



Renfrew Hydro Inc.
29 Bridge Avenue W.
Renfrew, ON
K7V 3K3

December 22, 2011

Ms. Kirstin Walli
Board Secretary
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, 27th Floor
Toronto, ON M4P 1E4

Re: Response to Interrogatories - 2012 IRM Application EB-2011-0195

Dear Ms. Walli:

Please find enclosed responses to interrogatories from Board staff and VECC by Renfrew Hydro Inc. ("Renfrew Hydro") in respect to the 2012 IRM Application EB-2011-0195.

This document is being filed pursuant to the Board's e-Filing Services.

Yours Truly,

A handwritten signature in cursive script that reads 'J. Thomas Freemark'.

Tom Freemark
President

Exhibit 4

RESPONSE TO INTERROGATORIES

Date Filed: December 22, 2011

Response to Board Staff Interrogatories

Board Staff Interrogatories 2012 IRM3 Electricity Distribution Rates Renfrew Hydro Inc. EB-2011-0195

Shared Tax Savings

1) Ref: Shared Tax Savings Workform, Sheet 6

Ref: EB-2011-0195, E1-T2-S5-p1

Ref: Filing Requirements for Transmission and Distribution Applications, Chapter 3, p. 17

Rate Class	Total Revenue \$ by Rate Class A	Total Revenue % by Rate Class B = A / \$H	Total Z-Factor Tax Change\$ by Rate Class C = \$I * B	Billed kWh D	Billed kW E	Distribution Volumetric Rate kWh Rate Rider F = C / D	Distribution Volumetric Rate kW Rate Rider G = C / E
Residential	\$1,060,947.5890	55.75%	-\$1,331	31,881,465	0	\$0.0000	
General Service Less Than 50 kW	\$343,389	17.71%	-\$423	12,958,689	0	\$0.0000	
General Service 50 to 4,999 kW	\$457,194	23.58%	-\$563	52,616,773	142,778		-\$0.0039
Unmetered Scattered Load	\$14,070	0.73%	-\$17	142,827	0	-\$0.0001	
Street Lighting	\$43,212	2.23%	-\$53	1,121,141	3,110		-\$0.0171
	\$1,938,812	100.00%	-\$2,387				
H							

In the current application, Renfrew notes that one or more of the Z-factor Tax Changes rate riders are found to be negligible and therefore proposes that the entire amount to be refunded be recorded in a USoA account for future disposition.

Board Staff notes that a rate rider less than \$0.0000 (in absolute value) is considered to be negligible according to the updated Filing Requirements. The rate riders for Residential class and GS<50 class as calculated by the Shared Tax Savings Model are negligible according to the Filing Requirements. However, the rate riders for all other rate classes are greater than \$0.0000 and therefore are not negligible.

Does Renfrew still intend to record the Total Z-factor Tax Changes (-\$2,386) amount in USoA accounts to be disposed at a later date? If so, please provide justification for why volumetric rate riders for GS>50, USL, and Street Lighting classes should be considered negligible.

Renfrew Hydro's Response:

Renfrew Hydro intent is to abide by the Board's filing requirements.

Renfrew Hydro would request the Board's direction on this matter with respect to what the Boards policy is for disposition of immaterial amounts. More specifically how is the

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1 Board expecting Renfrew Hydro to maintain its sub ledger records if it disposes of some
2 but not all of the shared tax savings amount.
3
4

5 Does Renfrew intend to record the credit amount in Account 1595? If Renfrew does not intend
6 to use 1595 please state which USoA account Renfrew proposes to use and provide justification
7 for the resulting choice.
8

9 **Renfrew Hydro's Response:**
10

11 Renfrew Hydro intent is to abide by the Board's direction.
12

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RTSR Adjustment

2) Ref: RTSR Adjustment Workform, Sheet 4

Ref: 2010 RRR 2.1.5

Rate Class	Unit	Non-Loss Adjusted Metered kWh	Non-Loss Adjusted Metered kW	Applicable Loss Factor	Load Factor	Loss Adjusted Billed kWh	Billed kW
Residential	kWh	30,305,144		1.0810		32,759,861	-
General Service Less Than 50 kW	kWh	12,427,065		1.0810		13,433,657	-
General Service 50 to 4,999 kW	kW	51,703,213	141,997		49.91%	51,703,213	141,997
Unmetered Scattered Load	kWh	150,176		1.0810		162,340	-
Street Lighting	kW	116,726	3,098		5.16%	116,726	3,098

Board staff was unable to reconcile Metered kWh for Street Lighting Class entered in Sheet 4 of the RTSR Adjustment Workform with the most recent RRR filings (2010 RRR 2.1.5). The figure in 2010 RRR 2.1.5 is 1,116,726 kWh instead of 116,726 kWh as entered by Renfrew.

Please confirm that the correct Metered kWh to be entered for Street Lighting class is 1,116,726 kWh and that the currently entered 116,726 kWh is an entry error. If Renfrew confirms, Board staff will make the necessary corrections.

Renfrew Hydro's Response:

Renfrew Hydro confirms that this was an error. Renfrew Hydro respectfully request Board staff to make the necessary correction.

