# ELECTRICITY DISTRIBUTION RATE APPLICATION (EB-2009-0274) VECC'S TECHNICAL CONFERENCE QUESTIONS

#### LOAD FORECAST

**QUESTION #1** 

References: VECC #22 B) Energy Probe #25 and #60 a)

a) Please confirm that the 883,889,204 kWh value presented in response to Energy Probe #25 c) is a forecast of 2009 wholesale weather normal purchases based on the updated employment forecast.

## Response:

Confirmed

b) Please confirm that the value is not a weather normalized actual value for 2009.

# Response:

We are unclear as to the meaning of "weather normalized actual" and therefore cannot confirm or reject this statement.

Further to this and based on a telephone discussion on June 16, 2010 between VECC (Bill Harper) and Whitby Hydro's load forecast consultant (Stephen Motluck – Elenchus Research), VECC suggested the prediction error for 2009 from Whitby's load forecast model (similar to what is in Table 2 at p.199 of pre-filed evidence) would be helpful. Substituting actual heating and cooling degree days for each month in 2009 and the load forecast equation described in Table 1 at p.198 of exhibit 3, the forecast for 2009 wholesale kWh is 862,282,171 kWh. Compared with actual 2009 wholesale kWh of 876,959,952 kWh, this represents a prediction error of roughly -1.7%. Table 2 is updated with 2009 results below:

Year	Actual kWh	Predicted kWh	% Error	Abs Error
2000	700,365,000	704,021,282	0.5%	0.5%
2001	733,129,000	736,301,675	0.4%	0.4%
2002	780,336,017	773,952,451	-0.8%	0.8%
2003	792,491,625	812,227,996	2.5%	2.5%
2004	825,196,089	855,034,407	3.6%	3.6%
2005	911,868,734	900,850,904	-1.2%	1.2%
2006	897,193,025	887,026,073	-1.1%	1.1%
2007	911,211,760	904,260,661	-0.8%	0.8%
2008	897,673,634	900,858,274	0.4%	0.4%
2009	876,959,952	862,282,171	-1.7%	1.7%
			Ava Error	MAPE
			Avg Error	
			0.2%	1.3%

Including 2009 in the table, shows that the model still performs with very accurate predictions, with an average percentage error of 0.2% and a mean absolute percentage error of 1.3%, comparing favourably with most load forecasting models. Based on preliminary results for 2010, we have also calculated the January to May 2010 percentage error. These results are presented below.

Year Actual kWh Predicted kWh % Error Jan-May 2010 359,741,970 358,764,923 -0.3%

For year-to-date 2010, the model is extremely accurate with very little error.

It is inappropriate to focus on any one individual year in isolation. For example, 2009 is an extraordinary year, with an unusually cool summer. In 2009, the number of cooling degree days observed at Pearson International Airport was 197.9, only 52% of the 10-year (1999-2008) average. Such a cool summer has not been observed since 1992, 17 years ago. Since 1985, only two years other than 2009 have seen annual CDD less than 200; in 1992 and in 1985. The year 2009 also saw the most severe recession in Ontario since 1981-82. These two events occurring simultaneously makes 2009 a very extraordinary year from a load forecast perspective. Notwithstanding this, Whitby's load forecast model predicted actual weather load with an error of only 1.7%, showing that the model is a reasonable basis to determine wholesale kWh.

#### OTHER REVENUE

**QUESTION #2** 

References: SEC #17

a) Does WHEC expect most or all of the listed facilities to be connected by the end of 2010?

# Response:

Of the fourteen proposed renewable energy projects listed in the response to SEC IR 17, Whitby Hydro forecast that approximately half will be connected by the end of 2010.

b) Please confirm whether or not the listed facilities will be required to pay the \$5.25 monthly fixed charge?

# Response:

All generators connected to Whitby Hydro's distribution system are required to pay the OEB approved monthly fixed charge of \$5.25.

c) What is WHEC's best estimate of the resulting revenue for 2010?

