinants for Growth - Denominator : 2009 Audited RRR	<u>\$30,901,482</u>	B

Growth 1.24% C = A / B



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

Threshold Test

Year	2010	
Status	Re-Basing	
Price Cap Index	0.18%	A
Growth	1.24%	B
Dead Band	20%	C
Average Net Fixed Assets		
Gross Fixed Assets Opening	\$ 187,960,573	
Add: CWIP Opening	\$ 7,285,640	
Capital Additions	\$ 14,721,227	
Capital Disposals	\$ -	
Capital Retirements	\$ -	
Deduct: CWIP Closing	-\$ 7,285,640	
Gross Fixed Assets - Closing	\$ 202,681,800	
Average Gross Fixed Assets	<u>\$ 195,321,187</u>	
Accumulated Depreciation - Opening	\$ 79,297,219	
Depreciation Expense	\$ 9,807,682	D
Disposals	\$ -	
Retirements	\$ -	
Accumulated Depreciation - Closing	\$ 89,104,901	
Average Accumulated Depreciation	<u>\$ 84,201,060</u>	
Average Net Fixed Assets	<u>\$ 111,120,127</u>	E
Working Capital Allowance		
Working Capital Allowance Base	\$ 131,677,443	
Working Capital Allowance Rate	15%	
Working Capital Allowance	<u>\$ 19,751,616</u>	F
Rate Base	<u>\$ 130,871,743</u>	G = E + F
Depreciation	D \$ 9,807,682	H
Threshold Test	139.00%	I = 1 + (G / H) * (B + A * (1 + B)) + C
Threshold CAPEX	\$ 13,633,026	J = H * I



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

Summary of Incremental Capital Projects

Number of ICP's

1

Project ID #	Incremental Capital Non-Discretionary Project Description	Incremental Capital CAPEX	Amortization Expense	CCA
ICP 1	North Oakville Transformer Stations	19,919,131	569,357	1,575,397
		19,919,131	569,357	1,575,397



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

Incremental Capital Adjustment

Current Revenue Requirement

Current Revenue Requirement - Total	\$	31,250,204	A
-------------------------------------	----	------------	---

Return on Rate Base

Incremental Capital CAPEX		\$	19,919,131	B
Depreciation Expense		\$	569,357	C
Incremental Capital CAPEX to be included in Rate Base		\$	19,349,773	D = B - C
Deemed ShortTerm Debt %	4.0%	E	\$ 773,991	G = D * E
Deemed Long Term Debt %	56.0%	F	\$ 10,835,873	H = D * F
Short Term Interest	2.07%	I	\$ 16,022	K = G * I
Long Term Interest	5.87%	J	\$ 636,066	L = H * J
Return on Rate Base - Interest		\$	652,087	M = K + L
Deemed Equity %	40.0%	N	\$ 7,739,909	P = D * N
Return on Rate Base -Equity	9.85%	O	\$ 762,381	Q = P * O
Return on Rate Base - Total		\$	1,414,468	R = M + Q

Amortization Expense

Amortization Expense - Incremental	C	\$	569,357	S
------------------------------------	---	----	---------	---

Grossed up PIL's

Regulatory Taxable Income	O	\$	762,381	T
Add Back Amortization Expense	S	\$	569,357	U
Deduct CCA		\$	1,575,397	V
Incremental Taxable Income		-\$	243,659	W = T + U - V
Current Tax Rate (F1.1 Z-Factor Tax Changes)	28.3%	X		Y = W * X
PIL's Before Gross Up		-\$	68,834	Z = Y / (1 - X)
Incremental Grossed Up PIL's		-\$	95,935	

Ontario Capital Tax

Incremental Capital CAPEX		\$	19,919,131	AA
Less : Available Capital Exemption (if any)		\$	-	AB
Incremental Capital CAPEX subject to OCT		\$	19,919,131	AC = AA - AB
Ontario Capital Tax Rate (F1.1 Z-Factor Tax Changes)	0.000%	AD		
Incremental Ontario Capital Tax		\$	-	AE = AC * AD

