



June 11, 2010

**BY COURIER AND RESS**

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

Dear Ms. Walli,

**RE: Whitby Hydro Electric Corporation**  
**Application for Approval of 2010 Electricity Distribution Rates**  
**EB- 2009-0274**

As directed by the Board's Procedural Order No. 3, Whitby Hydro Electric Corporation has provided responses to the Vulnerable Energy Consumers Coalition's (VECC) supplementary interrogatories (dated May 21, 2010) for this rate proceeding. Two paper copies and an electronic copy (CD) will follow via courier. A copy has also been filed electronically through the Board's RESS system.

Confidential Filings – Whitby Hydro Electric Corporation (Whitby Hydro) has referenced documents in specific interrogatory responses which contain confidential information. These documents include sensitive information with regards to third party contractors including competitive pricing. Copies of the following confidential documents have been filed with the Board in accordance with the Board's confidential filing procedures:

- #57 c) 2006 Transfer Pricing Report Attachments (Attachments 1 -3)
- #57 d) 2010 Transfer Pricing Analysis (Part 1 and 2)

Please note that a brief description of each item filed in confidence has been included as part of the interrogatory responses filed.

Should you require any further information or clarification, please contact me directly.

Respectfully submitted,

*Original signed by*

Ramona Abi-Rashed  
Treasurer

Cc: Neil Mather (email)  
All Intervenors (email)

# WHITBY HYDRO ELECTRIC CORPORATION 2010 RATE APPLICATION

(EB-2009-0274)

## VECC'S INTERROGATORIES (ROUND #2)

*(Note: Numbering Continues from Round #1)*

### Question #51

Reference: VECC #5 and #27  
SEC #34 b)  
Board Staff #14

- a) Please indicate where, in the Original Application, Whitby's approach to dealing with the HST is documented.

**Response:**

Whitby Hydro refers to the HST treatment for capital in Exhibit 2 pages, 133, 138, 143 and indicates that the impact of the commodity tax harmonization has been incorporated in the 2010 -2012 budgets. Similar to the references included for capital, Whitby Hydro had intended to provide clarifying comments regarding the inclusion of the HST impact in the OMA figures for the 2010 test year as part of the write-up provided in Exhibit 4. Upon review of the original application, Whitby Hydro acknowledges an oversight, as it is apparent that these comments were not included as was originally intended. Whitby Hydro did however, provide additional clarification of HST treatment as it relates to capital and OM&A in Board Staff IRR#14, SEC #34b) and Energy Probe IRRs #1, #11, 32r) and 47.

- b) Please reconcile the \$30 M adjustment to the 2010 Corporate Budget for HST with the \$28 M difference between the forecasted 2010 HST savings (\$37 M) and the provision incorporated in the Application (\$65 M).

**Response:**

The Whitby Hydro budget included half a years worth of PST savings which is projected to be approximately \$37k. The rate application reflects annualized savings of \$65k, as a result  $(65k - 37k = 28k)$ .

- c) Table 4-4 and VECC #27 provide a detailed variance explanation for the difference between the 2009 and 2010 OM&A levels. However, there is no reference in either to the \$65 M reduction included for HST. Please reconcile and demonstrate that the \$65 M reduction was actually incorporated in the Original Application's proposed OM&A.

**Response:**

Whitby Hydro did not specifically identify the HST reduction in the referenced table and response to VECC IRR #27, however the savings have been incorporated into OM&A for the test year as described in several of the IRRs (see part (a) for references).

**Question #52**

**Reference:** VECC #18

- a) Please explain why there are no expected capital expenditures for voltage conversion in 2011.**

**Response:**

In setting the time lines for the voltage conversion project Whitby Hydro reviewed the overall work that was forecast to be undertaken over the 3 year planning horizon. These included a number of works related to line construction projects, road relocation projects (1<sup>st</sup> phase of the HWY #407 extension etc.) and new municipal substation works.

Voltage conversion work was not included in 2011 in order to reduce implementation costs and ensure that the capital expenditures forecast for 2011 would not exceed Whitby Hydro's average annual expenditure level of approximately \$6.5 million. This level of capital works is manageable and allows work to be completed without a high level of reliance on more expensive non-affiliated third party resources.

The voltage conversion project is forecast to be completed over a six year period to allow cost reductions through co-ordination with municipal road relocation projects while maintaining annual capital expenditures at normal levels.

**Question #53**

**Reference:** VECC #21 b)

- a) Please confirm that the Burlington Decision supported the rejection regression models that included population or number of customers because the negative values for the resulting coefficients were counter intuitive not because either was considered an inappropriate explanatory variable to test for modelling purposes.**

**Response:**

We can confirm that in the Burlington Hydro Decision, the Board supported the rejection of regression models that included counter-intuitive signs. In the case of

Burlington Hydro, both number of customers and population yielded counter-intuitive signs when included in the regression analysis. Therefore, the Board supported the rejection of the regression model including these two variables.

**b) Is Whitby Hydro or its consultants aware of any utilities where the inclusion of customer count/population in the regression analysis yielded an intuitively correct and statistically significant result? If so, please indicate which distributor(s).**

**Response:**

Whitby Hydro and their consultant have not undertaken an exhaustive survey of all load forecast models submitted to the Board. However, it is our understanding that Toronto Hydro submitted a model for their 2010 rate application (EB-2009-0139) that used population for the Residential and GS<50 classes and number of customers for the larger GS classes (50-999 and 1000-4999). Our understanding is that these variables had the correct signs and were statistically significant. However, this load forecast model was significantly different in structure from that used by Whitby Hydro. Toronto Hydro's 2010 application contained class specific forecast models (i.e., separate regression equations for each class). Furthermore, the dependent variable used by Toronto Hydro is monthly kWh per day<sup>1</sup>, rather than the monthly kWh used by Whitby Hydro. It is worth noting that Toronto Hydro previously filed a load forecast model based on a methodology much closer to that which is used by Whitby Hydro for their 2008 rate application (EB-2007-0680), in that the model forecast utility wide monthly kWh purchases. In that model, Toronto Hydro tested the number of customers as an explanatory variable and found that the sign was negative (i.e. counter-intuitive) and had ambiguous significance.<sup>2</sup>

It should also be noted that our consultant's experience, after preparing many load forecasts for LDCs across the province, is that using population and customer counts as explanatory variables typically leads to counter-intuitive or statistically insignificant results. There may be several reasons for this. For example, the source of population data is a concern. Official population counts are conducted only once every five years during the Census. Monthly population counts for some areas are available through statistical estimation models, but may not reflect true population counts. Further, the connection between population, customer counts, and energy consumption may not be a simple linear relationship (e.g., substitution of a large customer with several smaller ones, or vice-versa, etc.). Our consultant has found that using monthly employment as a predictor of growth is a far more consistent approach and yields more plausible and accurate forecasts.