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3) Ref: EB-2011-0195, E1-T2-S5-p2
Ref: RTSR Adjustment Workform, Sheet 13
Ref: EB-2010-0112, Decision and Order

Rate Class	Unit	Proposed RTSR Network	Proposed RTSR Connection
Residential	kWh	\$ 0.0051	\$ 0.0029
General Service Less Than 50 kW	kWh	\$ 0.0047	\$ 0.0027
General Service 50 to 4,999 kW	kW	\$ 1.9073	\$ 1.0405
Unmetered Scattered Load	kWh	\$ 0.0047	\$ 0.0027
Street Lighting	kW	\$ 1.4384	\$ 0.8043

In the application, Renfrew proposes an increase of 0% in the Network Transmission Rates and an increase of 0% in the Line and Transformation Connection Service Rates for all rate classes. Board staff notes that the RTSR Adjustment Workform has calculated RTSR rates for GS>50 and Street Lighting classes that have changed from the current rates. The current RTSR rates for GS>50 are \$1.9081/kW for Network and \$1.0393 for Connection. The current RTSR rates for Street Lighting are \$1.4390/kW for Network and \$0.8034/kW for Connection. Board Staff

Does Renfrew still propose a 0% change in the RTSR rates for GS>50 and Street Lighting classes given that the model has calculated a none zero change in these rates from the current rates?

Renfrew Hydro's Response:

Renfrew Hydro calculated 0% as a general average with rounding. Any resultant changes from the model for kW billed rate classes were input in the rate generator. Renfrew Hydro notes that these are not the final numbers subject to the Board's adjustments for updated wholesale rates.

If the answer to a) is yes please provide rationale for not changing the RTSR rates.

Renfrew Hydro's Response:

See response above.

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Rate Generator

4) Ref: IRM3 Rate Generator V1.3, Sheet 6

enter the WMSR or RRRP Rate below. These rates will appear automatically on the final Tariff of Rates and Charges.

Rate Description	Unit	Amount	Effective Until Date
Residential			
Low Voltage Service Rate	\$/kWh	0.00110	April 30, 2012
Rate Rider for Global Adjustment Sub-Account (2010) – Applicable only for Non-RPP Customers	\$/kWh	0.00170	April 30, 2012
Rate Rider for Deferral/Variance Account Disposition (2010)	\$/kWh	(0.00510)	April 30, 2013

Renfrew has entered a sunset date of April 30, 2012 for the Low Voltage Service Rate for all rate classes (Residential class reproduced above for illustrative purposes). Board staff notes that the current Low Voltage Service Rate was established in Renfrew's 2010 COS application with no sunset date and was continued with no sunset date in Renfrew's 2011 IRM application. The Low Voltage Service Rate will likely not be considered for a change until Renfrew's next COS application for 2014 rates.

Please provide rationale for applying a sunset date for the Low Voltage Service Rate considering that the Low Voltage Service Rate has not had any sunset dates on the tariff schedule previously. In particular, why has Renfrew chosen the sunset date of April 30, 2012? If this was an entry error Board staff will remove the sunset date from the Low Voltage Service Rate in Renfrew's Rate Generator model.

Renfrew Hydro's Response:

Renfrew Hydro confirms that this was an error. Renfrew Hydro respectfully request Board staff to make the necessary correction.

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5) Ref: IRM3 Rate Generator V1.3, Sheet 9
Ref: 2010 RRR 2.1.7 Trial Balance

Account Descriptions	Account Number	Projected Interest from Jan 1, 2011 to December 31, 2011 on Dec 31 -10 balance adjusted for disposition during 2011 ³	Projected Interest from January 1, 2012 to April 30, 2012 on Dec 31 -10 balance adjusted for disposition during 2011 ^{4,7}	Total Claim	As of Dec 31-10 ⁴	Variance RRR vs. 2010 Balance (Principal + Interest)
Group 1 Accounts						
LV Variance Account	1550	\$ 304	\$ 100	\$ 20,962	\$ 20,578	\$ 0
RSVA - Wholesale Market Service Charge	1580	\$ 3,343	\$ 1,108	\$ 235,125	\$ 230,674	\$ 0
RGVA - Retail Transmission Network Charge	1584	\$ 412	\$ 137	\$ 27,202	\$ 26,653	\$ -
RSVA - Retail Transmission Connection Charge	1586	\$ 340	\$ 113	\$ 21,540	\$ 21,087	\$ -
RGVA - Power (excluding Global Adjustment)	1588	\$ 3,401	\$ 1,120	\$ 236,431	\$ 231,902	\$ 0
RSVA - Power - Sub-Account - Global Adjustment	1588	\$ 1,040	\$ 345	\$ 73,406	\$ 72,020	\$ -
Recovery of Regulatory Asset Balances	1590					\$ -
Disposition and Recovery of Regulatory Balances (2008) ⁷	1595					\$ -
Disposition and Recovery of Regulatory Balances (2009) ⁷	1595					\$ -
Group 1 Sub-Total (including Account 1588 - Global Adjustment)		\$ 5,256	\$ 1,741	\$ 370,391	\$ 363,394	\$ 0
Group 1 Sub-Total (excluding Account 1588 - Global Adjustment)		\$ 6,296	\$ 2,086	\$ 443,796	\$ 435,414	\$ 0
RSVA - Power - Sub-Account - Global Adjustment	1588	\$ 1,040	\$ 345	\$ 73,406	\$ 72,020	\$ -
Special Purpose Charge Assessment Variance Account	1521	\$ 97		\$ 2,267	\$ 20,112	\$ 17,842
Deferred Payments in Lieu of Taxes	1562			\$ 272,066		\$ -

Renfrew did not enter any amount in the 2.1.7 RRR balance column for Account 1562 in the Rate Generator model. Board staff notes that the RRR 2.1.7 filing shows a credit balance of \$65,460 for 1562.

Please confirm that \$0 balance entered in the 2.1.7 RRR column in the rate generator model for Account 1562 is an entry error. If Renfrew confirms this Board staff will enter a credit of \$65,460 for the 2.1.7 RRR balance for 1562 in the Rate Generator model.