Incremental Revenue Requirement

Return on Rate Base - Total	Q	\$	1,414,468	AF
Amortization Expense - Total	S	\$	569,357	AG
Incremental Grossed Up PIL's	Z	-\$	95,935	AH
Incremental Ontario Capital Tax	AE	\$	-	AI
Incremental Revenue Requirement		\$	1,887,890	AJ = AF + AG + AH + AI



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

Calculation of Incremental Capital Rate Rider - Option A Fixed and Variable

Rate Class	Service Charge % Revenue A	Distribution Volumetric Rate % Revenue kWh B	Distribution Volumetric Rate % Revenue kW C	Service Charge Revenue D = \$N * A	Distribution Volumetric Rate Revenue kWh E = \$N * B	Distribution Volumetric Rate Revenue kW F = \$N * C	Total Revenue by Rate Class G = D + E + F	Billed Customers or Connections H	Billed kWh I	Billed kW J	Service Charge Rate Rider K = D / H / 12	Distribution Volumetric Rate kWh Rate Rider L = E / I	Distribution Volumetric Rate kW Rate Rider M = F / J
Residential	29.8%	25.8%	0.0%	\$ 562,416.23	\$ 487,483.03	\$ -	\$ 1,049,899.26	58,617	557,127,208	0	\$ 0.795664	\$ 0.000875	
General Service Less Than 50 kW	6.4%	7.9%	0.0%	\$ 120,384.85	\$ 149,623.13	\$ -	\$ 270,007.98	5,109	173,380,609	0	\$ 1.963607	\$ 0.000863	
General Service 50 to 999 kW	3.7%	0.0%	19.3%	\$ 70,357.59	\$ -	\$ 365,081.05	\$ 435,438.63	833	594,844,951	1,670,520	\$ 7.038573	\$ 0.000000	\$ 0.218543
General Service 1,000 to 4,999 kW	2.2%	0.0%	2.1%	\$ 42,065.77	\$ -	\$ 39,833.29	\$ 81,899.06	17	147,132,426	353,675	\$ 206.204735	\$ 0.000000	\$ 0.112627
Unmetered Scattered Load	0.3%	0.1%	0.0%	\$ 5,745.56	\$ 2,482.51	\$ -	\$ 8,228.07	696	3,881,044	0	\$ 0.687926	\$ 0.000640	
Sentinel Lighting	0.0%	0.0%	0.0%	\$ 243.28	\$ -	\$ 587.23	\$ 830.51	227	135,511	389	\$ 0.089310	\$ 0.000000	\$ 1.509582
Street Lighting	1.1%	0.0%	1.1%	\$ 20,660.31	\$ -	\$ 20,926.62	\$ 41,586.93	16,783	11,730,313	33,349	\$ 0.102596	\$ 0.000000	\$ 0.627504
				\$ 821,873.58	\$ 639,588.68	\$ 426,428.19	\$ 1,887,890.45						

N

Enter the above rate riders onto Sheet
"J2.8 Incremental Capital Rate Rider"
of the 2011 OEB IRM3 Rate Generator.



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

Calculation of Incremental Capital Rate Rider - Option B Variable

Rate Class	Total Revenue \$ by Rate Class A	Total Revenue % by Rate Class B = A / \$H	Total Incremental Capital \$ by Rate Class C = \$I * B	Billed kWh D	Billed kW E	Distribution Volumetric Rate kWh Rate Rider F = C / D	Distribution Volumetric Rate kW Rate Rider G = C / E
Residential	\$17,398,448	55.61%	\$1,049,899	557,127,208	0	\$0.0019	
General Service Less Than 50 kW	\$4,474,448	14.30%	\$270,008	173,390,609	0	\$0.0016	
General Service 50 to 999 kW	\$7,215,889	23.06%	\$435,439	594,844,951	1,670,520		\$0.2607
General Service 1,000 to 4,999 kW	\$1,357,194	4.34%	\$81,899	147,132,426	353,675		\$0.2316
Unmetered Scattered Load	\$136,352	0.44%	\$8,228	3,881,044	0	\$0.0021	
Sentinel Lighting	\$13,763	0.04%	\$831	135,511	389		\$2.1350
Street Lighting	\$689,159	2.20%	\$41,587	11,730,313	33,349		\$1.2470
	\$31,285,252	100.00%	\$1,887,890				
	H		I				

Enter the above rate riders onto Sheet "J2.8 Incremental Capital Rate Rider" of the 2011 OEB IRM3 Rate Generator.