---

<sup>1</sup> See Toronto Hydro Application EB-2009-0139, Ex K1, T1, S1, p4.

<sup>2</sup> See Toronto Hydro Application EB-2007-0680, Exh K1, T1, S1, Appendix B.

Indeed, in the same way as simply using R-squared to determine model fit may be inappropriate, so may be the step-wise regression approach of adding and dropping various potential regressors to determine model fit based on t-stats, signs, and R-squared. This approach is virtually costless with computer statistics packages. However, fitting a model in this fashion may not necessarily yield the true behavioural relationship between the variables. Best practice should dictate that models are based on a rationale for energy consumption variance and not simply including regressors randomly.<sup>3</sup>

### **Question #54**

**Reference:** VECC #26 a)

- a) Please explain why the \$80,000 contribution was treated as “revenue” a opposed to a capital contribution.**

**Response:**

In accordance with GAAP, and as recommended by Whitby Hydro’s auditors, the \$80,000 contribution was recognized as revenue and was included in taxable income and as a result, the required taxes were paid.

### **Question #55**

**Reference:** VECC #27  
VECC #32 e)

**Preamble:** VECC #32 e) requested a breakdown between labour and non-labour OM&A costs for both those costs incurred (directly) by Whitby Hydro and those incurred by WHES and (subsequently) assigned/allocated to Whitby Hydro. The response did not provide the requested information.

- a) Please confirm that not all of the \$8,587 k in costs assigned by WHES to Whitby Hydro for 2010 is included in the proposed Revenue Requirement OM&A costs and that items certain items such as Smart Meters and CDM will be excluded. Please provide a schedule that sets out the items included in the \$8,587 k but excluded from the OM&A costs in the Application and the dollar value of each. (Expressed**

---

<sup>3</sup> For a summary discussion of these issues, see Chapter 12, “Econometrics in Practice: Problems and Perspectives” the classic text Econometric Methods, J. Johnston (3<sup>rd</sup> ed., 1984, McGraw-Hill).

another way, which of the “Adjustments for Rate Application” apply to the WHES costs.)

**Response:**

Confirmed. The \$8,587 in Service Agreement Costs is not all included in the proposed Revenue Requirement OM&A costs. Please see the schedule below that sets out the items included in the \$8,587 but excluded from the OM&A costs in the Application.

<b>OMA- Reconciliation of Service Agreement Costs</b>			
	<b>2008</b>		
	<b>Actuals</b>	<b>2009</b>	<b>2010</b>
Total Service Agreement Costs	7,188	7,814	8,587
Less:			
Smart Meters		-139	-293
CDM	-55	-67	-69
Sentinel light maintenance	-3	-2	
IFRS		-34	
HST			-10
Rate Application			-125
Maintenance			-135
	<u>-58</u>	<u>-242</u>	<u>-632</u>
Service Agreement Costs in Rates	7,130	7,572	7,955
Direct Costs	1,019	914	1,064
HST			-20
IFRS			-80
Direct Costs in Rates	<u>1,019</u>	<u>914</u>	<u>964</u>
Total OMA Rate Application Costs	<b>8,149</b>	<b>8,486</b>	<b>8,919</b>
\$ Adjustment	840	728	636
Total Service Agreement Costs	<u>6,290</u>	<u>6,844</u>	<u>7,319</u>
Total Service Agreement (A)	7,130	7,572	7,955
% Adjustment	13.35%	10.64%	8.69%

- b) As noted in the preamble, no breakdown has been provided of labour vs. external costs breakdown for either Whitby Hydro or WHES. Given the confidentiality concerns expressed in response to VECC #27 e) – please provide a schedule setting out a breakdown of the total OM&A costs (per the Application) between labour and non-labour costs.

**Response:**

OMA Rate Application Costs			
	2008 Actual	2009 Bridge	2010 Test
Whitby Hydro (External and Labour Costs) 1	911	834	904
Board of Directors	108	80	60
Total Direct Costs	1,019	914	964
<u>Service Agreement</u>			
Labour	4,524	4,828	5,031
External Costs	2,550	2,684	2,866
Depreciation	56	60	58
Total Service Agreement Costs	7,130	7,572	7,955
Total OMA Rate Application	8,149	8,486	8,919
Note: 1. Due to confidentiality reasons labour costs have been grouped with external costs.			

### Question #56

**Reference:** VECC #32 g)

**Preamble:** VECC #32 g) requested a breakdown between labour and non-labour capital spending for both those costs incurred (directly) by Whitby Hydro and those incurred by WHES and (subsequently) assigned/allocated to Whitby Hydro. The response did not provide the requested information.

- a) Given the confidentiality concerns expressed in response to VECC #27 g) – please provide a schedule setting out a breakdown of the 2010 total capital spending for inclusion in rate base (per the Application) between labour and non-labour costs.