Renfrew Hydro's Response:

Renfrew Hydro confirms that this was an error. Renfrew Hydro respectfully request Board staff to make the necessary correction.

If Renfrew is of the view that this was not an error please provide rationale for not entering the RRR information for 1562.

Renfrew Hydro's Response:

See response above.

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6) Ref: IRM3 Rate Generator V1.3, Sheet 10

Ref: EB-2009-0146, RateMaker model

Rate Class	Unit	Metered kWh	Metered kW	Billed kWh for Non-RPP Customers	Estimated kW for Non-RPP Customers	Distribution Revenue ¹
Residential	\$/kWh	30,305,144	-	2,378,006	-	1,080,948
General Service Less Than 50 kW	\$/kWh	12,427,065	-	2,031,209	-	343,389
General Service 50 to 4,999 kW	\$/kW	51,703,213	141,997	55,058,612	-	457,194
Unmetered Scattered Load	\$/kWh	150,176	-	-	-	14,070
Street Lighting	\$/kW	116,726	3,098	1,211,953	-	43,212
Total		94,702,324	145,095	60,679,780	-	1,938,812

Board staff was unable to reconcile the Distribution Revenue entered by Renfrew in Sheet 10 of the Rate Generator Model with the Distribution Revenue established in Renfrew's last COS application. Renfrew entered \$1,938,312 for Distribution Revenue while the \$1,877,960 was established in EB-2009-0146.

Please confirm that the use of \$1,938,312 for Distribution Revenue is an entry error and the amount to be entered should be \$1,877,960. If Renfrew confirms Board staff will make the necessary corrections.

Renfrew Hydro's Response:

Renfrew Hydro would note it used the distribution revenue as calculated in the 2012 shared tax savings model. The difference in value is attributable to transformer allowance amount not included in the \$1,877,960 plus the 2011 IRM adjustment. If the Board deems this an error then Renfrew Hydro respectfully request Board staff to make the necessary adjustment. For further details please reference Appendix 2 attached.

Last COS Re-based Year was in 2010

Rate Class	Re-based Billed Customers or Connections	Re-based Billed kWh	Re-based Billed kW	Rate ReBal Base Service Charge	Rate ReBal Base Distribution Volumetric Rate kWh	Rate ReBal Base Distribution Volumetric Rate kW	Service Charge Revenue	Distribution Volumetric Rate kWh	Distribution Volumetric Rate kW	Revenue Requirement from Rates
	A	B	C	D	E	F	G = A * D * 12	H = B * E	I = C * F	J = G + H + I
Residential	3,635	31,881,465	0	14.11	0.0146	0.0000	615,478	465,469	0	1,080,948
General Service Less Than 50 kW	474	12,958,689	0	30.07	0.0133	0.0000	171,038	172,351	0	343,389
General Service 50 to 4,999 kW	64	52,616,773	142,778	170.67	0.0000	2.2841	131,075	0	326,119	457,194
Unmetered Scattered Load	30	142,827	0	35.87	0.0081	0.0000	12,913	1,157	0	14,070
Street Lighting	1,173	1,121,141	3,110	1.99	0.0000	4.8878	28,011	0	15,201	43,212
							958,515	638,377	341,320	1,938,812

If Renfrew is of the view that this was not an entry error please provide the rationale for using an amount for Distribution Revenue that diverges from its last COS application.

Renfrew Hydro's Response:

See response above.

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Lost Revenue Adjustment Mechanism ("LRAM")

7) Ref: Exhibit 1, Tab 1, Schedule 3

Renfrew has requested recovery of \$58,257.82, related to lost revenues from OPA CDM Programs delivered from 2006-2010.

Please confirm that Renfrew has used the 2010 OPA final program results when calculating its LRAM amount.

Renfrew Hydro's Response:

Renfrew Hydro received the final 2010 evaluation results on November 15, 2011. The final report effectively changes the amount requested. This is detailed below.

If Renfrew has not used the 2010 OPA final program evaluation results to calculate its LRAM amount, please update the amount by using the 2010 final evaluation results.

Renfrew Hydro's Response:

Renfrew Hydro received the final 2010 evaluation results from the OPA on November 15, 2011.

The following summarizes the updated results.

Customer Class	Savings	LRAM
Residential	3.3 GWh	\$43,369.53
General Service Less Than 50 kW	0.9 GWH	\$10,880.79
General Service 50 to 4,999 kW	1.9 MW	\$4,059.70
Total To April 2012		<u>\$58,310.02</u>

Therefore Renfrew Hydro includes in this response an updated LRAM claim in the amount of \$58,310.02 for the years from January 1, 2006 through April 30, 2012. An amended third party review by the consulting firm Elenchus is enclosed herein, which supports this claim. Please see Appendix 2.

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The following table calculates the updated proposed rate riders to be collected over a one year period ending April 30, 2013:

Customer Class	2010 RRR	Units	LRAM	Proposed Rate Rider
Residential	30,305,144	kWh	\$43,369.53	\$0.0014
General Service Less Than 50 kW	12,427,065	kWh	\$10,880.79	\$0.0009
General Service 50 to 4,999 kW	141,997	kW	\$4,059.70	\$0.0286
Total To April 2012			\$58,310.02	

Renfrew Hydro respectfully requests Board staff to make the appropriate changes in the model.

Please provide a table that shows the portion of Renfrew's LRAM claim that is attributable to carrying charges.

Renfrew Hydro's Response:

Renfrew Hydro has not included carrying charges in its LRAM claim.

