



# **ONTARIO ENERGY BOARD**

## **BOARD STAFF SUBMISSION**

2008 ELECTRICITY DISTRIBUTION RATES

HALTON HILLS HYDRO INC.

EB-2007-0696

**January 18, 2007**

## **INTRODUCTION**

Halton Hills Hydro Inc. ("Halton Hills Hydro", the "utility" or the "Applicant") is the licensed electricity distributor for the town of Halton Hills and serves about 24,000 customers.

Halton Hills Hydro submitted an application for 2008 electricity distribution rates on August 15, 2007. The application was based on a future test year cost of service methodology. Halton Hills Hydro submitted its response to interrogatories from Board staff and the two intervenors, the School Energy Coalition ("SEC") and the Vulnerable Energy Consumers Coalition ("VECC"). Phase 1 interrogatory responses were submitted on November 20, 2007 and Phase 2 supplementary interrogatory responses were submitted on December 21, 2007.

These submissions reflect observations and concerns which arise from Board staff's review of the pre-filed evidence and interrogatory responses made by the utility, and are intended to assist the Ontario Energy Board (the "Board") in evaluating the Halton Hills Hydro application and in setting just and reasonable distribution rates.

## **THE APPLICATION**

Halton Hills Hydro has requested a revenue requirement of \$10,446,283 to be recovered in new rates effective May 1, 2008. The electricity bill for a residential customer consuming 1,000 kWh per month is expected to increase by 1.8% if the application is approved as filed.

## **Operations, Maintenance & Administration**

### **Background**

Halton Hills Hydro's Summary of Operating Costs is found at Exh.4, Tab 1, Sch. 2, p. 1 of the application. The test year Total Controllable OM&A Expenses forecast is \$5,319,000 an increase of 16% (or \$0.73 million) compared to the 2006 actual level.

### **Discussion and Submission**

#### **i) Overall OM&A**

Using the OM&A Summary as its base, Board staff created two tables and submitted interrogatories based on these tables. The table below, derived from Exh4/Tab1 /Sch2/p1 and from Board staff IR # 1 (Phase 2), compares OM&A expenses for 2006, 2007, and 2008:

	2006	Variance	2006	Variance	2007	Variance	2008	Variance
	Board Approved	2006/2006	Actual	2007/2006	Bridge	2008/2007	Test	2008/2006
Operation	495,098	205,455	700,553	14,447	715,000	69,000	784,000	83,447
		4.5%		0.3%		1.4%		1.8%
Maintenance	560,579	133,973	694,552	46,448	741,000	80,000	821,000	126,448
		2.9%		1.0%		1.7%		2.8%
Billing & Collecting	835,191	73,658	908,849	14,151	923,000	116,000	1,039,000	130,151
		1.6%		0.3%		2.4%		2.8%
Administrative and General Expenses	1,961,445	127,314	2,088,759	81,241	2,170,000	277,000	2,447,000	358,241
		2.8%		1.8%		5.8%		7.8%
<b>Total Controllable Expense</b>	<b>3,923,445</b>	<b>661,189</b>	<b>4,584,634</b>	<b>174,366</b>	<b>4,759,000</b>	<b>560,000</b>	<b>5,319,000</b>	<b>734,366</b>
		14.4%		3.8%		11.8%		16.0%
<b>Low Voltage</b>	<b>613,744</b>		<b>0</b>		<b>0</b>		<b>0</b>	<b>0</b>
Taxes other than income taxes	71,132	117,888	189,020	980	190,000	5,000	195,000	5,980
Other Operating Costs	0	2,901	2,901	17,099	20,000	13,000	33,000	30,099
Community Relations (CDM)	88,690		2,245		2,000		2,000	0
Amortization Expenses	1,846,338		1,930,209		2,129,369		2,190,723	61,354
Cost of Power	30,683,803		35,539,505		36,636,500		37,840,000	1,203,500
LCT, OCT & Income Taxes	502,007		731,486		1,181,000		836,500	-344,500
<b>Total Operating Costs</b>	<b>37,729,159</b>		<b>42,980,000</b>		<b>44,917,869</b>		<b>46,416,223</b>	<b>1,690,799</b>

In addition, to assist in the understanding of the increases in Total Controllable OM&A Expenses, Board staff prepared the following cost driver table. The table summarizes cost drivers identified by Halton Hills Hydro in its response to Board staff Phase 2 interrogatories. The review begins with the 2006 Board Approved costs of \$3.9 million and progresses forward to the 2008 test year amount of \$5.3 million.

<b>Cost Drivers</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
<b>Opening Balances</b>	<b>\$ 3,923,445</b>	<b>\$ 4,584,634</b>	<b>\$ 4,759,000</b>
<b>Cost Drivers</b>			
<b>Staffing costs:</b>			
Annual salary cost increases:	\$ 137,300	\$ 66,500	\$ 69,800
Staffing additions	\$ -	\$ -	\$ 159,800
Staff benefit costs	\$ 68,900	\$ -	\$ 33,100
Other staff costs	\$ 217,100	\$ -	\$ 62,500
<b>Total Staffing Costs</b>	<b>\$ 423,300</b>	<b>\$ 66,500</b>	<b>\$ 325,200</b>
<b>Other Costs:</b>			
Contractor costs	\$ 39,000	\$ 45,000	\$ 92,600
Communications costs	\$ -	\$ -	\$ 33,500
Other costs	\$ 29,000	\$ 33,000	\$ 58,200
Taxes	\$ 117,900	\$ -	\$ 6,000
<b>Total Other Costs</b>	<b>\$ 185,900</b>	<b>\$ 78,000</b>	<b>\$ 190,300</b>
<b>Total Cost Drivers</b>	<b>\$ 609,200</b>	<b>\$ 144,500</b>	<b>\$ 515,500</b>
<b>Unexplained Variance</b>	<b>\$ 51,989</b>	<b>\$ 29,866</b>	<b>\$ 44,500</b>
	<b>\$ 4,584,634</b>	<b>\$ 4,759,000</b>	<b>\$ 5,319,000</b>

Board staff have not identified any additional questions required to be answered with respect to the cost drivers. Board staff invites parties to comment on whether the evidence supports the 2008 cost drivers and requested cost levels.

In addition, parties may wish to comment on the employee compensation and benefits category which comprises 61% of operation costs and for which Halton Hills Hydro has requested an 11.7% increase for the 2008 test year (see below).