**Response:**

<b>Capital Rate Application Costs</b>			
	<b>2008 Actual</b>	<b>2009 Bridge</b>	<b>2010 Test</b>
<u>Whitby Hydro Direct Costs</u>	995	563	804
Smart Meters		-70	-39
Whitby Hydro (External and Labour Costs) 1	995	493	765
<u>Service Agreement</u>			
Labour	2,218	2,070	2,342
External Costs	4,527	2,911	5,945
Depreciation	56	60	59
Total Service Agreement Costs	6,800	5,041	8,346
Contributions	-293	-151	-1,380
Secondary Service Adjustment			678
Total Capital Rate Application Costs	7,502	5,383	8,409
Note: 1. Due to confidentiality reasons labour costs have been grouped with with external costs.			

### **Question #57**

**Reference: VECC #33 - #36  
SEC #3**

- a) Please reconcile the total OM&A Services costs and adjustments reported in VECC #33 b) with those reported in response to VECC #32 d).**

**Response:**



Total Service Agreement Costs -(\$k)			
	2008 Actuals	2009	2010
<u>OMA Services</u>			
\$ Adjustment	809	701	625
Total Costs	6,077	6,793	7,627
Total OMA Services	6,886	7,494	8,252
<u>Vehicle Tools</u>			
\$ Adjustment	32	27	24
Total Costs	215	226	242
Total Vehicle Tools Services	247	253	266
<u>CDM</u>			
\$ Adjustment	7	7	6
Total Costs	48	60	63
Total CDM Services	55	67	69
Total			
\$ Total Adjustment	848	735	655
Total Costs	6,340	7,079	7,932
Total Service Agreement Costs	7,188	7,814	8,587

**b) With respect to VECC #33 a), please provide full details as to how the level of the adjustment (% and dollar value) for 2008, 2009 and 2010 was determined. In doing so, please demonstrate that the mark-ups used reconcile with the categories and the mark-up values referenced in the Attachment to SEC #3.**

**Response:**

Rate Application Service Agreement Cost breakdown:

Rate Application Service Agreement Cost Breakdown												
	2008 OMA				2009 OMA				2010 OMA			
	Costs	Adjusted Costs	Adjustment	% Adjustment	Costs	Adjusted Costs	Adjustment	% Adjustment	Costs	Adjusted Costs	Adjustment	% Adjustment
FMV Testing Feasible	1,141	1,312	172	15.0	1,318	1,477	158	12.0	1,314	1,445	131	10.0
FMV Not Feasible/Exempt	3,474	3,957	483	13.9	3,729	4,142	412	11.0	4,121	4,492	368	8.9
Procurement Model	1,079	1,232	153	14.2	1,089	1,219	131	12.0	1,121	1,233	112	10.0
Vehicle Tools	215	247	32	15.0	227	253	27	11.7	243	267	25	10.1
Direct costs	381	381	0	0.0	481	481	0	0.0	519	519	0	0.0
Total Service Agreement Costs for Rate Application	6,290	7,130	840	13.3	6,844	7,572	727	10.6	7,317	7,956	636	8.7

**c) Please file the attachments referred to in the Transfer Pricing Report provided in response to SEC #3.**

**Response:**

Due to the confidential nature of third party pricing provided in the report, attachments 1-3 have been filed with the Board in accordance with the Board's confidential filing procedures. Attachments 4 and 5 have been provided.

**d) With respect to the Transfer Pricing Report provided in SEC #3, has Whitby Hydro undertaken any more recent Fair Market Value Testing? If so, please provide.**

**Response:**

As indicated in the Exhibit 4, page 227, line 19-21, Whitby Hydro has engaged a third party to perform a review to re-validate the transfer pricing arrangement. A copy of the report has been attached as part of the response to this interrogatory.

As noted in Whitby Hydro's application (Exhibit 4, page 233, line 20-22), Whitby Hydro met with the CCO shortly after the ARC amendments of May 16, 2008 to re-affirm the methodology used during the 2005/2006 ARC review continued to meet the ARC requirements. As a result, the independent evaluator review undertaken by Ian McKenzie Business Services Inc. (IMBSI) utilized the same underlying premise and testing process accepted by the Chief Compliance Officer (CCO) during the 2005/2006 ARC compliance review in order to re-validate the following areas:

- Fair Market Testing of rates for
  - Overhead Line Construction Maintenance
  - Substation Maintenance
  - Engineering,
  - Vehicles and Equipment
- Review of Purchasing Cost Recoveries

Note that Whitby Hydro did not request IMBSI perform a review of the Control Room and Meter Department cost model, as these costs are strictly labour based and did not rely on outside variables (ie. third party pricing or outside purchasing volumes) that might drive an outcome different from that which was obtained during the 2006 review with the CCO. The only other variable that might affect the outcome of the original analysis would be a significant change in the departmental structure of the two departments, or if there was an increase to the pricing adjustment used in the transfer pricing arrangements. There was no change to the departmental structure and the pricing adjustment of 15% in 2006 has declined to a 10% level for 2010. As a result, neither variable would adversely alter the outcome of the analysis which shows that the transfer pricing supports the organizational structure of these departments.

As outlined in IMBSI's report, the results of the review indicate that the transfer pricing rates charged to Whitby Hydro are well below the fair market value (average of third party pricing obtained) for overhead line, substation and

engineering services. Vehicle and equipment costs are in line with only small differentials associated with bucket truck usage. With respect to the purchasing recoveries, IMBSI's review indicated that the pricing adjustment used for 2010 resulted in an over-recovery. This result was somewhat unexpected given the findings during the 2006 ARC review supported the transfer pricing model as it relates to the purchasing of materials and outsourced services however, this result is driven in part by the higher levels of capital requirements in 2010 (largely due to the MTO Highway 7 relocation project). It should be recognized that when the results (under-recoveries) of the fair market price testing is combined with the results of the purchasing over-recoveries, the net impact is an under-recovery of \$154K which supports Whitby Hydro's overall transfer pricing.

In addition to the attached report prepared by IMBSI, Whitby Hydro has provided as part of a confidential filing with the Board, a document which provides information regarding the contractors involved in the 2010 market price testing process as well as the analysis of pricing comparatives. Information provided in these documents is of a sensitive nature and as a result, Whitby Hydro has filed this document in confidence, in line with the Board's directions for confidential filings.