Please confirm that Renfrew has not recovered any of the amounts associated with its LRAM claim in the past. If Renfrew has recovered amounts included in this application, please provide an updated LRAM amount with these amounts removed.

Renfrew Hydro's Response:

Renfrew Hydro confirms that it has not recovered any of the amounts associated with its LRAM claim in the past.

Please confirm when Renfrew's last load forecast was approved by the Board.

Renfrew Hydro's Response:

Renfrew Hydro's last load forecast was approved by the Board Decision EB-2009-0146 November 25, 2010

Please identify the CDM savings that were included in Renfrew's last Board approved load forecast for CDM programs deployed from 2006 to 2010 inclusive.

Renfrew Hydro's Response:

There were no direct CDM savings from OPA programs included in Renfrew's load forecast.

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1 Please provide an updated table with an LRAM amount exclusive of any persisting CDM
2 savings that take place after Renfrew's last Board-approved load forecast.

3
4 **Renfrew Hydro's Response:**

5 Renfrew last Board-approved Load forecast was completed in 2010. Renfrew's LRAM
6 request does not include any amounts exclusive of persistence beyond December 31,
7 2010.
8

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Account 1562 – Deferred PILs

8) Missing Evidence

Please file the 2005 application Excel RAM model (active).

Renfrew Hydro's Response:

Please reference e-filing reference number 15291 submitted December 16, 2011.

The following file(s) have been uploaded successfully:
| Renfrew Hydro Inc 2005 Ram1 1 submissiona.xls

Please file the 2001, 2002 and 2005 application Excel PILS proxy models (active).

Renfrew Hydro's Response:

Please reference e-filing reference number 15291 submitted December 16, 2011.

The following file(s) have been uploaded successfully:
| Renfrew Hydro Inc 2005pilsfinal_050105.xls
| Renfrew Hydro IncPILs Proxy Model_2001 Q4 2002.xls

Note that 2001 and 2002 are contained in the same excel workbook.

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1 **9) PILs Proxy Amounts**

2
3 The PILs amount calculated on the 2002 SIMPIL model is \$172,227. This does not agree with
4 the Board approved amount of \$170,782.

5
6
7 Please provide corrected 2002, 2003 and 2004 SIMPIL models that agree with the 2002
8 application PILs proxy model details approved by the Board in decision RP-2002-0064/EB-
9 2002-0073.

10
11 **Renfrew Hydro's Response:**

12
13 Renfrew Hydro's submits that the models submitted agreed to the Board approved
14 amount of \$170,782.
15

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10) CDM Incremental OM&A Expenses - 2005 SIMPIL Model

In the 2005 SIMPIL model TAXCALC worksheet cell C44 there is an amount of \$25,000 related to CDM. There is no actual amount entered on the TAXCALC worksheet in cell G44 and this causes an asymmetrical true-up in the 2005 SIMPIL.

The Board issued a letter dated September 13, 2011 regarding 2012 EDR – Disposition of account 1562 deferred PILs that states:

“In the 2005 EDR, a deduction for CDM expenses was made in the PILs proxy model. The applicant should ensure that there is a corresponding tax (accounting) amount recorded on the same row in SIMPIL to determine the appropriate true-up”.

Please provide the dollar amount of actual CDM expense incurred in 2005 to compare to the proxy amount so that a reasonable true-up will be calculated and enter it in the TAXCALC worksheet in cell G44 and submit a revised SIMPIL model, PILs continuity schedule and EDDVAR continuity schedule.

Renfrew Hydro's Response:

Cell G44 is NIL because there were no CDM costs deducted for tax purposes in 2005.

For accounting purposes, the CDM costs incurred was \$11,685 which were recorded in subaccounts of Account 1565 and presented in the balance sheet as part of total regulatory assets.

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11) Income Tax Rates

		2001	2002	2003	2004	2005
APPLICATION PILS PROXY CALCULATION	1. SIMPIL Tab TAXCALC Cell E122&138 : Blended income tax rate	34.12%	34.12%	34.12%	34.12%	18.62%
	2. SIMPIL Tab TAXCALC Cell E130&175: Income tax rate used for gross-up (excluding surtax)	34.12%	34.12%	34.12%	34.12%	18.62%
		2001	2002	2003	2004	2005
SIMPIL MODELS TAB TAXCALC	3. Cell E122 (123): Calculation of true-up variance -income tax effect	32.12%	34.12%	23.92%	22.50%	18.77%
	4. Cell E130 (131): Income tax rate used for gross-up (excluding surtax)	31.00%	33.00%	22.80%	21.38%	17.65%
	5. Cell E138 (139): Calculation of Deferral Account Variance caused by changes in legislation – Revised corporate income tax rate	32.12%	34.12%	23.92%	22.50%	18.77%
	6. Cell E175 (176): Calculation of Deferral Account Variance caused by changes in legislation – Actual income tax rate used for gross-up (excluding surtax)	31.00%	34.12%	22.80%	21.38%	17.65%

Please explain how Renfrew chose the income tax rates of 32.12% for the true-up calculation and 31.00% for the gross-up calculation for 2001, since the utility incurred a net loss in that year. Please explain the methodology used in arriving at the rate(s) used.

Renfrew Hydro's Response:

Renfrew Hydro loss is due in part to the 2001 pre-market opening energy variance amount that was recorded in the income statement as an expense and not recorded as a regulatory asset. This served to decrease the taxable income in the fourth quarter of 2001 due to this year-end adjustment.