*ii) Employee Compensation & Benefits*

Exhibit 4 Tab 2 Schedule 6 provides information concerning employee compensation and a breakdown of labour costs. Based upon this information, Board staff prepared the following Compensation and Benefits table:

	2006 Board			2006 Actual			2007 Bridge			2008 Test	
	Approved										
<b>Compensation</b>	\$	3,102,126	\$	3,567,531	\$	3,746,277	\$	3,892,649			
<b>Pension and Benefits</b>	\$	519,290	\$	629,071	\$	713,783	\$	773,495			
<b>Incentive Pay</b>	\$	-	\$	61,665	\$	68,100	\$	70,923			
<b>Total Compensation</b>	\$	3,621,416	\$	4,258,267	\$	4,528,160	\$	4,737,067			
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<b>Capitalized</b>	\$	-	\$	1,380,543	\$	1,644,322	\$	1,541,698			
<b>OM&amp;A</b>	\$	-	\$	2,877,724	\$	2,883,838	\$	3,222,369			
<b>Total Compensation</b>	\$	-	\$	4,258,267	\$	4,528,160	\$	4,764,067			
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<b>Capitalized</b>		-		32.4%		36%		32%			
<b>OM&amp;A</b>		-		67.6%		64%		68%			

In comparing the utility's labour costs to Total Controllable OM&A, Board staff notes that labour is approximately 61% of operation costs:

		2006 Board			2006 Actual			2007 Bridge			2008 Test	
		Approved										
OM&A Labour	A	-	\$	2,877,724	\$	2,883,838	\$	3,222,369				
Total Controllable OM&A Expenses	B	\$	3,923,445	\$	4,584,634	\$	4,759,000	\$	5,319,000			
Labour as a percent of OM&A	C = A / B	-		62.8%		60.6%		60.6%				

Board staff prepared the following table to identify the final value of labour cost drivers:

	2006 Board			2006 Actual			2007 Bridge			2008 Test	
	Approved										
OM&A Labour	-	\$	2,877,724	\$	2,883,838	\$	3,222,369				
Annual Labour Changes			-	\$	6,114	\$	338,531				
% Change			-		0.2%		11.7%				

A comprehensive review of the 2008 cost drivers producing an 11.7% increase in OM&A labour costs from 2007 to 2008 indicates that the increase is mainly a consequence of the following factors:

1. Annual salary cost increases from 2007 to 2008 correspond to a 3% collective agreement annual increase for both unionized and management/executive staff.
2. Three staffing additions which include a regulatory affairs officer, settlement analyst, and an engineering technologist.
3. Financing of a MBA program for two years at a cost of \$45,000 per annum.

#### 4. Staff development and training costs.

Board staff note the overall increase requested (11.7%) in OM&A labour costs. Board staff invites submissions regarding the reasonableness of this increase.

### **Capital Expenditures**

#### **Background**

In its application, Halton Hills Hydro projected \$4,831,010 for its 2008 capital expenditures, an increase of approximately 47% compared to the 2006 actual capital expenditures of \$3,277,357.

When construction work in progress (CWIP) is included, the total capital expenditures are \$4.07 million, \$4.84 million and \$5.83 million, respectively in 2006, 2007 and 2008, representing increases of 19% in 2007 and 20% in 2008 (2008 expenditure is 43% higher than 2006).

Rate Base increases from 2006 to 2008 due to capital additions in 2007 (\$2.97 million) and 2008 (\$2.3 million) and smaller increases (\$0.26 million in 2007 and \$0.19 million in 2007) in working capital. The proposed 2008 capital expenditure does not include any expenditure for smart meters.

### **Discussion and Submission**

#### *i) Increase in 2008 Capital Expenditures (compared to 2006)*

Board staff used information provided in response to Board staff Phase 2 IR #13 to create the following table to examine the investment trend in distribution facilities.

in 000's

Year	2002	2003	2004	2005	2006	2007	2008
Net Income	\$ 1,422	\$ 1,771	\$ 990	\$ 671	\$ 1,165	\$ 1,583	\$ 1,934
Actual ROE%	8.27%	6.66%	5.48%	3.55%	5.88%	7.47%*	n/a
Allowed ROE%	9.88%	9.88%	9.88%	9.88%	9.00%	9.00%	8.93%
Retained Earnings	\$ 234	\$ 1,405	\$ 2,395	\$ 3,066	\$ 4,231	\$ 5,814	\$ 7,748
Dividends to Shareholder	-	-	-	-	-	-	\$ 750
Total Capital expenditures	\$ 1,867	\$ 1,486	\$ 2,379	\$ 2,757	\$ 3,277	\$ 5,426	\$ 4,831

\* forecast

Halton Hills Hydro provided information on expenditure for work in progress in responses to VECC IR #8 and #14. When CWIP is included, capital expenditure is not decreasing and there is a profile of capital commitment that is more reflective of the description provided.

The table below is derived from the response to Board staff IR #14 and the responses to the VECC IRs #8 and #14. The table shows the reconciliation with the information illustrated in the table above. The Applicant has followed Board policy in not including

the work in progress in the rate base.

### 2006-2008 Capitalized Expenditures & Construction Work in Progress Expenditures

\$000's	2006	2007	2008
Capital Budget	3,276.5	4,641.7	5,131
Construction Work in Progress	796.5	200	700
<b>Total Expenditures</b>	<b>4,074</b>	<b>4,842</b>	<b>5,831</b>
+Expenditures capitalized,		+767.1	
+capitalized interest on CIP		- 200.0	
- Construction in progress, land, office furniture retirements	-803.4	+ 38.4	-1,000
<b>Capitalized Expenditure</b>	<b>3,270.4</b>	<b>5,447.2</b>	<b>4,831</b>

Board staff notes that part of the increase for 2008 capital budget is due to construction of a new transformer station that will not fully be in service in 2008. Halton Hills Hydro stated (Board staff IR # 14 page 5, table 10) that if the amount for the new transformer station and the land were included in 2008 capex, the 2008 capital budget would have been virtually unchanged, as compared to 2007.