- e) With respect VECC #33 a); VECC #36 and SEC #5, please file copies of all other reports and documents provided to the CCO that described Whitby Hydro's transfer pricing practices.**

**Response:**

Whitby Hydro has provided the Transfer Pricing Report prepared for the Chief Compliance Officer (CCO) as an attachment referenced in SEC IRR #3. Whitby Hydro notes that this report adequately summarizes the discussions/meetings with the CCO, and questions the relevance of further questions in this area given that it pertains to 2006 cost information, ARC compliance was obtained by the CCO at the time of the review, and this proceeding is not intended to further address ARC compliance issues.

- f) Please provide a schedule that for the years 2008 – 2010 breaks down the services provided by WHES and their costs in accordance with the various treatments set out in the Transfer Pricing Report and show the calculation of the relevant mark-ups for each as appropriate. Please reconcile the resulting total mark-up for each year with the values reported in response to VECC #33 b).**

**Response:**

Please refer to response 57 b) for the breakdown requested. A more appropriate reconciliation of the total marked-up costs by year would be to the Total Service Agreement costs identified in the chart provided in VECC IRR #55 b) which ties

back to those costs included in the rate application as opposed all Service Agreement Costs.

- g) With respect to VECC #34 c), please reconcile the percentage mark-ups on Vehicle Tools reported here with the mark-up approach outlined in the Transfer Pricing Report (SEC #3).**

**Response:**

The percentage mark-ups on Vehicle Tools reported in VECC #34 c) were provided as 14.88% (2008), 11.95% (2009) and 9.92% (2010). In relation to the Transfer Pricing Report (SEC #3), the Vehicle Tools would be included as part of the affiliate costs that went through fair market value testing. These costs were tested supporting a mark-up of 15% as referenced on page 5 of the Transfer Pricing Report (under (2) Servco Internal Costs – Fair Market Value Testing Feasible). The 15% was accepted by the Chief Compliance Officer (CCO) to represent a “return on equity”. In 2009 and 2010 the mark-up was updated to reflect 12% and 10% respectively (before tax), in line with the Service Agreement and ARC.

- h) With respect to VEC #35 b), please provide full details as to how the level of the adjustment (% and dollar value) for 2008, 2009 and 2010 Capital Services was determined. In doing so, please demonstrate that the mark-ups reported in the responses reconcile with the categories and the mark-up values referenced in the Transfer Pricing Report attachment to SEC #3.**

**Response:**

Rate Application Service Agreement Cost Breakdown												
	2008 CAPITAL				2009 CAPITAL				2010 CAPITAL			
	Costs	Adjusted Costs	Adjustment	% Adjustment	Costs	Adjusted Costs	Adjustment	% Adjustment	Costs	Adjusted Costs	Adjustment	% Adjustment
FMV Testing Feasible	1,313	1,510	197	15.0	1,309	1,466	157	12.0	1,594	1,753	159	10.0
FMV Not Feasible/Exempt	904	988	84	9.3	657	721	65	10.0	939	1,012	73	7.8
Procurement Model	3,570	4,056	486	13.6	2,329	2,601	272	11.7	4,830	5,314	483	10.0
Vehicle Tools	215	247	32	15.0	227	253	27	11.7	242	267	25	10.3
Total Service Agreement Costs for Rate Application	6,002	6,801	800	13.3	4,521	5,041	521	11.5	7,605	8,346	741	9.7

**Question #58**

**Reference: Board Staff #2 b) and c)**

- a) Please update the response to Board Staff # 2 c) to reflect the Board's final Decision regarding Hydro One Networks' 2010 Transmission rates.

**Response:**

Please see Board Staff supplementary IRR #33 b).

- b) Please confirm that the total charges shown in response to #2 c) are based on the 2010 rates (as shown) and the 2009 actual billing quantities.

**Response:**

Confirmed.

- c) If the response to part (b) is yes, please provide a schedule that sets out Whitby Hydro's actual 2009 wholesale consumption, the 2010 forecast wholesale consumption and the resulting 2010 Line and Connection costs if the 2009 actual billing quantities are adjusted for the ratio between 2010 forecast wholesale consumption and 2009 actual wholesale consumption.

**Response:**

The schedule below provides the information as requested.

2009 Actual Wholesale Consumption (kWh)	876,959,953
2010 Forecast Wholesale Consumption (kWh)	886,766,789
2010 Forecast to 2009 Actual Ratio	101.12%

	IESO		HONI		Total	
	Network	Line Connection & Transformation	Network	Line Connection & Transformation	Network	Line Connection & Transformation
Billing Demand:						
Jan - Apr	412,347	415,498	140,033	139,033		
May - Dec	923,552	950,270	232,376	257,540		
2009A kW	1,335,899	1,365,768	372,409	396,573	1,708,308	1,762,341
Billing Demand:						
Jan - Apr	416,965	420,152	141,601	140,590		
May - Dec	933,896	960,913	234,979	260,424		
Est 2010 kW per VECC IR #58c)	1,350,861	1,381,065	376,580	401,015	1,727,441	1,782,079
					101.12%	101.12%
Rates:						
Jan. 1, 2010	\$ 2.97	\$ 2.44	\$ 2.24	\$ 1.99		
May 1, 2010	\$ 2.97	\$ 2.44	\$ 2.65	\$ 2.14		
Total Charges:						
Jan - Apr	\$ 1,238,387	\$ 1,025,170	\$ 317,187	\$ 279,774	\$ 1,555,574	\$ 1,304,944
May - Dec	\$ 2,773,670	\$ 2,344,628	\$ 622,693	\$ 557,308	\$ 3,396,364	\$ 2,901,936
2010F per VECC IR #58c)	\$ 4,012,057	\$ 3,369,798	\$ 939,880	\$ 837,083	\$ 4,951,938	\$ 4,206,880

### **Question #59**

**Reference:** Board Staff #3 b)  
VECC #44 c) and d)

- a) Please update the response to Board Staff #3 b) to reflect the Board's final decision and approved ST rates for Hydro One Networks effective May 1, 2010.