#### Response:

Based on 7 renewable energy projects being connected over the course of 2010, it is estimated that the resulting revenue would be approximately \$200.

d) What is WHEC's best estimate of the revenues for 2011-2013?

# Response:

There has been limited experience to-date related to the uptake of renewable energy projects and as a result, it is somewhat difficult to project connections over the 2011 – 2013 timeframe. Given the number of projects Whitby Hydro currently has pending, we would estimate connecting 10 projects in each of the years 2011 – 2013. We would estimate the resulting incremental revenue to be approximately \$320 in each year.

#### **CAPITAL EXPENDITURES & FIXED ASSET RATE BASE**

**QUESTION #3** 

Reference: VECC #52

a) The response indicates that voltage conversion work was not included in 2011 in order to ensure that the capital expenditure forecast for 2011 would not exceed Whitby Hydro's average annual capital expenditure level of approximately \$6.5 M. The response goes on to state that this level of capital works is manageable. However, capital spending is forecast to be \$11.0 M for 2010 (page 133), \$10.1 M for 2011 (page 138) and \$11.5 M for 2012 (page 143). Please reconcile.

# Response:

The \$6.5M average annual capital expenditures referred to is the average of net capital expenditures referred to in Table 2-3 (page 110). The figures of \$11.0M, \$10.1M, \$11.5M for 2010 through 2012 represent gross capital expenditures. As outlined in Table 2-3 for comparison, net capital expenditures are forecast to be \$7.7M (net of secondary services adjustment) in 2010, \$6.2M in 2011 and \$6.9M in 2012. Please refer to the response to VECC IR# 52 for additional information.

**QUESTION #4** 

Reference: SEC Round #1- #34 d)

Preamble: The response states that Whitby Hydro owns all equipment, inventory and assets acquired by WHES in the course of providing services.

a) Please confirm that WHES owns the transport and work equipment used by it to provide OM&A and Capital services to WHEC. If not, what is the basis for the Vehicle charges to WHEC and why do they include depreciation (per Energy Probe #40) and why are there no WHEC assets reported for Account # 1930 (per page 164)?

#### Response:

Confirmed.

b) What other types of equipment (e.g. USOA accounts) does WHES own and charge for as part of the Vehicle/Tools Costs under the Services Agreement (page 248)

# Response:

The other types of equipment are Account #1940 Tools, Account #1945 Measurement & Testing Equipment and Account #1955 Communication Equipment.

# OM&A

**QUESTION #5** 

Reference: VECC #5 and #51

a) Please confirm that the \$30 M HST adjustment shown in VECC #5 is meant to be capture the same difference as the \$28 M value reported in VECC #51.

# Response: Confirmed.

#### **AFFILIATE CHARGES**

**QUESTION #6** 

Reference: VECC #57 b)

**SEC #3 – Transfer Pricing Report Attachment** 

a) Please confirm that FMV Not Feasible/Exempt row in VECC #57 b) includes categories 1, 3 and 4 from the November 2006 Transfer Pricing Report.

# Response:

Confirmed.

b) Please confirm that for the 2006 Transfer Pricing Report the only mark-up included for these costs was roughly \$80 k associated with the category 4 – Control Room & Meter Operations.

# Response:

The \$80k mark-up applies to the Control Room and Meter Operation costs only. Other costs in the FMV Not Feasible/Exempt row (categories 1 and 3) include a markup of no more than 10% on the activities.

c) What is the basis for \$368 k adjustment included in the costs for 2010?

## Response:

See part (b). The \$368k adjustment is calculated to yield a mark-up of no more than 10% on the activities within this category.

d) Please confirm that the other types of activities in these categories include administrative activities such as Finance, HR, IT, Regulatory, etc.

# Response:

Confirmed. The other types of activities also include those identified in the 2006 Transfer Pricing Report as categories, 1, 3, and 4.

