ONTARIO ENERGY BOARD

STAFF SUBMISSION

2010 ELECTRICITY DISTRIBUTION RATES

HALDIMAND COUNTY HYDRO INC.

(“Haldimand County”)

EB-2009-0265

February 18, 2010

Introduction

Haldimand County Hydro Inc. ("Haldimand" or the "Applicant") is a wholly owned subsidiary of Haldimand County Utilities Inc. which is 100% owned by Haldimand County. Haldimand owns and operates the electricity distribution system in its licensed service area in Haldimand County, serving approximately 20,843 Residential, General Service, Street Lighting, Sentinel Light and Unmetered Scattered Load customers and two Embedded Distributors. The total service territory for Haldimand is 1,252 square kilometers consisting of rural areas and six communities: Caledonia, Cayuga, Dunnville, Hagersville, Jarvis and Townsend.

Haldimand filed an application with the Ontario Energy Board (the "Board"), on August 28, 2009, under section 78 of the *Ontario Energy Board Act*, *1998*, S.O. 1998, c.15 (Schedule B), seeking approval for changes to the rates that Haldimand charges for electricity distribution, to be effective May 1, 2010. In its Application, Haldimand requested a service revenue requirement of $13,938,978 which produced a deficiency in gross distribution revenue of $1,584,943 at current rates for the 2010 Test Year.

The Board issued a Notice of Application and Hearing on September 16, 2009. Energy Probe Research Foundation ("Energy Probe"), School Energy Coalition ("SEC") and the Vulnerable Energy Consumers Coalition ("VECC") applied for intervenor status and cost eligibility. The Board also granted intervention status to a residential ratepayer, Ms. Lisa Pryor.

In Procedural Order No. 1 issued on October 14, 2009, the Board indicated that it would proceed by way of a written hearing and outlined the dates for filing written interrogatories and responses to interrogatories. In Procedural Order No. 3 issued on December 11, 2009, the Board provided dates for filing supplemental written interrogatories and outlined the dates for a settlement conference between the Applicant and intervenors with the objective of reaching a settlement among the parties on the issues.

A settlement conference was held on January 21st and 22nd, 2010 in the Board's hearing room. The parties reached a settlement on all issues with the exception of the following:

1. Load forecast
2. Lead / Lag Study – the appropriateness of a lead / lag study for Haldimand's next rebasing application
3. Harmonized Sales Tax
4. Return on Equity and Capitalization
5. RSVA Account 1588 – Sub-account Global Adjustment (separation by RPP/Non-RPP)

Although the parties reached a settlement on Deferral and Variance Accounts, the proposal provided for Board staff to make a submission on the narrow issue of RSVA Account 1588 (Sub-account Global Adjustment).

Load Forecast

Background

The Applicant discussed the development of its customer/connection count forecast and load forecast in Exhibit 3 of its August 28, 2009 filing. It determined the 2009 Bridge Year and 2010 Test Year customer/connection count by class by utilizing historical data. It also determined the kWh forecast and the kW forecast for appropriate classes by customer class and presented variance analyses in support of the forecasts. The Applicant provided additional information in response to two rounds of interrogatories.

Discussion and Submission

<u>Methodology and Model</u>

The forecast for the number of customers/connections by rate class was determined on the basis of historical customer/connections data for the past 7 years (2002-2008). The weather-normalized load forecast was developed in a four-step process. First, a total system weather-normalized purchased energy forecast was developed based on a multifactor regression model that incorporated historical load, weather, economic data, population and calendar factors. Second, the predicted 2008 weather normalized purchases were adjusted by the negative growth factors outlined in the ISEO 18-Month Outlook to produce a 2009 and 2010 forecast of weather normalized purchases. Third, the weather normalized purchased energy forecast was adjusted by Haldimand's proposed total loss factor to produce a weather normalized billed energy forecast. Finally, the forecast of billed energy *by* rate class was developed based on a forecast of customer/connection numbers and their historical usage patterns. For each of the rate classes with weather-sensitive load, forecasted billed energy was adjusted to ensure that the total of the billed energy forecast by rate class was equivalent to the previously-obtained total weather-normalized billed energy. For those rate classes that use kW for the distribution volumetric billing determinant, the kWh forecast was modified by applying a conversion factor to the class energy forecast based on the historical relationship between kW and kWh.