#### ii) Drivers for the Increase in Capital Expenditure

The key drivers for the increase in total expenditures from 2006 to 2008 (47%) are explained in the application and in response to interrogatories. Generally the drivers can be identified as the following:

##### A. Customer /Load increases

The Application provides a listing of projects undertaken over the three years and the need for each project. Major contributors are new subdivision developments, road widening on Winston Churchill, a new transformer station, station and transformer upgrades and overhead/underground upgrades.

##### B. New Transformer Station

Halton Hills Hydro provided a joint study by it and other distributors which identified the need for a new transformer station to relieve the load on the existing transformer assets. The study was reviewed by the Board and intervenors in the context of other proceedings, including Leave to Construct applications (e.g. Woodstock EB-2007-0027). The GTA West study has also been provided as a justification for this project.

### C. Load Transfer Elimination

In response to Board staff IR #10 (Phase 2), Halton Hills Hydro indicated that numerous projects are required for the elimination of load transfer arrangements (part a/page 2/table 3) and shows a cost estimate of \$1.1 million for eliminating the load transfer. Other projects listed show "N/A" in regard to cost.

The Board has indicated that load transfer arrangements among distributors should be eliminated in the most economical manner. (EB-2005-0513 Board decision, provided in Appendix B of the IR response)

Board staff notes that the pre-filed application stated a cost of \$810,481 for 2007 and a forecast of \$111,740 in 2008 for the Winston Churchill 5SDRS to Steeles project. In its response to Board staff IR #17, Halton Hills Hydro indicated that "Discussions concerning the best method to manage this project have been ongoing with Hydro One Brampton for more than 18 months. Upon analysis, it was decided the most economical method was to share the cost of the line construction."

Board staff is not clear what the costs are for each of the load transfer projects listed in Table 3. Furthermore, Board staff is unclear if Winston Churchill Blvd – Steeles to Norval Metering Point load transfer project, estimated cost \$1.1 million, is the same as the Winston Churchill 5SDRS to Steeles project, which is included in 2008 rate base.

Board staff is also not clear on the total cost of the load transfer projects and the economic justification for these projects that are required for the elimination of the load transfer arrangements. In light of the concerns regarding the cost of these projects, Board staff invites the applicant to:

- a) clarify what "N/A" for each line item in table 3 means and state whether it means there is no cost involved or whether the cost information is not available,
- b) clarify which load transfer project does not require Board's approval as a part of separate application by Halton Hills Hydro,
- c) comment on whether the Winston Churchill Blvd – Steeles to Norval Metering Point load transfer project (\$1.1 million), and the Winston Churchill 5SDRS to Steeles load project are the same. If they are different projects, clarify which project's capital expenditure is included in the 2008 rate base,
- d) clarify those load transfer projects where costs are being shared with Hydro One Brampton, Milton and Hydro One Networks,
- e) clarify the total costs of the 2008 load transfer projects that do not require amendment to Halton Hills Hydro's distribution licence and that are included as part of 2008 rate base, net the cost shared by Hydro One Brampton, Milton, and Hydro One Networks,
- f) clarify whether the road works on Winston Churchill Boulevard will be completed in the 2008 test year, and

- g) clarify whether the costs outlined in response to Board staff IR# 10 (Phase 2), page 2, should be included in the 2008 rate base as part of this application and why.

**D. Building Rehabilitation**

Significant investment is being made in a project to upgrade the Halton Hills Hydro Head Office building, identified as project F in Exh2/Tab3/Sch1/p7. The applicant provided detailed information covering the need for the project.

**Service Reliability Indices**

Service reliability figures are measures of performance of the system as seen by customers. SAIDI and SAIFI provide a measure of the duration and frequency of interruptions experienced by customers on the system (averaged over the total number of customers). CAIDI represents the average duration of interruption averaged over the number of customers that are interrupted.

In its response to VECC IR #3b regarding statistics for service reliability figures, Halton Hills Hydro provided the following information:

**Table 2 – Service Reliability Indices**

	2003	2004	2005	2006	2007 Forecast	2008 Forecast
SAIDI	3.4253	1.1234	1.8462	1.193	1.2	1.2
SAIFI	1.8774	1.2190	1.7034	1.534	1.6	1.6
CAIDI	1.8200	0.9200	1.0838	0.780	0.8	0.8

Board staff notes that the service reliability indices show that the Halton Hills Hydro system experienced better reliability performance in 2006 compared to the three previous years.

The 2006 EDR handbook indicated that the distributors should maintain the historical performance of the last three years. The Applicant advised that their performance statistics are comparable to other Ontario distributors and is above Hydro One Distribution's performance in most areas (Response to VECC IR #3). The evidence is not clear on the reliability performance Halton Hills Hydro achieved in 2007 compared to 2006. With no information on its reliability performance for 2007 and whether or not it has set specific improvement targets in its projection for 2008, evaluating how Halton Hills Hydro plans to achieve those targets to sustain or/and enhance its reliability performance is not possible.

In its reply submission, Halton Hills Hydro, citing the evidence on the record, may wish to clarify the correlation and impact of its 2008 capital expenditure projects with the reliability performance targets.



## **Assessment of Asset Condition and Asset Management Plan**

In response to Board staff Phase 2 IR# 11 and VECC IR# 5, Halton Hills Hydro indicated that they have not conducted a comprehensive distribution asset condition assessment. The applicant provided documentation and procedures, and examples of the distribution system assessments made by internal personnel (Appendix C and D). However, no formal asset management plan was filed.

In the absence of an asset management plan, it is not clear to Board staff how Halton Hills Hydro prioritizes its work plans and expenditures on a short and long term basis in order to maintain its assets. Board staff invites parties to provide comment on the merit of an independent assessment of asset condition and the development of a formal asset management plan.

## **Cost of Capital**

### **Background**

Cost of Capital pertains to costs for compensation of investors and lenders for the capital provided to fund the assets that the utility uses to provide service to its customers. It compensates for the opportunity cost for the time that the money is invested until recovery as well as the risk of recovering the investment, based on the business risk of the firm in its market(s) relative to the risks of investing elsewhere. The Cost of Capital relates to the return on the rate base of the regulated firm. There are several parameters that comprise the cost of capital for rate-making purposes:

- 1) Capital structure (the proportion of rate base financing through debt (long or short term) or equity (common shares or preferred shares);
- 2) Long-term debt rate;
- 3) Short-term debt rate;
- 4) Return on Equity ("ROE"); and
- 5) Return on preferred shares.