**Response:**

Please see Board Staff IRR #34.

### **Question #60**

**Reference:** SEC #14

- a) The response makes reference to new borrowing in 2010 to support Whitby's capital spending program. Please provide Whitby's current expectation as to the timing of the borrowing, the amount that will be borrowed, the source of the borrowing and the cost of borrowing.

**Response:**

In SEC IRR#14 Whitby Hydro indicated that it expects to borrow \$11.9M. Of this, \$4.0M relates to 2010 capital programs and the remainder relates to Smart Meters. The timing of borrowing is anticipated to occur in the late summer of 2010.

Further, it is noted in the response to Board Staff #30,

*"New third party debt has been added to reflect incremental borrowing anticipated to occur on or around September 1, 2010. The rate used for new third-party debt is the currently published rate for Infrastructure Ontario (IO). While this rate has not been negotiated, Whitby Hydro will update its evidence with a negotiated third-party rate should it become finalized during this proceeding."*

Whitby Hydro intends to use a third party for borrowing but has not yet negotiated with lending institutions for 2010 borrowing requirements. For the purpose of application updates (see Board Staff IRR #30), the published rate for Infrastructure Ontario of 5.24% (as of April 21, 2010) was used as a proxy for the cost of borrowing new debt. This rate reflects a term of 25 years and the rate is updated on a weekly basis. As indicated, Whitby Hydro will update its application with a negotiated third-party rate as appropriate.

- b) Using the response to part (a) please update the average cost of long term debt for 2010 as currently set out in Exhibit 5, page 335 and the resulting 2010 average cost of capital.

**Response:**

The average cost of long term debt for 2010 was addressed in the responses to VECC IR #39 (a) and (b) however, this information has been incorporated into the format used in table 5-1 of the application and provided below:

<b>Table 5-1 (updated for VECC IRR #60)</b> <b>Capitalization and Cost of Capital-New cost of capital</b>				
<u>Particulars</u>	<u>Capitalization Ratio</u>		<u>Cost Rate</u>	<u>Return</u>
	<b>2010 Test Year</b>			
	(%)	(\$)	(%)	(\$)
<b>Debt</b>				
Long-Term Debt	18.62%	\$14,109,743	6.67%	\$941,455
Aff -callable	8.60%	\$6,521,300	6.67%	\$435,126
Aff -non callable	28.78%	\$21,816,642	6.67%	\$1,455,689
Short-Term Debt	4.00%	\$3,031,977	2.07%	\$62,762
<b>Total Debt</b>	<b>60.00%</b>	<b>\$45,479,662</b>	<b>6.37%</b>	<b>\$2,895,032</b>
<b>Equity</b>				
Common Equity	40.00%	\$30,319,775	9.85%	\$2,986,498
Preferred Shares				
<b>Total Equity</b>	<b>40.00%</b>	<b>\$30,319,775</b>	<b>9.85%</b>	<b>\$2,986,498</b>
<b>Total</b>	<b>100.00%</b>	<b>\$75,799,437</b>	<b>7.76%</b>	<b>\$5,881,530</b>

## VECC Supplementary Interrogatories Listing of Referenced Documents

**The following reports and analysis have been referenced VECC's supplementary interrogatory responses. Each item has been identified by interrogatory number with a brief description and an indication of whether the document has been attached as part of the public record or has been filed in confidence.**

<b>IR#</b>	<b>Document Description</b>	<b>Public Filing</b>	<b>Confidential Filing</b>
57 c)	2006 Transfer Pricing Report Attachments: <ul style="list-style-type: none"> <li>- Attach 1: Regular Hourly Rates</li> <li>- Attach 2: Overtime Hourly Rates</li> <li>- Attach 3: Engineering Rates</li> <li>- Attach 4: Control/Meter Department Costs</li> <li>- Attach 5: Procurement Cost Analysis</li> </ul>	No No No Yes Yes	Yes Yes Yes n/a n/a
57 d)	2010 Independent Evaluator Review of Fair Market Value Testing and Purchasing Cost Recoveries	Yes	n/a
57 d)	2010 Transfer Pricing Analysis <ul style="list-style-type: none"> <li>- Part 1: Request for Contractor Pricing</li> <li>- Part 2: Market Price Analysis and Comparisons <ul style="list-style-type: none"> <li>* Regular Rates</li> <li>* Overtime Rates</li> <li>* Engineering Rates</li> </ul> </li> <li>- Part 3: Procurement Cost Analysis</li> </ul>	No No No No Yes	Yes Yes Yes Yes n/a



**VECC IRR # 57 c)**

**2006 Transfer Pricing Report Attachments**

## **Attachment 1: Regular Hourly Rates (2006)**

This attachment was included in the documents provided to the OEB's Chief Compliance Officer (CCO) during the 2005/2006 ARC review. It has been filed as a confidential document as it contains competitive contractor pricing obtained in 2006 for the purpose of market value price testing.

## **Attachment 2: Overtime Hourly Rates (2006)**

This attachment was included in the documents provided to the OEB's Chief Compliance Officer (CCO) during the 2005/2006 ARC review. It has been filed as a confidential document as it contains competitive contractor pricing obtained in 2006 for the purpose of market value price testing.

### **Attachment 3: Engineering Rates (2006)**

This attachment was included in the documents provided to the OEB's Chief Compliance Officer (CCO) during the 2005/2006 ARC review. It has been filed as a confidential document as it contains competitive contractor pricing obtained in 2006 for the purpose of market value price testing.