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

LDC Information

Applicant Name	Oakville Hydro Electricity Distribution Inc.
OEB Application Number	IRM3
LDC Licence Number	ED-2003-0135
Applied for Effective Date	May 1, 2011
Last COS Re-based Year	2010
Last COS OEB Application Number	EB-2009-0271



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

Table of Contents

Sheet Name

[A1.1 LDC Information](#)

[A2.1 Table of Contents](#)

[B1.1 Re-Based Bill Det & Rates](#)

[B1.2 Removal of Rate Adders](#)

[B1.3 Re-Based Rev From Rates](#)

[C1.1 Decision Cost Revenue Adj](#)

[C1.2 Revenue Offsets Allocation](#)

[C1.3 Transformer Allowance](#)

[C1.4 R C Ratio Revenue](#)

[C1.5 Proposed R C Ratio Adj](#)

[C1.6 Proposed Revenue](#)

[C1.7 Proposed F V Rev Alloc](#)

[C1.8 Proposed F V Rates](#)

[C1.9 Adjust To Proposed Rates](#)

Purpose of Sheet

Enter LDC Data

Table of Contents

Set Up Rate Classes and enter Re-Based Billing Determinants and Current Tariff Rates

Removal of Rate Adders

Calculated Current Revenue From Rates

Decision - Cost Revenue Adjustments by Rate Class

Revenue Offsets Allocation

Transformer Allowance

Revenue / Cost Ratio Revenue

Proposed Revenue / Cost Ratio Adjustment

Proposed Revenue from Revenue / Cost Ratio Adjustment

Proposed Fixed Variable Revenue Allocation

Proposed Fixed and Variable Rates

Adjustment required to Proposed Rates



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

Rate Class Selection, Re-Based Billing Determinants & Current Tariff Rates

The purpose of this sheet is to set up the rate classes, enter the re-based billing determinants from your last cost of service application and enter the current service charge and volumetric distribution rates as found on your May 1, 2010 (or subsequent) Tariff of rates and charges.

Last COS Re-based Year				2010					
Last COS OEB Application Number				EB-2009-0271					
Rate Group	Rate Class	Fixed Metric	Vol Metric	Re-based Billed Customers or Connections A	Re-based Billed kWh B	Re-based Billed kW C	Current Tariff Service Charge D	Current Tariff Distribution Volumetric Rate kWh E	Current Tariff Distribution Volumetric Rate kW F
RES	Residential	Customer	kWh	56,419	555,127,459		13.25	0.0145	
GSLT50	General Service Less Than 50 kW	Customer	kWh	4,887	170,241,898		32.54	0.0143	
GSGT50	General Service 50 to 999 kW	Customer	kW	855	584,050,240	1,564,795	116.64		3.6216
GSGT50	General Service Greater Than 1,000 kW	Customer	kW	18	147,437,802	357,797	3,417.13		1.8664
USL	Unmetered Scattered Load	Connection	kWh	679	3,936,855		11.40	0.0106	
Sen	Sentinel Lighting	Connection	kW	183	133,918	2,363	1.48		25.0161
SL	Street Lighting	Connection	kW	16,286	11,085,581	30,957	1.70		10.3987
NA	Rate Class 8	NA	NA						
NA	Rate Class 9	NA	NA						
NA	Rate Class 10	NA	NA						
NA	Rate Class 11	NA	NA						
NA	Rate Class 12	NA	NA						
NA	Rate Class 13	NA	NA						
NA	Rate Class 14	NA	NA						
NA	Rate Class 15	NA	NA						
NA	Rate Class 16	NA	NA						
NA	Rate Class 17	NA	NA						
NA	Rate Class 18	NA	NA						
NA	Rate Class 19	NA	NA						
NA	Rate Class 20	NA	NA						
NA	Rate Class 21	NA	NA						
NA	Rate Class 22	NA	NA						
NA	Rate Class 23	NA	NA						
NA	Rate Class 24	NA	NA						
NA	Rate Class 25	NA	NA						



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

Removal of Rate Adders

The purpose of this sheet is to remove from current tariff rates any rate adders included in rates. Most applicants will not require input on this sheet