These components combine together to determine the weighted average cost of capital ("WACC"). Multiplied by the rate base, this produces the net income (relating to the expected profitability of the firm) and also influences directly the tax or PILs expense borne by the firm and recovered in rates.

The Board has provided its Cost of Capital methodology in the *Report of the Board on Cost of Capital and 2<sup>nd</sup> Generation Incentive Regulation for Ontario's Electricity Distributors* (the "Board Report"), issued December 20, 2006. The Board Report is a guideline and any departures from the methodology in the Board Report are expected to be adequately supported in evidence.

Halton Hills Hydro has provided its proposed Cost of Capital in Exhibit 6. The following table summarizes the proposed Cost of Capital:

Cost of Capital Parameter	Halton Hills Hydro Proposal
Capital Structure	53.3% debt (composed of 49.3% long-term debt and 4.0% short-term debt) and 46.7% equity, as clarified through responses to interrogatories from Board staff, SEC and VECC
Short-Term Debt	Originally no short-term debt rate and then 6.00%, but to be updated in accordance with section 2.2.2 of the Board Report.
Long-Term Debt	6.14%, as a weighted average of 5.78% for new third-party debt and 6.25% for a long-term debt with the municipal shareholder (affiliated debt).
Return on Equity	8.93%, but to be updated in accordance with the methodology in Appendix B of the Board Report.
Return on Preference Shares	Not applicable
Weighted Average Cost of Capital	7.451% as proposed, but subject to change as the short-term debt rate and ROE are updated per the Board Report at the time of the Board's Decision.

The Applicant's approach to cost of capital appeared to be generally consistent with the Board Report. Certain information related to the long-term debt to complete, clarify and correct the record was sought through discovery. With the corrections, explanations and clarifications provided, staff submits that the proposal is generally compliant with the Cost of Capital methodology in the Board Report, subject to comments provided below.

## Discussion and Submission

### i) Weighted Average Cost of Capital (WACC)

In response to Board staff IR #26, Halton Hills Hydro provided a table summarizing the calculation of the WACC based on the proposed ROE and short and long term debt rates. Board staff submits that the information provided in the response is erroneous, as it uses a 6.00% rate for long-term debt (as well as for short-term debt) rather than the 6.14% embedded cost of long-term debt proposed in the application. In addition, there are mathematical errors in the calculation. Board staff submits the following table correctly summarizes the calculation of the WACC as proposed in the application as clarified and corrected in response to interrogatories.

	Deemed Portion of Capital Structure (A)	Effective Rate (B)	(A) x (B)
<b>Debt</b>			
Long-term Debt	49.30%	6.14%	3.027%
Short-term Debt	4.00%	6.00%	0.240%
<b>Equity</b>			
Common Equity	46.70%	8.93%	4.170%
Preferred Shares	n/a		
<b>Cost of Capital</b>	100.00%		7.437%

It is recognized that the applicant agrees that these numbers will be updated based on January 2008 *Consensus Forecasts* and Bank of Canada data in accordance with the Cost of Capital methodology documented in the Board Report.

## **Customer and Load Forecasts**

### **Background**

A summary of the development of the Applicant's customer count and load forecasts is found in Exhibit 3 of the application. Historic customer numbers are projected, using a simple growth trend, to forecast the Bridge Year (2007) and Test Year (2008) customer counts by class. The kWh forecast – and the kW forecast for appropriate classes – is also presented by customer class. Weather normalization was not utilized in the forecast that was ultimately filed. Two variance analyses are included in support of the forecasts.

In response to two rounds of Board Staff and VECC interrogatories, the Applicant provided additional information, updated some data values and made some corrections.

### **Discussion and Submission**

#### **General**

Board staff experienced some difficulty understanding the forecasting evidence as presented in the pre-filed documents. The two interrogatory rounds were essential in providing a clear picture of the forecasts and the methodology used.

#### **Methodology and Model**

##### ***i) Customer Numbers***

The Applicant indicated that since historical data for the number of customers by class were only available for 2004 to 2006, it chose a simple trend growth to determine the customer forecast. The supporting argument for this approach was: "In recent history, there has been very little year-to-year variation in customer growth by class." However,

Board staff submits that the filed evidence does not support this apparent stability; as customer numbers changed significantly from 2004 to 2006; ie, the evidence showed that changes in customer numbers of 47%, 28% and 20% per annum are recorded for individual classes (Exh3/Tab2/Sch1).

Apart from explaining the effect of limited available water allotments on Residential class customer growth, virtually no other evidence was provided to explain the forecast. Board staff is unable to comment on the reasonableness of the Applicant's customer count methodology due to insufficient information.

ii) kW and kWh Forecasts

The Applicant's evidence indicated that it first developed the weather normalized average use per customer ("NAC") by customer class based on the 2004 load values that were weather-normalized for the Applicant by Hydro One. When the estimated load based on the NAC values was extrapolated to 2006, the method produced a load that was 8.1% higher than the 2006 Actual load. On the basis of this difference, the Applicant abandoned its use of weather normalization in load forecasting.

In response to Board staff IR # 15(h) (Phase 2) as to why it did not develop its own weather-corrected historical data, Halton Hills Hydro responded: "Halton Hills Hydro Inc. expected to use the weather normalized load forecast but as the application was prepared, found it produced a result that did not appear reasonable and realistic. For this reason, Halton Hills Hydro Inc. chose not to use the weather normalized data."

Board staff is concerned that Halton Hills Hydro abandoned weather normalization in their forecast. While Board staff acknowledge that an 8.1% difference between modelled and actual results is a cause for concern, staff does not understand why all attempts at weather normalization were abandoned. This is especially in light of the Applicant's response to Board staff IR # 15 (i) where a similar 8.1% difference in load values had the majority of the difference (5%) attributed to the loss factor and only the remaining 3.1% attributed to a different forecasting method. This indicates that the real difference between the weather corrected methodology and the subsequent method based on Actual load, appears to be much smaller than suggested by the Applicant.

After rejecting a weather normalized load forecast, the Applicant used a forecast based on actual loads. While evidently using the same customer count forecast discussed earlier, no explanation was provided on the rationale used to arrive at the second load forecast. Insufficient information was presented to permit Board staff to comment on the reasonableness of Applicant's load forecasting methodology.

In addition, no rationale was provided for the determination of the kW forecast for the customer classes using the kW charge determinant.