## Attachment #4

### Control/Meter Department Costs

#### Control Room/Meter (Servco model)

	\$	Markup	Markup \$	Total Costs
Control room	200,000	0.15	30,000	230,000
Meter	308,000	0.15	46,200	354,200
	508,000		76,200	584,200
Control room-supervision	14,000	0.15	2,100	16,100
Meter -supervision	12,000	0.15	1,800	13,800
	26,000		3,900	29,900
Total	534,000			614,100

#### Control Room/Meter (Distco model)

Control room/Meter Room costs excluding supervision	508,000
Supervision costs	142,000
	650,000
Difference	35,900

Nov 8, 2006

## Attachment #5

### Procurement Costs(Distco model)

	\$K
Purchasing Agent	165
Technical purchaser	149
Administrative support	91
	404

### Procurement Costs(Servco model)

A. Outsourcing of Services (\$K)

2003	1,080
2004	2,134
2005	1,617
<b>Average</b>	<b>1,610</b>

B. Material Purchases (\$K)

2003	1,084
2004	2,375
2005	1,554
<b>Average</b>	<b>1,671</b>

Total A + B	3,281
-------------	-------

<u>Current Pricing Structure</u>	<u>\$K</u>	<u>Mark-up %</u>	<u>Mark-up \$K</u>
Contractors	1,610	15	242
Materials	<u>1,671</u>	15	<u>251</u>
	3,281		493
 <u>Proposed Pricing Structure</u>			
Contractors	1,610	15	242
Materials	<u>1,671</u>	10	<u>167</u>
	3,281		409

Nov 8, 2006

**VECC IRR # 57 d)**

**2010 Independent Evaluator Review for Fair Market  
Value Testing and Purchasing Cost Recoveries**

# **Ian McKenzie Business Services Inc.**

## **Independent Evaluator Review of Fair Market Value Testing and Purchasing Cost Recoveries**

**for**

## **Whitby Hydro Electric Corporation**

**Box 39114  
London Ontario, N5Y5L1  
Phone: 519-691-6501  
Email:  
[i\\_s\\_mckenzie@sympatico.ca](mailto:i_s_mckenzie@sympatico.ca)**

***June 9, 2010***



## **Table of Contents**

Overview	1
Evaluators	1
Scope of Review	1
Findings	2
Summary	5
Appendix A – CV - Ian McKenzie	
Appendix B – CV - Jim Hopeson	

## Overview

Whitby Hydro Electric Corporation (WHEC) is an electric distribution utility regulated by the Ontario Energy Board (OEB). WHEC purchases several services from its non regulated affiliate Whitby Hydro Energy Services Inc (WHES). To assist in ensuring compliance with the Affiliate Relationship Code, in accordance with processes agreed to between WHEC and the OEB Chief Compliance Officer, WHEC engaged Ian McKenzie Business Services Inc. (IMBSI) to independently review the updated current transfer pricing arrangements for selective services.

## Evaluators

IMBSI provides regulatory and financial consulting services to Ontario based LDCs and affiliates. The principal, Ian McKenzie, has 10 years of experience in the deregulated electricity market both from a consulting perspective as well as a LDC perspective (see CV in Appendix A).

IMBSI engaged Jim Hopeson, of Hopeson Financial Inc., to assist in this project. Jim has in excess of 30 years experience in the electricity industry again both from a consulting and staff perspective (see CV in Appendix B).

## Scope of Review

IMBSI completed a 2 part review process.

IMBSI compared the labour and vehicle & equipment transfer prices to be charged to WHEC in 2010 from the services company against Fair Market Value comparators for the following services (underground line construction services were not reviewed as it is our understanding that all underground work is already contracted out by WHEC):

- Overhead Line Construction and Maintenance
- Substation Maintenance
- Engineering

In addition IMBSI reviewed the reasonability of purchasing cost recoveries related to procurement services for materials and outside contractors.

## Findings

### Review of Fair Market Value Pricing

#### *Methodology*

WHEC conducted research and obtained current market pricing comparisons from several market competitors. In our opinion, a reasonable number of vendors were used to obtain representative market pricing information. In addition, the vendors selected were key players in their specific service segments. The following table summarizes the scope of the review:

Service	Pricing Requested	Pricing Received
Overhead Line Construction and Maintenance	4	2
Substation Maintenance	5	3
Engineering	5	3
Vehicles and Equipment	5	3

IMBSI validated that the rates used in the analysis tied in to the source document pricing information provided by the service providers.

#### *Pricing Results*

The results of the comparisons are as follows:

- Overhead Line Construction and Maintenance
  - Labour rates charged to WHEC (incl. overheads & profit margin) are lower than the market average
  - Regular labour cost comparisons vary by position and range from 12% to 34% lower than average market values
  - Overtime labour cost comparisons vary by position and range from 45% to 60% lower than average market values
  - Generic Comments
    - WHEC analysis utilized top of bracket labour rates charged from WHES vs. competitive market average rates
    - Where market prices from individual vendors reflected a range the comparison used the lowest rate in the determination of market average
    - Transfer pricing costs charged to WHEC are comparable to the lowest vendor pricing data obtained

- **Substation Maintenance**
  - Labour rates charged to WHEC (incl. overheads & profit margin) are lower than the market average
  - Regular labour cost comparisons are 28% lower than market average rates (10% lower than lowest market prices obtained)
  - Overtime labour cost comparisons are 46% lower than market average rates (37% lower than lowest market prices obtained)
  - WHEC analysis utilized top of bracket labour rates charged from WHES vs. competitive market average rates
- **Engineering**
  - Labour rates charged to WHEC (including overheads & profit margin) are lower than the market average
  - Regular labour cost comparisons vary by position and range from 5% to 28% lower than average market value
  - WHEC analysis utilized top of bracket labour rates charged from WHES vs. competitive market average rates
  - Comparison to lowest market prices obtained on a job specific basis reflected mixed results – some positions higher and some positions lower
- **Vehicles and Equipment**
  - Pick-up truck rates charged to WHEC (including overheads & profit margin) are 2% lower than market average prices
  - Bucket truck rates charged to WHEC (including overheads & profit margin) are 5% or \$3/hr. higher than market average prices resulting in immaterial total dollar differences

## **Review of Purchasing Cost Recoveries**

### *Methodology*

WHEC completed a simulation exercise in 2006 where it estimated the costs of utilizing a formalized purchasing department within WHEC to manage the procurement processes for distribution purchases. This process was accepted by the Chief Compliance Officer. IMBSI reviewed an updated 2010 version of this simulated costing process.