Last COS Re-based Year 2010

Last COS OEB Application Number EB-2009-0271

Rate Class	Current Tariff Service Charge	Current Tariff Distribution Volumetric Rate kWh	Current Tariff Distribution Volumetric Rate kW	Service Charge Rate Adders	Distribution Volumetric kWh Rate Adders	Distribution Volumetric kW Rate Adders
	A	B	C	D	E	F
Residential	13.25	0.0145	0.0000	0.00	0.0000	0.0000
General Service Less Than 50 kW	32.54	0.0143	0.0000	0.00	0.0000	0.0000
General Service 50 to 999 kW	116.64	0.0000	3.6216	0.00	0.0000	0.0000
General Service Greater Than 1,000 kW	3,417.13	0.0000	1.8664	0.00	0.0000	0.0000
Unmetered Scattered Load	11.40	0.0106	0.0000	0.00	0.0000	0.0000
Sentinel Lighting	1.48	0.0000	25.0161	0.00	0.0000	0.0000
Street Lighting	1.70	0.0000	10.3987	0.00	0.0000	0.0000



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

Calculated Current Revenue From Rates

The purpose of this sheet is to calculate current revenue from rate classes

Last COS Re-based Year

2010

Last COS OEB Application Number

EB-2009-0271

Rate Class	Re-based Billed Customers or Connections A	Re-based Billed kWh B	Re-based Billed kW C	Current Base Service Charge D	Current Base Distribution Volumetric Rate kWh E	Current Base Distribution Volumetric Rate kW F	Service Charge Revenue *12	Distribution Volumetric Rate Revenue kWh H = B * E	Distribution Volumetric Rate Revenue kW I = C * F	Revenue Requirement from Rates I
Residential	56,419	555,127,459	0	13.25	0.0145	0.0000	8,970,621	8,049,348	0	17,019,969
General Service Less Than 50 kW	4,887	170,241,898	0	32.54	0.0143	0.0000	1,908,276	2,434,459	0	4,342,735
General Service 50 to 999 kW	855	584,050,240	1,564,795	116.64	0.0000	3.6216	1,196,726	0	5,667,062	6,863,788
General Service Greater Than 1,000 kW	18	147,437,802	357,797	3,417.13	0.0000	1.8664	738,100	0	667,792	1,405,892
Unmetered Scattered Load	679	3,936,855	0	11.40	0.0106	0.0000	92,887	41,731	0	134,618
Sentinel Lighting	183	133,918	2,363	1.48	0.0000	25.0161	3,250	0	59,113	62,363
Street Lighting	16,286	11,085,581	30,957	1.70	0.0000	10.3987	332,234	0	321,913	654,147
							13,242,095	10,525,538	6,715,879	30,483,512



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

Decision - Cost Revenue Adjustments by Rate Class

The purpose of this sheet is to input the Revenue Cost Ratios as determined from column G on Sheet "C1.5 Proposed R C Ratio Adj" of the applicants 2010 IRM3 Supplemental Filing Module or 2010 COS Decision and Order.

Under Direction the applicant can choose "No Change" - no change in that rate class ratio, "Change" - Board ordered change from COS decision, or Rebalance to apply offset adjustments to Decision prescribed rate classes.

Rate Class	Direction	Current Year 2010	Transition Year 1 2011	Transition Year 2 2012	Transition Year 3 2013	Transition Year 4 2014	Transition Year 5 2015
Residential	Rebalance	109.09%	tbd	tbd	tbd	tbd	tbd
General Service Less Than 50 kW	No Change	114.28%	114.28%	114.28%	114.28%	114.28%	114.28%
General Service 50 to 999 kW	No Change	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%
General Service Greater Than 1,000 kW	Rebalance	131.83%	tbd	tbd	tbd	tbd	tbd
Unmetered Scattered Load	No Change	120.00%	120.00%	120.00%	120.00%	120.00%	120.00%
Sentinel Lighting	Change	36.78%	53.39%	70.00%	0.00%	0.00%	0.00%
Street Lighting	Change	40.58%	55.29%	70.00%	0.00%	0.00%	0.00%



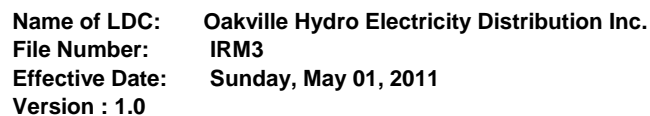
Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

Revenue Offsets Allocation

The purpose of this sheet is to allocate the Revenue Offsets (miscellaneous revenue) found in the last COS to the various rate classes in proportion to the allocation from the Cost Allocation informational filing.