As stated above, Haldimand has incorporated the IESO-18 Month Outlook to forecast the 2009 and 2010 weather normalized purchases. The IESO forecasted a 4.0% decline in Ontario energy demand for 2009 and an additional 0.3% decline for the year 2010. Haldimand has incorporated the IESO outlook as the majority of Haldimand's wholesale consumption is purchased through the IESO and also because Haldimand has experienced a decline in retail and wholesale consumption (kWh) since 2007 and into 2009.

Results

The 2010 forecasted customer/connection count is 24,586, a 0.5% increase over the previous year and is fairly close to the historical average (2003-2008). The total weather normalized billed energy forecast for 2010 is 343,105,622 kWh as filed in the original evidence. This is 2.5% lower than the actual billed volume of 352,084,249 in 2008.

Analysis

While the Applicant's methodology is a conventional load forecasting approach, Board staff submits that Haldimand's approach is problematic. In Board staff supplemental interrogatory No. 3, Board staff questioned the rationale of using a model that provided a high R square but one that was not statistically and theoretically sound. The model proposed in the original evidence provided negative coefficients for population and Gross Domestic Product ("GDP"), a result that was counter-intuitive.

In response to the above-referenced Board staff supplemental interrogatory, Haldimand submitted a revised regression model that excluded Ontario real GDP and Population but included a Conservation and Demand Management ("CDM") flag. The CDM flag is an increasing number from 1 to 36 starting in January 2006 through to December 2008. The actual number has been cubed in the regression model. The resulting billed load forecast is 343,156,303 kWh for 2010 as compared to the original filed number of 343,105,622 kWh.

Board staff submits that using a CDM flag and cubing the number seems to suggest an exponential impact of CDM. There is no evidence that CDM has such a significant impact on load. Moreover, the Applicant has not provided a basis for using the CDM flag as proposed in the alternate model.

Board staff prefers the use of an alternate model that excludes Population, GDP, Number of Peak Hours and Blackout Flags. All of these variables either include a negative coefficient that is counter-intuitive or variables that are statistically insignificant as noted in Applicant's response to Energy Probe Interrogatory No.12. Based on the regression output the R-square is 0.89 and the resulting 2009 and 2010 weather normalized system purchase forecast using the IESO-based methodology is 374,541,204 kWh and 373,417,580 kWh respectively. A billed load forecast number for 2009 and 2010 based on the above regression model has not been provided by the Applicant.

For reasons that follow, Board staff submits that the Board should use a system purchase forecast of 374,541,204 kWh for 2010. The Applicant in its Reply Argument is requested to provide a billed load forecast based on this number.

As noted in Table 12 (Exh 3 / Tab 2 / Sch.2 / Pg.6), Haldimand's forecast for 2009 and 2010 seems to suggest that the trend for Residential load is declining from 9,415 kWh per customer in 2008 to 9,292 in 2009 and 9,170 in 2010 a reduction of 1.3% for 2009 and 2010. This is despite the fact that residential customer connections are forecasted to increase by 1.6% in 2010 as compared to 2008. There is no evidence that the economic downturn has had such a significant impact on residential load. The Applicant has relied on the IESO 18-month outlook that forecasts a reduction of 4.0% in demand in 2009 and another 0.3% decline in 2010.

However, this forecast is province wide and there is no regional breakdown to provide any indication if the same forecast applies to Haldimand County. The IESO outlook also attributes the decline largely to the economic downturn implying a reduction in commercial/industrial load. There is no indication that the residential load would experience the same level of impact as the industrial sector.

In addition, an analysis of the Historical Annual Usage per Customer/Connection as presented in Table 17 (Exh 3 / Tab 2 / Sch.2 / Pg.18) reveals no clear trend. Haldimand's forecast for 2009 and 2010 seems to suggest that the trend for residential load is declining from 9,415 kWh per customer in 2008 to 9,292 in 2009 and 9,170 in 2010 a reduction of 1.3% for 2009 and 2010 (as noted in Table 12, E3/T2/Sc.2). This is despite the fact that average use increased in two of the past seven years (2005 and 2007). In the absence of a clear declining trend and the lack of evidence showing a significant impact of the economic downturn on residential load, a reduction in both years (2009 and 2010) does not seem appropriate. As can be noted from the data presented in Table 12 (E3/T1/S2), large commercial/ industrial load (GS > 50) shows a negative trend for the past 4 years (2005-2008) with 2007 and 2008 showing double digit declines. There is no such trend visible from the residential usage.