WHEC established recovery rates to recover the simulated purchasing department costs in the following manner:

$$\text{Recovery Rate} = \text{Simulated Purchasing Costs} / (\text{3-Year Average of Material} + \text{Contract Service Purchases})$$

IMBSI utilized the 2008, 2009 & 2010 materials and contracted service values provided by WHEC.

The determination of simulated costs included total labour costs for a 3 person purchasing department and additional general and administration costs that the LDC would incur as a result of this new department.

The labour rate for the head of the department (Purchasing Agent) was obtained through a market price analysis contracted from the Toronto Board of Trade. The other 2 positions represent reasonable differentials as compared to the Purchasing Agent level and have not changed since the 2006 analysis.

The General and Administrative costs represent a combination of incremental costs and allocation cost changes to WHEC related to the establishment of a new purchasing department.

Labour Costs include a 30% burden to account for out of pocket benefit costs and a reasonable allocation of employee future benefit costs.

The following General and Admin costs have been included in the analysis:

- **Space costs** – based on lowest value of market rental comparisons including utilities
- **Vehicle** – based on current lease values and provisions for fuel, maintenance, and insurance
- **Office Supplies** – provision including office equipment leases, paper, toner, etc.
- **Information Technology** – provision for internet access, server, network, and PC maintenance
- **Payroll, Accounting, HR** – provision to reflect increased allocation of expense to WHEC
- **Insurance** – provision to reflect property and liability coverage
- **Executive** – provision to reflect increased allocation of expense to WHEC
- **Miscellaneous** – minor provision to account for contingencies

### *Pricing Results*

The Purchasing Department costs of \$402,000 in 2010 are virtually the same as the costs determined in 2006 (\$404,000).

The recovery rate to recover the simulated purchasing department cost of \$402,000 is 8.6% (based on 2008 to 2010, three year average materials & contracted service costs). IMBSI has been advised that WHEC utilized a 10% recovery rate in the 2010 cost of service rate application, resulting in an average annual over recovery of approximately \$66,000.

## Summary

In our opinion, WHEC is purchasing Overhead Line, Substation, and Engineering services from its affiliate at costs below fair market value (average of obtained pricing). The review utilized a conservative approach, on a full cost allocation basis, to the market value comparison process and did not include boarding costs for suppliers outside of the WHEC distribution territory. Top of bracket labour rates, including overhead recovery, were used for WHEC and the lowest labour rates were used for vendors that provided a labour cost range.

WHEC vehicle and equipment costs are in line with current market pricing with immaterial cost differentials relating to bucket truck usage.

In our opinion, the determination of 2010 simulated Purchasing Department costs are reasonable and have not changed since the original analysis based on 2006 cost levels. The determination of purchasing department costs reflects a full cost allocation approach. This mirrors the expected increase in LDC costs which would be recovered through distribution rates if the department actually existed. The assumptions used to estimate the labour burdens fall within generally accepted industry norms and all applicable general and administration cost elements have been accounted for in the analysis. In addition, the assumptions used to estimate general and administrative cost categories are reasonable in nature.

IMBSI analysis indicates that a recovery rate of 8.6% (calculated over a three year material & contracted service average) would be required to recover the \$402,000 purchasing department costs. WHEC has utilized a 10% recovery rate in the 2010 cost of service rate application resulting in an annualized \$66,000 over recovery.

# Appendix A

## Ian S. McKenzie

---

### Summary and Background

Ian McKenzie is currently the President of Ian McKenzie Business Services Inc.

Prior to starting Ian McKenzie Business Service Inc., he was a Senior Consultant with E360 Inc. (Formerly RDI Consulting Inc. & RDII Utility Consulting & Technologies Inc.). Ian has worked in the Ontario Electricity Industry since 2000 and has 10 years combined years experience in consulting/corporate planning fields.

Ian also spent two years (2005 – 2007) as a Regulatory Analyst with London Hydro Inc. where he directed all regulatory activities.

His work has focused on regulatory applications, filings, compliance and regulatory accounting for the Ontario Electricity Industry. He has also participated in numerous financial and rate assessments of potential utility mergers & acquisitions.

Mr. McKenzie has provided guidance to a vast number of electricity distribution clients including (but not limited to) London Hydro Inc., North Bay Hydro, Northern Ontario Wires, Brant County Power, EnWin Utilities, Whitby Hydro, Essex Energy and various Ontario Electricity Industry consortium groups (NEPA and CHEC).

Mr. McKenzie has a Bachelor of Science degree from the University of Western Ontario (Canada) majoring in Statistical Science.

---

### Highlights of Experience

- **Utility Mergers & Acquisitions** – Post deregulation (2000) he participated in numerous merger and acquisition studies involving business, financial and customer impact analysis.
- **Regulatory Accounting, Reporting & Filing** – Has completed a number of regulatory filing requirements including, distribution rate applications, annual tax reporting, Quarterly Ontario Energy Board (OEB) Record Reporting Requirements and has performed compliance audits for energy sector customers.

Developed and delivered several regulatory workshops to both utility and non-utility clients.

- **Corporate Restructuring** – Has participated in operational effectiveness studies involving multiple corporate entities to ensure optimal business processes and compliance with the Affiliate Relationship Code (ARC).
- **Conservation & Demand Management** – Prepared Conservation and Demand Management Plans for London Hydro as well as performing quarterly and annual filing requirements as set out by the industry regulator.
- **Ontario Electricity Policy Development** – Ian has participated in OEB working groups to aid in the development of both the 2006 Electricity Distribution Rate Handbook and the 2006 Cost Allocation Filing Guidelines.
- **Regulatory Briefing Notes** – Has completed, for both senior executives and board of directors, briefing notes on regulatory topics including rate rebasing, corporate return rates, and debt/equity structures.
- **Corporate Planning** – Participated in the development of strategic financial plans for utility clients and was also responsible for finalizing annual budgets for various departments and branches of CGU Group Canada (now AVIVA Insurance). Along with the Canadian budgeting process Ian assisted in the overall international budgeting process for CGU business unit.