Rate Class	Informational Filing Revenue Offsets A	Percentage Split C= A / B	Allocated Revenue Offsets E = D * C
Residential	63	62.55%	1,290,496
General Service Less Than 50 kW	15	14.70%	303,282
General Service 50 to 999 kW	18	17.81%	367,446
General Service Greater Than 1,000 kW	4	3.87%	79,844
Unmetered Scattered Load	1	0.63%	12,998
Sentinel Lighting	0	0.00%	21
Street Lighting	0	0.44%	9,078
	100	100.00%	2,063,163
	B		D

Enter revenue offsets as found in
 Cell F47 on sheet "C1.2 Revenue
 Offsets Allocation" of the 2010 IRM3
 Supplemental Filing Module or from
 2010 COS RRWF



The purpose of this sheet is to remove the transformer allowance from volumetric rates. Under Transformer Allowance in Rates select "Yes" if included in that rate class or "No" if not included.

Once selected apply the update button to reveal input cells in which you can input the number of kW's and the transformer rate for each rate class.

Rate Class	Transformer Allowance In Rate	Transformer Allowance A	Transformer Allowance kW's C	Transformer Allowance Rate E	Volumetric Distribution Rate F	Billed kW's G	Adjusted Volumetric Distribution Rate I = (F * (G - C) + (F - E) * C) / G
Residential	No						
General Service Less Than 50 kW	No						
General Service 50 to 999 kW	No						
General Service Greater Than 1,000 kW	No						
Unmetered Scattered Load	No						
Sentinel Lighting	No						
Street Lighting	No						
		B -	D -			H -	
Enter Transformer Allowance as found in Cell E47 on sheet "C1.3 Transformer Allowance" of the 2010 IRM3 Supplemental Filing Module or from 2010 COS RRWF							



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

Revenue / Cost Ratio Revenue

The purpose of this sheet is to calculate revenue by rate class that includes Revenue Offsets and excludes Transformer Allowance prior to Revenue Cost Ratio Adjustment re-allocation.

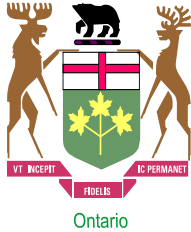
Rate Class	Billed Customers or Connections	Billed kWh	Billed kW		Base Service Charge	Base Distribution Volumetric Rate kWh	Base Distribution Volumetric Rate kW	Service Charge	Distribution Volumetric Rate kWh	Distribution Volumetric Rate kW	Revenue Requirement from Rates
	A	B	C		D	E	F	G = A * D * 12	H = B * E	I = C * F	J = G + H + I
Residential	56,419	555,127,459	0	0	13.25	0.0145	0.0000	8,970,621	8,049,348	0	17,019,969
General Service Less Than 50 kW	4,887	170,241,898	0	0	32.54	0.0143	0.0000	1,908,276	2,434,459	0	4,342,735
General Service 50 to 999 kW	855	584,050,240	1,564,795	0	116.64	0.0000	3.6216	1,196,726	0	5,667,062	6,863,788
General Service Greater Than 1,000 kW	18	147,437,802	357,797	0	3,417.13	0.0000	1.8664	738,100	0	667,792	1,405,892
Unmetered Scattered Load	679	3,936,855	0	0	11.40	0.0106	0.0000	92,887	41,731	0	134,618
Sentinel Lighting	183	133,918	2,363	0	1.48	0.0000	25.0161	3,250	0	59,113	62,363
Street Lighting	16,286	11,085,581	30,957	0	1.70	0.0000	10.3987	332,234	0	321,913	654,147
								13,242,095	10,525,538	6,715,879	30,483,512



Name of LDC: Oakville Hydro Electricity Distribution Inc.
File Number: IRM3
Effective Date: Sunday, May 01, 2011
Version : 1.0