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1 Renfrew therefore submits that its taxable net income would have been in excess of the
2 \$200,000 small business limit in 2001. Subject to exceeding this limit Renfrew utilized
3 the mid-range calculation as a reasonable estimate of tax.
4

5 Please explain how Renfrew chose the income tax rates of 34.12% for the true-up calculation
6 and 33.00% for the gross-up calculation for 2002, since the utility's tax rate as shown in the
7 TAXREC tab of the 2002 SIMPIL model shows tax rates of 19.12% (with surtax) and 18.00%
8 (without surtax). Please explain the methodology used in arriving at the rate(s) used.
9

10 **Renfrew Hydro's Response:**
11

12 Renfrew submits that its taxable net income would have been in excess of the \$200,000
13 small business limit in 2002 had it not experienced the loss carry forward from the 2001
14 tax period as discussed above. Subject to exceeding this limit Renfrew utilized the mid-
15 range calculation as a reasonable estimate of tax.
16

17 Please explain how Renfrew chose the income tax rates of 23.92% for the true-up calculation
18 and 22.80% for the gross-up calculation for 2003, since the utility's tax rate as shown in the
19 TAXREC tab of the 2003 SIMPIL model shows tax rates of 18.62% (with surtax) and 17.50%
20 (without surtax). Please explain the methodology used in arriving at the rate(s) used.
21

22 **Renfrew Hydro's Response:**
23

24 Renfrew submits that its taxable net income would have been higher in 2003 had it not
25 experienced the loss of a major industrial customer and subsequent bad debt write off in
26 2003. Renfrew Hydro believes that its real earning would have been higher and thus
27 utilized the mid-range calculation as a reasonable estimate of tax.
28

29 Please explain how Renfrew chose the income tax rates of 22.50% for the true-up calculation
30 and 21.38% for the gross-up calculation for 2004, since the utility's tax rate as shown in the
31 TAXREC tab of the 2004 SIMPIL model shows tax rates of 18.62% (with surtax) and 17.50%
32 (without surtax). Please explain the methodology used in arriving at the rate(s) used.
33

34 **Renfrew Hydro's Response:**
35

36 Renfrew submits that its taxable net income would have been higher in 2004 had it not
37 experienced the loss of a major industrial customer in 2003. Renfrew Hydro believes that
38 its real earning would have been higher and thus intended to utilize the mid-range
39 calculation as a reasonable estimate of tax.
40

41 Renfrew further notes that it intended to enter the mid-range values of 27.62% and
42 26.0% from sheet "Tax Rates".
43
44

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1 Please explain how Renfrew chose the income tax rates of 18.77% for the true-up calculation
2 and 17.65% for the gross-up calculation for 2005, since the utility's tax rate as shown in the
3 TAXCALC tab of the 2005 proxy calculation shows tax rates of 18.62% (with surtax) and
4 17.50% (without surtax). Please explain the methodology used in arriving at the rate(s) used.

5
6 **Renfrew Hydro's Response:**
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8 Renfrew submits that its taxable net income would have been higher in 2005 had it not
9 experienced the loss of a major industrial customer in 2003. Renfrew Hydro believes that
10 its real earning would have been higher and thus intended to utilize the mid-range
11 calculation as a reasonable estimate of tax.

12
13 Renfrew further notes that it intended to enter the mid-range values of 27.62% and
14 26.0% from sheet "Tax Rates".
15
16
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12) 1562 Balance Reported in RRR

Renfrew Hydro has reported the balance in account 1562 to be a credit of \$71,021 at the end of December 2005 and a credit of \$65,460 at the end of December 2010 in its RRR filing 2.1.7. The 2010 balance according to the PILS disposition sheet (exclusive of interest), is a credit balance of \$122,709.

Please explain the reasons for the differences between the 2010 RRR balance and the evidence filed in this case.

Renfrew Hydro's Response:

Renfrew Hydro respectfully submits that the completion of a reconciliation of differences between the RRR filings and the final calculation of 1562 PIL's disposition would not yield any reasonable explanation of difference.

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1 **13) Interest Expense**

2 **Ref: Interest Portion of True-up – 2003, 2004, 2005 SIMPIL - TAXCALC**

3 When the actual interest expense, as reflected in the financial statements and tax returns,
4 exceeds the maximum deemed interest amount approved by the Board, the excess amount is
5 subject to a claw-back penalty and is shown in sheet TAXCALC as an extra deduction in the
6 true-up calculations. For the tax years 2001 to 2005:

7
8 Did Renfrew Hydro have interest expense related to liabilities other than debt that is disclosed
9 as interest expense in its financial statements?

10
11 **Renfrew Hydro's Response:**

12
13 Renfrew Hydro has interest expense related to liabilities included in its financial
14 statements

15
16 Did Renfrew Hydro net interest income against interest expense in deriving the amount it shows
17 as interest expense in its financial statements and tax returns? If yes, please provide details to
18 what the interest income relates.

19
20 **Renfrew Hydro's Response:**

21
22 Renfrew Hydro did not net interest income against income expense in deriving the
23 amount it shows as interest expense.

24
25
26 Did Renfrew Hydro include interest expense on customer security deposits in interest expense
27 for purposes of the interest true-up calculation?

28
29 **Renfrew Hydro's Response:**

30
31 Renfrew Hydro included interest expense on customer security deposits in interest
32 expense for purposes of the interest true-up calculation.

33
34
35 Did Renfrew Hydro include interest income on customer security deposits in the disclosed
36 amount of interest expense in its financial statements and tax returns?

37
38 **Renfrew Hydro's Response:**

39
40 Renfrew Hydro did not include interest income on customer security deposits in the
41 disclosed amount of interest expense in its financial statements and tax returns.