Partial Table 12 (Exh. 3 / Tab 2 / Sch. 2 / Pg.6)

Year	Residential		GS < 50 kW		GS 50 to 4999 kW	
	kWh	%	kWh	%	kWh	%
2002	10,192		22,341		2,947,132	
2003	9,953	-2.34%	25,733	15.18%	3,482,472	18.16%
2004	9,690	-2.64%	24,743	-3.85%	3,582,000	2.86%
2005	10,142	4.66%	25,448	2.85%	3,471,737	-3.08%
2006	9,516	-6.17%	24,721	-2.86%	3,493,188	0.62%
2007	9,581	0.68%	24,984	1.06%	2,376,253	-31.97%
2008	9,415	-1.73%	24,973	-0.04%	2,101,728	-11.55%
2009 - Normalized	9,292	-1.31%	25,441	1.87%	1,987,658	-5.43%
2010 - Normalized	9,170	-1.31%	25,918	1.87%	1,880,056	-5.41%

In light of the above arguments, Board staff submits that a system purchase forecast of 374,541,204 kWh for 2010 is appropriate. The forecast is the result of a regression model that is more stable and theoretically sound as compared to the Applicant's proposed approach. At the same time, it does not accept Haldimand's argument that the load will keep on declining in 2009 and 2010. As a proxy for the argument that there is no evidence that the residential load is declining to the extent claimed by Haldimand, Board staff submits that the Board not take into account a further 0.3% reduction that is assumed in 2010.

Working Capital – Lead / Lag Study for next cost of service application

Background and Submission

The Applicant in response to VECC interrogatory No. 4 indicated that to date it has not undertaken a lead-lag study to determine the working capital allowance. Haldimand has used a working capital allowance factor of 15% in its Application. This is similar to a number of other electric utilities that have come before the Board for rebasing in 2008 and 2009.

Board staff submits that there have generally been concerns about the appropriateness of the standard 15% formulaic approach, which dates back to the prior regulation of the municipal utilities by the former Ontario Hydro. The restructuring of the industry, unbundling of rates, introduction of competition in generation and marketing, and the corporatization of distributors as commercial, profit-seeking entities have altered the business environment and the distributors themselves. Current initiatives, such as smart metering and Time-of-Use pricing, and renewable generation contracts, will have further impacts on cash working capital requirements for all distributors.

Board Staff notes that 15% may be appropriate at this time, but submits that new evidence should be required at Haldimand's next rebasing application to support the requested working capital allowance

Board staff is planning to conduct a generic lead-lag study which is anticipated to be completed by March 2012. Board staff intends to include participation of electricity distributors in this study. Board staff submits that Haldimand should either adopt the outcome of the generic study or submit its own study at the time of its next rebasing.

Cost of Capital

Background

Haldimand has provided its proposed Cost of Capital in Exhibit 5. This proposal has been revised in response to interrogatories and the Settlement Agreement. The following table summarizes its updated proposals in this area:

Table 3

Cost of Capital Parameter	**Haldimand County Hydro's Proposal**
Capital Structure	Requesting Board approval of a capital structure of 60% debt and 40% equity. This is to comply with the *Report of the Board on Cost of Capital and 2nd Generation Incentive Regulation for Ontario's Electricity Distributors*, issued December 20, 2006 (the "Board Report").
Short-Term Debt	Requesting a 4% short-term debt component with a rate of 1.33% in accordance with the letter from the Board of February 24, 2009 regarding cost of capital updates for 2009 cost of service applications, consistent with the Board's Report
Long-Term Debt	Proposing a long term debt rate for 2010 of 5.58% revised to 5.13% as a result of the Settlement Agreement of February 12, 2010
Return on Equity	Proposing a return on equity rate for the 2010 Test year of 9.75% in accordance with the Report of the Board on the Cost of Capital for Ontario's Regulated Utilities issued on December 11, 2009.

Discussion and Submission

Capital Structure

Haldimand is requesting Board approval of a capital structure of 60% debt and 40% equity. It is requesting this change primarily to comply with the Board Report which requires all licensed Ontario electricity distributors to move toward a 60% debt and 40% equity ratio. Board staff notes that Haldimand's proposal is consistent with the Board Report.

Short Term Debt

Haldimand has included a 4% short-term debt component as part of its proposed capital structure and is proposing as a place holder, the short-term debt rate for the 2009 Test year of 1.33% in accordance with the letter from the Board of February 24, 2009 regarding cost of capital updates for 2009 cost of service applications. Haldimand's use of a short-term debt rate of 1.33% is without prejudice to any revisions that may be adopted by the Board in early 2010.