Proposed Revenue / Cost Ratio Adjustment

Rate Class	Adjusted Revenue	Current Revenue	Re-Allocated Cost	Proposed	Final Adjusted	Dollar Change	Percentage Change
	A	Cost Ratio B		Revenue Cost Ratio D	Revenue E = C * D		
			C = A / B			F = E - C	G = (E / C) - 1
Residential	\$ 18,310,465	1.09	\$ 16,784,733	1.08	\$ 18,058,777	-\$ 251,688	-1.4%
General Service Less Than 50 kW	\$ 4,646,017	1.14	\$ 4,065,468	1.14	\$ 4,646,017	-\$ 0	0.0%
General Service 50 to 999 kW	\$ 7,231,234	0.85	\$ 8,507,334	0.85	\$ 7,231,234	\$ 0	0.0%
General Service Greater Than 1,000 k	\$ 1,485,736	1.32	\$ 1,127,009	1.30	\$ 1,468,836	-\$ 16,900	-1.1%
Unmetered Scattered Load	\$ 147,616	1.20	\$ 123,013	1.20	\$ 147,616	\$ 0	0.0%
Sentinel Lighting	\$ 62,384	0.37	\$ 169,613	0.53	\$ 90,557	\$ 28,173	45.2%
Street Lighting	\$ 663,225	0.41	\$ 1,634,364	0.55	\$ 903,640	\$ 240,415	36.2%
	<u>\$ 32,546,675</u>		<u>\$ 32,411,533</u>		<u>\$ 32,546,675</u>	<u>-\$ 0</u>	<u>0.0%</u>
Out of Balance					0		
Final ?					Yes		



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Effective Date: Sunday, May 01, 2011
Version : 1.0

Proposed Revenue from Revenue / Cost Ratio Adjustment

Rate Class	Adjusted Revenue By Revenue Cost Ratio A	Allocated Re- Based Revenue Offsets B	Revenue Requirement from Rates Before Transformer Allowance C = A - B	Re-based Transformer Allowance D	Revenue Requirement from Rates E = C + D
Residential	\$ 18,058,777	\$ 1,290,496	\$ 16,768,281	\$ -	\$ 16,768,281
General Service Less Than 50 kW	\$ 4,646,017	\$ 303,282	\$ 4,342,735	\$ -	\$ 4,342,735
General Service 50 to 999 kW	\$ 7,231,234	\$ 367,446	\$ 6,863,788	\$ -	\$ 6,863,788
General Service Greater Than 1,000 kW	\$ 1,468,836	\$ 79,844	\$ 1,388,993	\$ -	\$ 1,388,993
Unmetered Scattered Load	\$ 147,616	\$ 12,998	\$ 134,618	\$ -	\$ 134,618
Sentinel Lighting	\$ 90,557	\$ 21	\$ 90,536	\$ -	\$ 90,536
Street Lighting	\$ 903,640	\$ 9,078	\$ 894,562	\$ -	\$ 894,562
	\$ 32,546,675	\$ 2,063,163	\$ 30,483,512	\$ -	\$ 30,483,512



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Proposed Fixed Variable Revenue Allocation

Rate Class	Revenue Requirement	Service Charge	Distribution Volumetric	Distribution Volumetric	Service Charge	Distribution Volumetric	Distribution Volumetric	Revenue Requirement
	from Rates		Rate % Revenue	Rate % Revenue		Rate Revenue	Rate Revenue	from Rates by Rate
	A		% Revenue	kWh		kW	Revenue	kWh
					E = A * B	F = A * C	G = A * D	H = E + F + G
Residential	\$ 16,768,281	52.7%	47.3%	0.0%	\$ 8,837,965	\$ 7,930,316	\$ -	\$ 16,768,281
General Service Less Than 50 kW	\$ 4,342,735	43.9%	56.1%	0.0%	\$ 1,908,276	\$ 2,434,459	\$ -	\$ 4,342,735
General Service 50 to 999 kW	\$ 6,863,788	17.4%	0.0%	82.6%	\$ 1,196,726	\$ -	\$ 5,667,062	\$ 6,863,788
General Service Greater Than 1,000 k	\$ 1,388,993	52.5%	0.0%	47.5%	\$ 729,228	\$ -	\$ 659,765	\$ 1,388,993
Unmetered Scattered Load	\$ 134,618	69.0%	31.0%	0.0%	\$ 92,887	\$ 41,731	\$ -	\$ 134,618
Sentinel Lighting	\$ 90,536	5.2%	0.0%	94.8%	\$ 4,718	\$ -	\$ 85,818	\$ 90,536
Street Lighting	\$ 894,562	50.8%	0.0%	49.2%	\$ 454,339	\$ -	\$ 440,223	\$ 894,562
	\$ 30,483,512				\$ 13,224,139	\$ 10,406,506	\$ 6,852,868	\$ 30,483,512