In response to phase 2 Board Staff IR # 17, the Applicant provided weather normalized data. Board staff's review of the data suggests that the data might have been used to

build a weather normalized load forecast. It is unclear to Board staff why the Applicant did not use this data to produce a weather normalized forecast.

Parties are asked to comment on whether there is sufficient evidence to support the forecast and if not what alternatives are available to the Board to address the lack of support.

*iii) Data*

The data used to forecast loads were primarily historical customer counts by class for 2004 to 2006 and the historical actual loads (kWh and kW) for 2006. Board staff has concerns regarding the fact that only a single year of historical load was used and that weather normalization was not applied.

While the Applicant's rationale for using the simple trend growth implied historical data from only 2004 to 2006 were available, responses to subsequent interrogatories provided data from the 2002 to 2004 period, indicating an apparent contradiction in the evidence.

*iv) Overall Forecast Results*

The Applicant's forecast shows a 2.0% annual average growth in customer numbers from 2006 to the 2008 Test Year. This compares with an average annual customer growth of 4.3% during the 2004 to 2006 period. The 2% forecast rate of growth is consistent with the Applicant's description of its expected customer growth but is not consistent with the historic period.

The Applicant's kWh forecast shows a 3.2% annual average kWh load growth from 2006 to the 2008 Test Year. This compares with an average annual kWh load growth of 6.6% during the 2004 to 2006 period. (As noted above, the historical load growth used was based on Actual kWh loads and therefore still contains variations due to weather.)

While Board staff is unable to comment on the possible accuracy of the Applicant's load forecast because of insufficient information regarding the methodology, etc., a comparison of the load to customer growth ratios for historic and forecast data shows some consistency. That is, the historical load growth (6.6% per annum) divided by the historical customer growth (4.3% per annum) produces a 1.53 ratio; the forecasted load growth (3.2% per annum) divided by forecasted customer growth (2.0% per annum) produces a 1.60 ratio. This shows an internal consistency in the values presented; however, it does not give an indication of the likely accuracy of the forecast.

In summary, Board staff ask parties to comment on the specific issues raised above to clarify the application in this regard.

**Cost Allocation and Rate Design**

*i) Host Distributor*

## **Background**

Halton Hills Hydro is a host distributor. Board staff inquired (Phase 2 Board staff IR # 7) why the utility had not applied for approval of a wheeling rate for its embedded distributor Hydro One Networks Inc., as directed in the RP-2004-0153/EB-2004-0235 Decision and Order. The response was that, at the customer's request, "Halton Hills Hydro Inc. made changes to the distribution system removing the necessity for calculating wheeling charges." The change was that Hydro One became a customer in the GS 1000 – 4999 kW class.

## **Discussion and Submission**

The evidence on this issue is not comprehensive. There is no indication whether the changes involved a physical change to the distribution system, a change in the manner or quality of the metering setup, or any other change.

Board staff submits that a host distributor does not have the prerogative to change the status of an embedded distributor to that of an ordinary retail customer, even if the rates to a retail customer are higher than the embedded rate might have been expected to be.

Board staff further submits that Halton Hills Hydro, as a host distributor, does not have the prerogative to discontinue its embedded class, even if it had never applied for a rate for the class since becoming regulated by the Board. The utility should have shown an embedded customer class in its Informational Cost Allocation study, even though the EDR 2006 Decision did not yet reflect the previous Board Decision, and regardless of the fact that the class has only one customer. The Informational Filing should have included suitable load and connection information, as provided for in the model framework that was made available.

Board staff invites parties to comment on whether Halton Hills should have a cost-based rate for this class of customer.

### **ii) Residential Time of Use Class**

## **Background**

The Application includes a proposal of 2008 rates for a class of two customers called Residential Time of Use. The request is for approval of rates that would be lower than those currently approved for this class, and that would be lower than the rates for the Residential class. (Exh10/Tab1/Sch7/p1). All proposed rates except for the distribution rates would be identical for the Residential and the Residential Time of Use classes.

## **Discussion and Submission**

Halton Hills Hydro's distribution rates for the Residential class and the "Residential Interval-metered" class were identical up to 2005. This was consistent with the first Distribution Rate Handbook, which stipulated that time-of-use rates would apply only to the commodity Cost of Power (March 9, 2000, section 4.6.2.4).

The 2006 EDR model calculated different adjustments to the distribution rates for the two groups, despite starting from the identical rates, due to the fact that the interval-metered customers had much higher consumption and hence quite different distribution bills than the ordinary-metered customers. In its initial application, Halton Hills Hydro applied to continue in 2006 with identical rates, and it made an adjustment in the rates model to achieve this outcome. Unfortunately, when the final Decision version of the rate model was issued, this manual adjustment was not done correctly. As a result, the rate structure generated automatically by the model was adopted, and has been in effect ever since.

In the currently approved tariff, the Residential Time of Use class is not identified in the customer classification section, but the separate rates begun in 2006 have continued through the IRM formula. In the current application, the Residential Time of Use class is listed in the description of the existing approved classes, though in terms identical to the Residential class. Separate rates are proposed for the Residential Time of Use class.

Board staff submits that the Board does not have any indication of whether the proposed rates are cost-based, because the Residential Time of Use class does not appear as a separate entity in the Informational Cost Allocation filing. In the current application, the Residential Time of Use class is not shown separately in most of the quantitative tables in the pre-filed evidence or interrogatory responses.

Board staff questions whether a separate distribution rate for the Residential Time of Use class should be continued. The distinction that generated the class in the first place was unintentional. Furthermore, the rate differences have not been shown to reflect cost differences.

Board staff invites the Applicant and parties to address the Residential TOU class issue.

### iii) Revenue to Cost Ratios

#### **Background**

Halton Hills Hydro has submitted its Revenue to Cost Ratio Informational Filing. Run 2 of the model yielded the Revenue to Cost Ratios found in the first column of the following table. The utility proposed changes in 2008 test year rates, and calculated the resulting revenue to cost ratios. These are shown in the second column of the table. In response to Board staff phase 2 IR #18, Table 20, an alternative calculation of revenue to cost ratios was provided, with corrections to labelling of classes. In response to VECC IR # 22, a second alternative calculation of revenue to cost ratios was also provided.