**QUESTION #7** 

Reference: VECC #57

a) The attachment to VECC #57 d) indicates that WHES' wage rate is marked up by 110% to cover overheads. What types of costs and activities are captured by this overhead mark-up? Does it include more than just pension and other employee-related benefits? If so, what?

## Response:

The markup of 110% consists of the following:

Employee related 70%
Administrative 30%
Return 10%
110%

Employee related overheads include: statutory payroll costs, pension, benefits, holidays, sick time, inclement weather, training and safety. Administrative overheads are for space, IT, accounting, payroll, HR, insurance, executive and supervision. The return reflects the market proxy of 10%.

b) Please provide a detailed break down that supports the 110% value.

#### Response:

Please see #7. a).

c) The Independent Evaluator Review states that mark-up for procurement is \$468 k (\$66 k over FMV). However, the responses to #57 b) and h) show a total procurement mark-up of \$595 k (\$112 + \$483) on capital and OM&A costs. Please reconcile. It appears that the adjustment included for 2010 results in cost that exceed FMV by \$193 k.

# Response:

Agree. The Independent Evaluator Review mark-up for procurement is based on a three year average which is consistent with the methodology used by the Chief Compliance Officer during the 2006 transfer pricing review. The amount for 2010 results in costs that exceed FMV by \$193k.

#### **QUESTION #8**

Reference: VECC #57 g) and VECC #33 a)

a) The response to VECC #57 g) and #33 a) both characterize the adjustment as a "rate on return". Please confirm that this characterization is incorrect. Rather it is simply an adjustment to the WHES costs that leads to an overall charge that is still less than what the surveys concluded were competitive market prices.

# Response:

For the purposes of the fair market value testing, the weighted cost of capital is used as a proxy for market pricing. As a result, it is simply an adjustment to the WHES costs that leads to the overall charge that yields pricing less than competitive market prices. Based on the transfer pricing plan determined through the 2006 Compliance Audit, this pricing mechanism is applied to the "FMV Not Feasible/Exempt" category and Vehicle/Tools.

b) If it is meant to be a "rate of return", please indicate the assets employed by WHES and the applicable ROE and cost of debt values use to calculate the adjustment.

# Response:

Please see #8 a).

# **QUESTION #9**

Reference: Energy Probe #64 c)

a) Please indicate what assets the \$53 k depreciation charge is associated with.

#### Response:

The depreciation expense is associated with Account #1940 Tools, Account #1945 Measurement & Testing Equipment and Account #1955 Communication Equipment.

#### **SMART METER ADDER**

**QUESTION #10** 

Reference: Application, pages 434 – 440

VECC #60 a)

a) Please confirm whether the  $\frac{1}{2}$  year rule was used in determining the smart meter depreciation costs for each year (page 437).

**Response:** The ½ year rule was used in determining the smart meter depreciation costs.

b) Please confirm that the cost of debt for 2010 should be the cost attributed to the new 2010 debt issue. If not, why not since \$8 M of the borrowing directly associated with smart meters (per VECC #60 a)) has been excluded from the average cost of debt calculation performed for determining the 2010 revenue requirement?

# Response:

Confirmed. The Smart Meter Rate Adder has been revised to reflect the Cost of Capital Parameters as per EP #39.b and is summarized below. As a result, the Smart Meter Rate Rider has been revised to \$2.11 from \$2.13.

Smart Meter Capital Structure						
	%	Rate				
Short Term Debt	4%	2.07%				
Long Term Debt	56%	5.24%				
Equity	40%	9.85%				

#### **DEFERRAL/VARIANCE ACCOUNTS**

**QUESTION #11** 

Reference: VECC #45 a)

a) With respect to Account RCVA #1518, please explain why the 2010 costs are forecast to decrease by 50% relative to 2009 while the revenues remain unchanged

# Response:

For RCVA account 1518, Whitby Hydro assumed that revenues would remain flat compared to the 2009 forecast and that there would be no material increase to the overall balance for that RCVA account. While this approach results in a 50% cost reduction in 2010, the it was intended to assume a "pass through" for any new 2010 activity.