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Proposed Fixed and Variable Rates

Rate Class	Distribution Volumetric			Re-based Billed			Proposed Base Service Charge G = A / D / 12	Proposed Base Distribution Volumetric Rate kWh H = B / E	Proposed Base Distribution Volumetric Rate kW I = C / F
	Service Charge Revenue A	Rate Revenue kWh B	Rate Revenue kW C	Customers or Connections D	Re-based Billed kWh E	Re-based Billed kW F			
Residential	\$ 8,837,965	\$ 7,930,316	\$ -	56,419	555,127,459	0	13.05	0.0143	-
General Service Less Than 50 kW	\$ 1,908,276	\$ 2,434,459	\$ -	4,887	170,241,898	0	32.54	0.0143	-
General Service 50 to 999 kW	\$ 1,196,726	\$ -	\$ 5,667,062	855	584,050,240	1,564,795	116.64	-	3.6216
General Service Greater Than 1,000 kW	\$ 729,228	\$ -	\$ 659,765	18	147,437,802	357,797	3,376.05	-	1.8440
Unmetered Scattered Load	\$ 92,887	\$ 41,731	\$ -	679	3,936,855	0	11.40	0.0106	-
Sentinel Lighting	\$ 4,718	\$ -	\$ 85,818	183	133,918	2,363	2.15	-	36.3172
Street Lighting	\$ 454,339	\$ -	\$ 440,223	16,286	11,085,581	30,957	2.32	-	14.2205



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Adjustment required to Proposed Rates

Rate Class	Proposed Base			Current Base			Adjustment		
	Proposed Base Service Charge	Proposed Base Distribution Volumetric Rate kWh	Proposed Base Distribution Volumetric Rate kW	Current Base Service Charge	Current Base Distribution Volumetric Rate kWh	Current Base Distribution Volumetric Rate kW	Adjustment Required Base Service Charge G = A - D	Adjustment Required Base Distribution Volumetric Rate kWh H = B - E	Adjustment Required Base Distribution Volumetric Rate kW I = C - F
		A	B		D	E			
Residential	\$ 13.05	\$ 0.0143	\$ -	\$ 13.25	\$ 0.0145	\$ -	-\$ 0.20	-\$ 0.0002	\$ -
General Service Less Than 50 kW	\$ 32.54	\$ 0.0143	\$ -	\$ 32.54	\$ 0.0143	\$ -	\$ -	\$ -	\$ -
General Service 50 to 999 kW	\$ 116.64	\$ -	\$ 3.6216	\$ 116.64	\$ -	\$ 3.6216	\$ -	\$ -	\$ -
General Service Greater Than 1,000 kW	\$ 3,376.05	\$ -	\$ 1.8440	\$ 3,417.13	\$ -	\$ 1.8664	-\$ 41.08	\$ -	-\$ 0.0224
Unmetered Scattered Load	\$ 11.40	\$ 0.0106	\$ -	\$ 11.40	\$ 0.0106	\$ -	\$ -	\$ -	\$ -
Sentinel Lighting	\$ 2.15	\$ -	\$ 36.3172	\$ 1.48	\$ -	\$ 25.0161	\$ 0.67	\$ -	\$ 11.3011
Street Lighting	\$ 2.32	\$ -	\$ 14.2205	\$ 1.70	\$ -	\$ 10.3987	\$ 0.62	\$ -	\$ 3.8218

Enter the above values onto Sheet
 "D1.X Revenue Cost Ratio Adj"
 of the 2011 OEB IRM3 Rate Generator.