42
43
44

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Date Filed: December 22, 2011

1 Did Renfrew Hydro include interest expense on IESO prudentials in interest expense?
2

3 **Renfrew Hydro's Response:**
4

5 Renfrew Hydro included fees for Hydro One prudentials in interest expense?
6
7

8 Did Renfrew Hydro include interest carrying charges on regulatory assets or liabilities in interest
9 expense?
10

11 **Renfrew Hydro's Response:**
12

13 Renfrew Hydro included interest carrying charges on regulatory assets or liabilities in
14 interest expense.
15
16

17 Did Renfrew Hydro include the amortization of debt issue costs, debt discounts or debt
18 premiums in interest expense? If the answer is yes, did Renfrew also include the difference
19 between the accounting and tax amortization amounts in the interest true-up calculations?
20 Please explain.
21

22 **Renfrew Hydro's Response:**
23

24 Renfrew Hydro did not include the amortization of debt issue costs, debt discounts or
25 debt premiums in interest expense.
26
27

28 Did Renfrew Hydro deduct capitalized interest in deriving the interest expense disclosed in its
29 financial statements? If the answer is yes, did Renfrew add back the capitalized interest to the
30 actual interest expense amount for purposes of the interest true-up calculations? Please
31 explain.
32

33 **Renfrew Hydro's Response:**
34

35 Renfrew Hydro did not deduct capitalized interest in deriving the interest expense
36 disclosed in its financial statements.
37
38
39

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1 Please provide Renfrew Hydro's views on which types of interest income and interest expense
2 should be included in the excess interest true-up calculations.

3
4 **Renfrew Hydro's Response:**
5

6
7 In Renfrew Hydro's circumstances, interest income is interest earned on cash held in its
8 bank accounts. Cash received from borrowings (debt, customer deposits) serves to
9 increase its bank balances, and therefore increase interest income earned. Interest
10 income is recorded as a component of Other Operating Revenue on the financial
11 statements.
12

13 In Renfrew Hydro's circumstances, interest expense is the amount paid for the use of
14 borrowed money, being short and long term debt and customer deposits. Renfrew
15 Hydro views this to include those costs identified in APH accounts 6005 to 6045. For
16 Hydro One prudential letters of credit, the fees paid to the bank are considered interest.
17 Also included is interest on regulatory assets.
18

19 Renfrew Hydro believes it would be appropriate to treat interest income as an offset to
20 interest expense for the claw-back calculation. Renfrew Hydro further believes it would
21 be appropriate to remove interest on regulatory assets as this not received until
22 recovered from customers. Furthermore, in the case of Hydro One prudential letters of
23 credit, the fees paid to the bank are included as interest, but should have instead been
24 considered General and Administrative expense. These are fees paid to the bank to
25 keep the letters of credit in place should the need arise to initiate a borrowing under this
26 credit facility. A letter of credit is not a loan, and does not attract interest until drawn
27 upon. Only at this point are the repayment terms, including interest, determined.
28 Renfrew Hydro further believes it would be appropriate to remove Hydro One prudential
29 letters of credit fees.
30
31
32

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Please provide a table for the years 2001 to 2005 that shows all of the components of Renfrew Hydro's interest expense and the amount associated with each type of interest.

Renfrew Hydro's Response:

DESCRIPTION RHI INTEREST BREAKDOWN	2001	2002	2003	2004	2005
	4th Quarter				
Interest Income - per Note 2(3) of FS	\$6,411	\$21,328	\$44,021	\$43,596	\$65,131
Interest ex - customer deposits	\$438	\$3,245	\$5,252	\$4,430	\$5,424
Interest ex - accrual for note - shareholder	\$98,062	\$196,832	\$196,125	\$196,125	\$196,125
Interest ex - bank loans	\$160	\$5,840	\$10,083	\$7,761	\$6,583
Interest ex - letter of credit hydro one		\$4,178	\$18,553	\$18,255	\$17,986
Interest ex - reg assets & liabilities			\$24,225	\$14,011	\$22,759
Interest Ex - total per financial statements	\$98,660	\$210,095	\$254,238	\$240,581	\$248,877
Interest Ex - total per financial statements	\$98,660	\$210,095	\$254,238	\$240,581	\$248,877
Less: Interest Income	-\$6,411	-\$21,328	-\$44,021	-\$43,596	-\$65,131
Less: Interest ex - reg assets & liabilities	\$0	\$0	-\$24,225	-\$14,011	-\$22,759
Less: Interest ex - letter of credit hydro one	\$0	-\$4,178	-\$18,553	-\$18,255	-\$17,986
Interest Expense for PIL's	\$92,249	\$184,589	\$167,439	\$164,719	\$143,001

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1 **14) Tax Years – Statute-barred**

2
3 Please confirm that all tax years from 2001 to 2005 are now statute-barred.

4
5 **Renfrew Hydro's Response:**

6
7 Renfrew Hydro confirms that all assessment notices have been received for the years
8 2001 to 2005 and are now statute- barred.
9

Response to VECC Interrogatories

EB-2011-0195

ONTARIO ENERGY BOARD

IN THE MATTER OF

the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15 (Schedule B), as amended;

AND IN THE MATTER OF an Application by
Renfrew Hydro Inc. for an order or orders
approving or fixing just and reasonable
distribution rates to be effective May 1, 2012.

Information Requests of the Vulnerable Energy Consumers Coalition (VECC)

Lost Revenue Adjustment Mechanism (LRAM)

VECC Question # 1

Reference: Exhibit 1, Tab 2, Schedule 6, Elenchus 2006 to 2012 LRAM Report

Preamble: Renfrew Hydro Inc. seeks an LRAM claim of \$58,257.82 for energy savings from 2006 to 2010 OPA CDM activities, for the years January 1, 2006 through April 30, 2012.

a) Please confirm that the LRAM amounts Renfrew Hydro is seeking to recover in this application are new amounts not included in past LRAM claims.