%	Informational Filing Run 2	Application Exhibit 10 / Tab 1 / Schedule 7	Board Staff (2 <sup>nd</sup> Round) Interrogatory # 18	VECC Interrogatories #22, and (2 <sup>nd</sup> Round) # 9(d)
<b>Customer Class</b>				
Residential	88.34	93.46	89.59	94.60
GS < 50 kW	81.75	96.50	94.58	94.44
GS 50 – 999 kW	156.93	149.18	156.57	134.81
GS 1000 – 4999	164.17	119.30	137.69	131.92
Street Lights	15.14	20.70	20.90	24.27
Sentinel Lights	36.74	50.00	50.82	53.43
USL	106.77	100.00	92.93	103.37

### Discussion and Submission

Board staff was unable to replicate the calculations in Exhibit 10/Tab1/Sch2, and requested a step-by-step calculation using a formula that has been requested of other applicants. The outcome is shown in the latter two columns of the table. The ratios are broadly similar, and Board staff submits that the ratios based on the proposed rates are within the range of the Board's report "Cost Allocation for Electricity Distributors", issued on November 28, 2007. For all of the classes where the Applicant calculates a ratio that is within the ranges of the Board's report, the value calculated by the Board staff formula and the VECC formula are also in the range.

There are two exceptions to the general pattern:

- The Streetlighting Class, which has a very low ratio based on current approved rates, and is proposed to remain very much below the lower end of the range for the ratio found in the Board report. The proposed ratio is approximately 21%, compared to the lower end of the range (70%).
- Sentinel Lights, with a proposed ratio of 50%, also to be compared to lowest range value of 70%.

In both instances, the proposed revenue to cost ratio is considerably higher than what prevails under the existing rates, but even with the somewhat more favourable outcome under the VECC formula, the ratios are well below the respective ranges.

The Applicant indicated that it does not intend to change the rate application in response to the publication of the Board's report, on the basis that the criteria are being met (response to Board staff IR phase 2 #10). With respect to the Streetlighting and



Sentinel Lighting results, the Applicant had earlier submitted that the cost allocation model yields ambiguous results due to most classes being allocated costs on the basis of whole customer loads whereas these classes are allocated costs on the basis of individual connections. Board staff asks parties to comment on the customer impacts of implementing the proposal as filed.

#### iv) Monthly Service Charges

##### **Background**

The application lists the 2006 approved monthly service rates for each class, together with the various calculations of per-customer customer-related costs yielded by the Informational Filing (Exh8/Tab1/Sch1/p5). The proposed rates for 2008 are compared with the 2006 approved charges (Exh8/Tab1/Sch2/p1). The percentage changes from the current 2007 approved rates are shown for each class in Exhibit 10/Tab1/Sch7/p1.

##### **Discussion and Submission**

Board staff notes that the 2006 monthly service charge was above the higher end of the range of the Informational Filing by a small amount, for two classes: GS < 50 kW, and Unmetered Scattered Load. In both cases, the proposed monthly service charge is higher than the currently approved rate.

The application in both these classes is to increase the monthly service charge by a percentage amount lower than the volumetric per-kWh rate. For the GS<50 kW class, the service charge would be increased by 13.7% compared to proposed increase in the volumetric rate of 28%. For USL, the corresponding amounts are 3.3% compared to 14.9%.

Board staff seek comments from parties on whether these changes are a reasonable adjustment to make on the basis of the Informational Cost Allocation study.

#### v) Retail Transmission Service Rates

##### **Background**

The currently approved Retail Transmission Service Rates were not adjusted in 2006, and in the initial Halton Hills Hydro application they were again proposed to remain constant. In response to Board staff IRs #55 and # 56, a new set of proposed rates was provided. In response to Board staff IR # 24 (phase 2), another set of proposed rates was put forward, which are lower than those provided in the phase 1 interrogatories.

##### **Discussion and Submission**

Board staff notes that the first proposed adjustments were minimal changes from the status quo, considerably smaller than the percentage changes in the wholesale charges.

The response to the phase 2 interrogatory points out that Halton Hills Hydro receives much of its power through embedded delivery points, and that new rates have not yet

been approved for Hydro One Networks Inc. which would determine the cost of transmission service through these five points. The proposed adjustments by Hydro One distribution are smaller in percentage terms than the corresponding decreases approved for wholesale transmission rates.

Board staff submits that the proposed adjustment in Retail Transmission Service Rates would be affected by the blending of the wholesale charge and the embedded delivery charge. The already approved wholesale transmission charge applies to two delivery points and Hydro One rates apply to the other five. The percentage adjustments provided in Tables 24 and 25 in the phase 2 IR #24 response appear to be greater than the higher of the two upstream adjustments, and so the proposed adjustments cannot be revenue neutral.

Board staff notes that the final sentence of the response is the applicant's intention to revise the rates once the rates applicable to the embedded delivery points are approved. In the meantime, Board staff submits that the illustrative rates do not appear to have been calculated correctly, and would welcome an explanation in the Applicant's reply submission.

#### vi) Low Voltage Charges

##### **Background**

Notwithstanding the fact that Halton Hills Hydro is a host distributor to Hydro One at certain delivery points of its distribution system, the reverse is also true at other delivery points where it is an embedded distributor, served by the host distributor Hydro One. As an embedded distributor, the utility has included an amount for Low Voltage (LV) cost of \$660,000 for the 2008 test year. The LV amount approved for inclusion in 2006 distribution rates was \$613,744. The corresponding expense in the bridge year was \$636,500 (Appendix E/Exh4/Tab2/Sch1/p2)

The cost is to be recovered from each class as a component of its volumetric rate, as in the current approved rates. The proposed components of the volumetric rates that are designed to cover the cost of LV – Wheeling are listed in Exh10/Tab1/Sch7/p 5.

##### **Discussion and Submission**

The components are approximately equal (in most cases slightly lower) than the corresponding amounts approved by the Board in the 2006 application.

#### Line Losses

##### **Background**

In response to Board staff IR #10, Halton Hills Hydro reaffirmed that the actual Distribution Loss Factors (DLF) for 2004 to 2006 are as provided in the application, i.e. 1.0509, 1.0637 and 1.0357 respectively. However, the interrogatory response also stated that previous less accurate data gathering and an increase in un-metered power

has resulted in lower historic loss factors. The response specifically states that the actual 2006 DLF of 1.0357 was incorrectly determined.