# Appendix B

## James D. Hopeson

---

### Summary and Background

Jim Hopeson is currently the President of Hopeson Financial Inc.

Prior to starting Hopeson Financial Inc. he was a Principal Consultant with E360 Inc. (Formerly RDI Consulting Inc. & RDII Utility Consulting & Technologies Inc.). Jim has been consulting in the deregulated Ontario electricity market since 2000 primarily in the areas of:

- Distribution Rate Applications
- Regulatory Accounting
- Corporate Financial Management
- Strategic / Business Planning and Budgeting
- Mergers and Acquisitions
- Corporate Restructuring

Jim has over 30 years of experience in the electricity industry in the distribution and generation sectors in Ontario and New Brunswick.

Prior to joining E360, Mr. Hopeson held the position of Business Manager for the Point Lepreau Nuclear Plant owned by New Brunswick Power. Prior to that, he was the Treasurer of London Public Utilities Commission / London Hydro with functional responsibility for Finance, Materials Management, and Information Technology.

Mr. Hopeson has also held the positions of Power Costing Analyst, Financial Planning Analyst, Fuel Resources Officer and Regional Controller for Ontario Hydro.

Mr. Hopeson has strong analytical and corporate finance skills and has extensive experience representing utility and private sector clients.

Mr. Hopeson has completed assignments for a number of electricity distribution and transmission clients, including (but not limited to) the Bonneville Power Administration in Vancouver, Washington and Portland, Oregon, Canadian Niagara Power, Enwin Utilities, Brantford Power, Westario Power, Essex Power, Erie Thames Power, Collus Power, Kingston Electricity Distribution Limited, and the Electricity Distributors Association.

Mr. Hopeson has a Master of Business Administration (MBA) degree from the University of Western Ontario (Canada) and an Honours Bachelor of Arts (Economics) degree from York University (Canada).

## Highlights of Experience

- **UMS Group, Subject Matter Expert** – As a Subject Matter Expert, Mr. Hopeson was a member of a three-person team responsible for completing an O&M Study for Bonneville Power Administration – Transmission Field Services and Transmission Marketing Finance for the purpose of designing and validating Operating & Maintenance tables used for estimating costs for maintaining and operating major types of substation equipment as well as Annual Cost Ratios for investment in equipment, substations, general plant and transmission lines.
- **Utility Mergers & Acquisitions** – Participated in and successfully completed corporate reorganization studies involving fifteen (15) different utilities at the time of deregulation in 2000. In each case, Mr. Hopeson provided either project management and/or direct corporate and business management advice to the affected companies. Post 2000 he has participated in numerous merger studies involving business, financial, and rate analysis.
- **Business & Financial Strategic Plans** – Completed a number of business and financial strategic plans with a focus on both the regulated and non-regulated aspects of each utility. In addition to preparing the initial planning documents, Mr. Hopeson provides annual up-date services to his utility clients.

Mr. Hopeson routinely assists with the preparation of capital and operating budgets for his clients.

- **Corporate Financial Management** – Has completed financial management frameworks and dividend policies for regulated and non-regulated companies to define financial performance standards.
- **Corporate Restructuring** – Has participated in operational effectiveness studies involving multiple corporate entities to ensure optimal business processes and compliance with the Affiliate Relationship Code (ARC).
- **Regulatory Accounting, Reporting & Filing** – Has participated and completed a number of regulatory filing requirements including, distribution rate applications, specialized rate applications, annual tax reporting and filings related to Affiliate Relationship Code compliance.

Completed independent regulatory compliance audits for numerous clients.

Prepared evidentiary materials and attended hearings conducted by the Ontario Energy Board on matters concerning specialized rate applications, customer appeals and general rate making protocols and interventions.

Completed a full absorption cost allocation study which was successfully used by the client in support of their Cost of Service rate rebasing application.

Developed and delivered several regulatory workshops to both utility and non-utility clients.

- **Conservation & Demand Management** – Completed a service offering and business analysis for a ten utility residential smart metering initiative on behalf of Utilismart Corporation.

**VECC IRR # 57 d)**

**2010 Transfer Pricing Analysis**

## **Part 1: Request for Contractor Pricing (Selection Process)**

This attachment describes the individual contractors identified in each of the various labour categories for which 2010 market prices were requested.

This report was filed as a confidential document in order to protect those contractors who were contacted and those that participated in the request for pricing.

## **Part 2: Market Price Analysis and Comparisons**

This section includes information regarding regular rates, overtime rates, and engineering rates for various labour categories and summarizes information that was relied on by the independent evaluator (Ian McKenzie Business Services Inc.) in preparing the report on the Review of Fair Market Value Testing and Purchasing Cost Recoveries.

This section of the 2010 Market Pricing Analysis contains competitive contractor pricing information obtained in 2010 for the purpose of market value price testing and has been filed as a confidential document with the Board.

### **Part 3: Procurement Cost Analysis**

This section includes information regarding the purchasing costs recoveries and summarizes information that was relied on by the independent evaluator (Ian McKenzie Business Services Inc.) in preparing the report on the Review of Fair Market Value Testing and Purchasing Cost Recoveries.

The analysis has been attached.

### PART 3 - Procurement Costs Analysis 2010

#### Procurement Costs(Distco model)

	<u>\$K</u>
Purchasing Agent	167
Technical purchaser	146
Administrative support	<u>89</u>
	402

#### Procurement Costs(Servco model)

##### A. Outsourcing of Services (\$K)

2008	2,178
2009	1,431
2010	2,958
Average	<b>2,189</b>

##### B. Material Purchases (\$K)

2008	2,468
2009	1,986
2010	2,993
Average	<b>2,482</b>

<b>Total A + B</b>	<b>4,671</b>
--------------------	--------------

2010 Current Pricing Structure	\$K	Mark-up %	Mark-up \$k
Contractors	2,189	10	219
Materials	<u>2,482</u>	10	248
	4,671		468