Exhibit: 4
Tab: 1
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Date Filed: December 22, 2011

Renfrew Response:

As confirmed on Exhibit 1 Tab 1 Schedule 2 page 1, line 21 of the LRAM report, there has been no previous LRAM application by Renfrew.

- b) Please explain why there is no claim for activity related to 2005 to 2009 Third Tranche programs.

Renfrew Response:

Renfrew chose to reserve its LRAM claim to savings that were the least contestable and easiest to calculate.

- c) When was Renfrew's load forecast last approved by the Board? Please discuss how any CDM savings have been accounted for in Renfrew's approved load forecast.

Renfrew Response:

There were no direct CDM savings from OPA programs included in Renfrew's load forecast.

- d) Does the LRAM claim include carrying charges? If not, please explain.

Renfrew Response:

Renfrew has chosen not to include carrying charges as they are not material.

- e) Please provide the rationale for requesting lost revenues for 2011 and January 1, 2012 to April 30, 2012.

Renfrew Response:

Renfrew is requesting recovery of lost revenues estimated to April 30, 2012 for programs "delivered" (OPA terminology) in 2009 and 2010; i.e. programs started in either of these years but which may continue to have energy-saving benefits for a number of years.

Renfrew is not requesting recovery of lost revenue associated with unverified programs started in 2011, or unverified programs started between January 1 and April 30, 2012. The requested lost revenues in 2011 and the first four months of

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2012 are associated with verified savings arising from programs that were started in 2009 and 2010.

A distinction must be made between lost revenue in 2011 due to programs started in 2011, and lost revenue in 2011 due to programs started in earlier years. An implemented program will lead to energy savings, and thus lost revenues, that will persist over the lifetime of the program's measures. For example, if a 2009 program consists of a measure with a lifetime of two years, the program will lead to lost revenues each year until the end of 2011. This would be unrelated to lost revenue due to a program started in 2011.

The use of a program's verified results extending over multiple years is standard for the calculation of an LRAM claim. This approach is consistent with numerous Board-approved LRAM claims, including Burlington Hydro's LRAM claims (Decision on EB-2010-0067 dated March 17, 2011; Decision on EB-2009-0259 dated March 1, 2010), as well as decisions on other LRAM claims (Decision on Middlesex Power Distribution's LRAM claim EB-2010-0098 dated March 17, 2011; Decision on Norfolk Power Distribution's LRAM claim EB-2011-0046 dated May 6, 2011; Decision on Hydro One Brampton's LRAM claim EB-2010-0132 dated April 4, 2011).

- f) Please discuss the source of input assumptions and CDM results used to calculate the savings and LRAM for 2011 and 2012.

Renfrew Response:

OPA evaluation (EM&V) results determine all savings and persistence values for measures deployed in their programs. These are captured in annual savings reports provided to all LDC's by the OPA.

The LRAM savings claimed for 2011 and part of 2012 are only comprised of the continuing (hardware/measures installed) savings (persistence) from 2006 to 2010 OPA CDM activities. Note that some of these savings extend even beyond 2012 and should therefore get captured in future LRAM processes along with the savings from 2011 and onward CDM activity.

- g) Please provide the calculation of the LRAM Rate Riders for each applicable rate class to the end of 2010.

Renfrew Response:

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Customer Class	2010 RRR	Units	LRAM	Proposed Rate Rider
Residential	19,868,483	kWh	\$33,647.22	\$0.0017
General Service Less Than 50 kW	4,729,493	kWh	\$5,942.85	\$0.0013
General Service 50 to 4,999 kW	11,793	kW	\$3,788.76	\$0.3213
Total to Dec 2010			<u>\$43,378.84</u>	

1
2
3

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VECC Question # 2

Reference: Elenchus Report, Table One, OPA Results Net kWh

Please provide the following details by year for the OPA Every Kilowatt Counts and Every Kilowatt Counts Power Savings Event that adds to the data shown in Table One: # units, unit and total kWh savings, lifetime, and free ridership rate. Reconcile to the lost revenues shown in Table Five.

Renfrew Response:

For the purposes of the two Every Kilowatt Counts programs, which were both 100% residential, Table Five simply displays a sub-set of the same information contained in Table Two.

- a) List and confirm OPA's input assumptions for Every Kilowatt Counts (EKC) 2006 to 2010 including the measure life, unit kWh savings and free ridership rate for Compact Fluorescent Lights (CFLs) and Seasonal Light Emitting Diodes (LED). Confirm some of these assumptions were changed in 2007 and again in 2009 and compare the values.

Renfrew Response:

OPA evaluation (EM&V) results over time and across dozens of measures can produce different measure life, unit kWh savings and free ridership rates, as needed and appropriate. Those are factored in to the energy and capacity savings calculations produced by the OPA. Since the OPA is the sole authoritative source of information regarding the results of its programs, Renfrew relies on the veracity of OPA data for its LRAM claim.

- b) Demonstrate that savings for EKC 2006 Mass Market measures 13-15 W Energy Star CFLs & Seasonal LEDs have been removed from the LRAM claim beginning in 2010.