### **Discussion and Submission**

Board staff note the inconsistency in the reporting of the actual 2006 DLF and the sharp increase in the DLF from 2004 to 2005.

Board staff seek comments from parties on:

- the DLF increase directly attributable to technical losses (resulting from the operation of the distribution system) and non-technical losses (resulting from theft).
- Whether there is a need to decrease the DLF during the test year (2008) and/or during a longer planning period. If there is a need, how that decrease would be accomplished.

### **DEFERRAL AND VARIANCE ACCOUNTS**

#### **i) Disposition**

#### **Background**

Halton Hills Hydro is requesting that the following accounts and balances be cleared for disposition as of April 30, 2008 as per the revised Exhibit 5, Tab 1, Schedule 3, in response to Board Staff phase 2 IR# 27. The balances provided below include both an interest and principal forecast up to April 30, 2008:

1508 Other Regulatory Assets, \$241,783  
1518 RCVA – Retail, \$12,228  
1525 Miscellaneous Deferred Debits, \$59,814  
1548 RCVA – STR, (\$3,102)  
1550 LV Variance, \$21,164  
1562 Deferred Payments in Lieu of Taxes, (\$115,260)  
1570 Qualifying Transition Costs, (\$2,038)  
1571 Pre-market Opening Energy Variances, (\$20,603)  
1580 RSVA – Wholesale Market Service Charge, \$251,077  
1582 RSVA – One-Time WMS, \$54,703  
1584 RSVA – Retail Transmission Network Charges, \$19,766  
1586 RSVA – Retail Transmission Connection Charges, (\$579,951)  
1588 RSVA – Power, \$1,654,427 (includes forecasted principal balance)  
1590 Recovery of Regulatory Asset Balances, \$130,533 (includes forecasted principal balance)

Total \$1,724,601

The Applicant's proposal is to collect these amounts from ratepayers over a three year period beginning May 1, 2008 via rate riders (Exh5/Tab1/Sch3).

## **Discussion and Submission**

### Continuation of Deferral and Variance Accounts

The Board has already approved and defined, through the APH and associated letters, the period and functionality of deferral and variance accounts in the electricity distribution sector. Therefore, it is not necessary for Halton Hills Hydro to request permission to continue using open deferral and variance accounts as per the APH.

### Treatment of RSVAs

Halton Hills Hydro is applying for disposition of 1588 RSVA Power. This account is reviewed quarterly for disposition by the Board as part of the Bill 23 process and the Board may wish to consider the impact of ordering disposition of this account upon the existing Bill 23 process.

### Forecasting Balances for Disposition

Halton Hills Hydro is forecasting both principal and carrying charges for some of the deferral and variance accounts that it is proposing to clear. The accounts being forecast are account 1588 RSVA – Power and 1590 Recovery of Regulatory Assets. The remaining accounts being applied for disposition are using December 31, 2006 principal balances plus accrued interest to April 30, 2008.

Board staff notes that in the natural gas sector, utilities do forecast principal and interest on deferral and variance accounts for disposition to the end of the current test year. However, generally, these forecasts do not exceed two or three months once the applicant provides an update before the decision is released. The forecast balances are then trued up to the actual and any differences are placed in a deferral account for disposition at the next rate case. This approach has not been used for electricity distributors.

In the electricity distribution sector, it has not been Board practice to order disposition of forecasted balances of principal transactions on deferral and variance accounts. Usual practice in the electricity sector is to use the most up-to-date audited balances, as supported by audited financial statements, plus forecasted carrying charges on those balances up to the start of the new rate year. The most recent Halton Hills Hydro balances that have been independently audited are the December 31, 2006 balances. It would be inconsistent with the Board's past usual practice in this sector to dispose of forecasted principal balances.

### Treatment of Account 1590 – "Recovery of Regulatory Asset Balances"

*Impacts on remaining variance accounts:*

It is unclear from the response to Board Staff phase 2 IR #28, if the utility was using account 1590 prior to 2005 to record the recoveries of deferral and variance accounts. This leads Board staff to question if account 1590 and other regulatory accounts have been accounted for correctly. Citing the evidence in the application, Halton Hills Hydro may wish to clarify its use of account 1590. The Board may wish to consider whether disposition of the requested variance accounts is prudent at this time.

*Disposition of 1590:*

Halton Hills Hydro is requesting that the balances currently in 1590 be rolled into the current disposition of regulatory assets. In the Phase 2 decision for the Review and Recovery of Regulatory Assets for the five large distributors (RP-2004-0117, RP-2004-0118, RP-2004-0100, RP-2004-0069, RP-2004-0064) the Board stated that:

“Also as of April 30, 2005, all four Applicants shall debit the Regulatory Asset Recovery Account (1590, Recovery of Regulatory Asset Balance) by the approved total recovery amounts. Starting May 1, 2005, revenue from the monthly rate riders shall be credited to the Regulatory Asset Recovery Account (1590). Interest shall continue to apply to this account. (Section 9.018)

At the end of the three year period, at April 30, 2008, as there will be a residual (positive or negative) balance in the Regulatory Asset Recovery Account (1590), this balance shall be disposed of to rate classes in proportion to the recovery share as established when rate riders were implemented. (Section 9.019)”

The Applicant has proposed to dispose of account 1590 before the final balance has been determined. Parties are asked to comment on whether the Board should consider that this does not reflect a proper true-up. The Phase 2 decision quoted above suggests that the rate rider associated with 1590 be removed as of May 1, 2008. Once the residual balance in account 1590 is finalized, the residual balance is to be disposed at a future hearing. The final balance in account 1590 cannot be confirmed until after the current recovery period has expired, i.e. April 30, 2008.

Interest Rates Used in Account 1508

In response to Board Staff phase 2 IR # 31, Halton Hills Hydro stated that it is using a 3.88% interest rate for the period January 1, 2005 to April 30, 2006 for both sub-accounts of 1508, OEB Cost Assessments and OMERS Pension Contributions. This is the correct interest rate for sub-account 1508 OMERS Pension Contributions. However, the correct interest rate for sub-account 1508 OEB Cost Assessments is 5.75% for this period, as per the December 20, 2004 letter from the Board to LDCs. The impact of the difference in these interest rates is estimated to be immaterial.