Board staff notes that the short-term debt rate will be updated by the Board in early March and submits that Haldimand should use the updated number in its draft Rate Order.

Common Equity

Haldimand is proposing a return on equity ("ROE") rate for the 2010 Test year of 9.75% in accordance with the *Report of the Board on the Cost of Capital for Ontario's Regulated Utilities* issued on December 11, 2009. As noted in page 37 of the Report, the 9.75% rate assumes a forecast long term Government of Canada bond yield of 4.25%. The Board will be updating the Return on Equity in early March and this may result in a change to the rate (9.75%) proposed in the December 11, 2009 Report.

Board staff submits that Haldimand should use the updated number in its draft Rate Order.

Harmonized Sales Tax

Background and Submission

Staff notes that the provincial sales tax ("PST") and goods and services tax ("GST") will be harmonized effective July 1, 2010 pursuant to Bill 218 which received Royal Assent on December 15, 2009. Unlike the GST, the PST is currently included as an OM&A expense and is also included in capital expenditures. When the GST and PST are harmonized, corporations will realize a reduction in OM&A expenses and capital expenditures that has not been reflected in the current application for 2010 rates.

In response to an interrogatory,[1] Haldimand stated that it has not made any adjustments to its 2010 OM&A and capital expenditure forecasts to reflect the elimination of the 8% PST costs starting on July 1, 2010. At the same time, Haldimand was not able to provide the amount of provincial sales tax paid in either of the historical actual or forecast OM&A expenses and capital expenditures.

Haldimand did not support the establishment of a deferral account to track resulting savings from the implementation of the HST[2]. The Applicant expressed concern with the additional administrative process of determining and tracking the resulting savings in a deferral account. Haldimand indicated that its inventory is valued on the weighted average cost basis, so receipt of goods that do not include the provincial sales tax portion subsequent to July 1, 2010 will simply reduce the average cost of each item and the full impact of the provincial sales tax portion would only be realized over time.

Haldimand was also not clear on how to recognize the savings from non-inventory items. Accordingly, Haldimand's view was that it could not accurately determine amounts that should go into a deferral account.

Board staff submits that the administrative burden and costs of harmonization are at odds with the provincial and Federal governments' pronouncements regarding the benefits of harmonization. While the costs and savings are not clear at this point, Board staff submits that tracking of these is warranted at this point and that, per government pronouncements, the potential savings for corporations like Haldimand could be significant. Accordingly, the Board may wish to consider establishing a variance account to track any savings that may arise.

Deferral and Variance Accounts

As noted in the Settlement Agreement, the parties have agreed to Haldimand's proposal to dispose of the December 31, 2008 balances in the deferral accounts together with carrying charges calculated to April 30, 2010, over a single year.

[1] Response to Energy Probe interrogatory #1
[2] Response to Energy Probe interrogatory #1(h) and Board staff supplemental interrogatory #11

The Agreement allowed Board staff to make a submission on the appropriate disposition of the balance in the RSVA Account 1588 – sub-account global adjustment. In Board staff supplemental interrogatory No. 18, staff inquired whether Haldimand had the capability in its billing system to exclude MUSH (“Municipalities, Universities, Schools and Hospitals”) sector customers to which the separate rate rider for the disposition of the account 1588 sub-account Power (Global Adjustment) balance would apply.

Although Haldimand agreed in principle that Residential and General Service<50 kW rate class that pay RPP should not be responsible for the recovery of the variance in RSVA Account 1588 (sub-account Global Adjustment), Haldimand clarified that it did not have the capability in its billing system to apply the separate rate rider to only of the non-RPP customers.

Discussion and Submission

The Board must decide whether the disposition of the balance of the Global Adjustment sub-account of Account 1588 should be subject to a separate rate rider, or, as proposed by Haldimand, be included in the single rate rider per class applicable to all customers in that class. Recovering the Global Adjustment sub-account balance solely from non-RPP customers more appropriately recovers the under-collection from those customers that were undercharged in the first place. Board staff takes no issue with Haldimand’s responses on the applicability or and practicality of excluding MUSH sector customers from any specific Global Adjustment sub-account rate rider.

Haldimand has confirmed that its billing system does not have the capability of applying the associated rate rider only to non-RPP customers. Board staff requests Haldimand to confirm from its vendor if this is a limitation of the billing system or if the purchase of additional software or modules could provide Haldimand the capability to apply a rate rider to non-RPP customers. In the event that the billing system can be modified, Haldimand is requested to provide the costs of modifying the system in its Reply Submission.

- All of which is respectfully submitted -