Treatment of Account 1570 and 1571

Halton Hills Hydro is seeking to dispose of account 1570, Qualifying Transition Costs, and account 1571, Pre-market Opening Energy Variances, with a refund to customers

of (\$2,038) and (\$20,603) respectively. The Applicant stated (Board staff IR #48 and Board staff Phase 2 IR #25) that in the case of account 1570, approved recoveries exceeded actual which resulted in a “small non-material credit balance”. For account 1571, a credit balance exists due to “back-billings” to customers in 2006 to the pre-market opening period for charges that were neither billed nor accrued to the pre-market opening period. It appears that Halton Hills Hydro discovered that the amounts applied for in the 2006 EDR were overstated for these two reasons, and is attempting to refund the balance to customers. However, these accounts were given final disposition and closed in the 2006 EDR Decision and should have zero balances.

Parties are asked to comment on whether the Board should consider disposing of these balances and creating a precedent for varying a previous Decision.

#### Treatment of Account 1562

Board staff discovered several errors in accounting for 1562 during the interrogatory phase, which the Applicant corrected in its revised application. These errors included Halton Hills Hydro stating that it was using method 3 to account for Deferred Payments in Lieu of Taxes (PILs) in its general ledger, but not using account 1563 as required by this method. The Applicant had also erroneously continued to use account 1562 after April 30, 2006, even though the account should have been closed at that date. These findings indicate that the Applicant has not been correctly using the deferral accounts related to PILs as per instructions provided in the Accounting Procedures Handbook and associated Frequently Asked Questions.

### **Payments in Lieu of Taxes**

#### **Background**

On October 30, 2007 the federal government introduced changes in tax legislation. Bill C-28, the enabling legislation, was given Royal Assent on December 14, 2007. Many different aspects of personal and corporate taxation were affected by Bill C-28.

The cost of service applications filed by distributors in 2007 have been affected by this change in tax legislation. The effective tax rate for each distributor is now lower than it was when the distributor submitted its application.

#### **Discussion and Submission**

The Halton Hills Hydro application used a combined Ontario and federal income tax rate of 34.5% for 2008. The correct tax rate for 2008 is now 33.5%. In response to Board staff IR #12, the Applicant agreed that its treatment of interest expense in the PILs calculations was not in accordance with previous Board guidance.

Board staff seek comments from parties on whether Halton Hills Hydro should recalculate its 2008 PILs allowance to reflect:

- 1) The elimination of interest expense additions and deductions;

- 2) Any adjustments to depreciation and CCA that might result from a change in rate base; and
- 3) The new combined income tax rate of 33.5%.

## **SMART METERS**

### **Background**

Halton Hills Hydro is not one of the 13 distributors undertaking smart meter activities and named in the combined smart meter proceeding, EB-2007-0063. It filed a smart meter plan in the RP-2005-0020/EB-2005-0374 2006 EDR proceeding. In its Decision and Order EB-2005-0374, the Board determined that \$3.50 per meter per month installed during the 2006 rate year (as provided in the March 21, 2006 Generic Decision EB-2005-0529) would be the amount to be recovered by Halton Hills Hydro effective May 1, 2006.

Subsequently, Halton Hills Hydro requested \$1.18 for smart meter costs in its 2007 EDR application. The Board, in its April 12, 2007 Decision and Order EB-2007-0536 declined this request stating:

“Halton Hills requested an amount of \$1.18 for smart meter costs. Regulation 153/07 under the *Electricity Act, 1998*, which amends regulation 427/06 under the same Act, was filed on April 10, 2007. As a result, it is the Board’s understanding that Halton Hills will not be undertaking any smart meter activity (i.e. discretionary metering activity) in 2007.

However, the Board has approved an amount of \$0.28 per month per metered customer to be collected through a smart meter rate adder. This nominal funding amount was calculated using the Board’s model for inactive distributors, as described in the Smart Metering Rates Addendum to the Report. The amount collected through the smart meter rate adder will be booked into the existing variance accounts, and retained in these accounts, to help fund future smart meter activity. As the notice of this application indicated, the Board will be holding a combined proceeding to consider, among other things, appropriate recovery of smart meter costs.”

In its November 20, 2007 response to interrogatories, Halton Hills Hydro provided its December 15, 2006 “Smart Meter Investment Plan (Board File # EB-2006-0246)”, and indicated that it applied for a rate rider of \$1.18 per month per metered customer, stating: “On December 15, 2006 Halton Hills Hydro Inc. filed its Smart Meter Investment Plan (Appendix G) with the Board. Halton Hills Hydro Inc. is of the opinion that the Plan is still valid and justifies the rate rider of \$1.18/customer/month.”

### **Discussion and Submission**

Board staff believes that the following points should be considered in the Halton Hills Hydro request for a rate rider of \$1.18 per month per metered customer [instead of the current \$0.28]:

- a) Halton Hills Hydro did not provide evidence that it is authorized to undertake smart meter activities;
- b) In the 2006 EDR proceeding Halton Hills Hydro received approval for the equivalent of \$0.30 per month per residential customer [as provided in the March 21, 2006 Generic Decision EB-2005-0529], instead of the amount according to the specific smart meter plan which the utility submitted;
- c) On December 15, 2006, Halton Hills Hydro submitted its Smart Meter Plan in the Board's EB-2006-0246 proceeding which subsequently formed the basis for the utility's request of a rate rider of \$1.18 per month per metered customer in the 2007 IRM proceeding;
- d) In its April 12, 2007 Decision and Order EB-2007-0536, the Board declined Halton Hills Hydro's request for a \$1.18 rate rider, noting that the Board's understanding that Halton Hills Hydro will not be undertaking any smart metering activity in 2007;
- e) In its interrogatory responses to Board Staff and VECC (Board staff IR # 46a and VECC IR # 2c, Halton Hills Hydro confirmed that it did not install any smart meters in 2007;
- f) In its interrogatory response to Board Staff (Board staff IR # 46), Halton Hills Hydro confirmed that it is not applying for smart meter cost recovery [through rate base and revenue requirement] for bridge year 2007 and test year 2008.

Parties are also asked to comment on whether, even if Halton Hills Hydro is denied its request in this application, that the utility could still proceed to implement smart meters after a rate order is issued if authorization is granted. Given that Halton Hills Hydro has a rate rider, would that rider be sufficient to support future smart meter activities until such time as Halton Hills Hydro filed an application to have its smart meter costs approved?

~ All of which is respectfully submitted ~