Renfrew Response:

It is apparent that the energy savings from the EKC 2006 Mass Market program drop-off precipitously after 2009. The 4-year effective useful life of some of the dominant measures in that initiative is undoubtedly the mathematical explanation for that drop-off. Since an authoritative evaluation (EM&V) was not conducted on the

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2006 EKC Mass Market program, and therefore not published by the OPA on its Website, all parties are reliant on the OPA's calculations as provided to LDC's. Any further elucidation of the specifics would require the involvement of the OPA.

- c) Adjust the LRAM claim as necessary to reflect the measure lives and unit savings for any/all measures that have expired starting in 2010.

Renfrew Response:

These adjustments are already taken into account in the claim.

- d) VECC notes that the totals on Table One – OPA Results Net kWh are the same as Table Two – OPA Results Net kWh Adjusted to April 30, 2012. Please explain and confirm the adjusted results to April 30, 2012 have been included in the LRAM calculation.

Renfrew Response:

This was a design error in the report, which has been corrected in the updated attachment.

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Schedule: 2
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Revenue to Cost Ratios

VECC Question # 3

Reference: 2012 Revenue to Cost Ratio Adjustment Workform
Preamble: On Sheet 7, Column D and Sheet 9, Column K, the Allocated Revenue Offsets column is blank.

a) Please explain why the references columns are blank. Please update the Workform if required.

Renfrew Response:

Renfrew apologizes that this was an oversight in completing the model. An amended model will be filed.

b) VECC was unable to reconcile the values by customer class entered on Sheet 7, Column A. Please provide the reference in EB-2009-0146.

Renfrew Response:

Please reference sheet F.3 CostAllocation in the file
"Renfrew_RateMaker_DRO_20101215" located on the OEB website

[Renfrew_RateMaker_DRO_20101215](#)

This is shown below:

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Tab: 1
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Date Filed: December 22, 2011

Renfrew Hydro Inc. (ED-2002-0577)			
2010 EDR Application (EB-2009-0146) version: IRs Round 1			
August 13, 2010			
F3 Cost Allocation			
<i>Enter selected amounts from sheets 'O1' and 'O2' of Cost Allocation</i>			
<input type="button" value="Refresh"/>			
REVENUE ALLOCATION (sheet O1)			
Customer Class Name	Service Revenue Requirement	%	Miscellaneous Revenue (mi)
Residential	1,000,414	49.58%	64,754
General Service Less Than 50 kW	365,503	18.11%	22,360
General Service 50 to 4,999 kW	533,639	26.45%	46,000
Unmetered Scattered Load	22,890	1.13%	1,659
Street Lighting	95,291	4.72%	5,005
TOTAL (from Column C of sheet O1)	2,017,737	100.00%	139,777
	OK	OK	OK
* Service Revenue Requirement less Miscellaneous Revenue			
evRequirement	F2.DirectRevenues	F3.CostAllocation	F4.RevenueAllocation
F5.Rate			

Please note that the same values were used in the OEB approved revenue cost ratio model in 2011 (shown below).

Name of LDC: Renfrew Hydro Inc.
File Number: IRM3
Effective Date: May 1, 2011
Version : 1.0

Revenue Offsets Allocation

The purpose of this sheet is to allocate the Revenue Offsets (miscellaneous revenue) found in the last COS to the various rate classes in proportion to the allocation from the Cost Allocation informational filing.

Rate Class	Informational Filing Revenue A	Percentage Split C = A / B	Allocated Revenue Offsets E = D * C
Residential	64,753	46.33%	64,753
General Service Less Than 50 kW	22,360	16.00%	22,360
General Service 50 to 4,999 kW	46,000	32.91%	46,000
Unmetered Scattered Load	1,659	1.19%	1,659
Street Lighting	5,005	3.58%	5,005
	139,777	100.00%	139,777
	B		D

Exhibit 4

Tab 2 of 2

Appendices

File Number: EB-2011-0195

Exhibit: 4

Tab: 2

Schedule: 1

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Appendix 1 of 2

Appendix 1 Update LRAM Report

Suite 600, 34 King Street East
Toronto, Ontario M5C 2X8
Fax: (416) 348-9930
web: elenchus.ca & cerise.info

Martin Benum
Tel: (416) 640-0929
mbenum@elenchus.ca



December 9, 2011

Tom Freemark
President
Renfrew Hydro Inc.
29 Bridge Avenue W.
Renfrew, ON
K7V 3K3

Re: Updated 2006 to 2012 LRAM Report

Dear Tom:

Elenchus is pleased to attach the 2006 to 2012 LRAM Report For Renfrew Hydro Inc. for inclusion in your 2012 IRM3 Rate Application.

Elenchus concludes that Renfrew Hydro Inc.'s electricity rates should be adjusted to reflect an LRAM claim of \$58,310.02. This update replaces our original proposed claim of \$58,257.82

Thank you for allowing Elenchus to be of service. Please contact me should you have any questions about this report.

Yours Truly,

A handwritten signature in black ink, appearing to read "M Benum", written in a cursive style.

Martin Benum
Senior Consultant



2006 to 2012 LRAM REPORT

Prepared on: December 9, 2011

Prepared for:

**Renfrew Hydro Inc.
29 Bridge Avenue W.
Renfrew, ON
K7V 3K3**

This document was prepared for Renfrew Hydro Inc.

by Elenchus Research Associates Inc.

For additional information regarding this document please contact:

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December 9, 2011



Exhibit 1

LRAM REPORT



Exhibit 1

Tab 1 of 3

Report

Report Contents

Title	Exhibit	Tab	Schedule	Attachment	Number
Cover Letter					
Cover Sheet					
LRAM REPORT	1				
Report	1	1			
Table of Contents	1	1	1		
Executive Review	1	1	2		
Introduction	1	1	3		
Assumptions	1	1	4		
LRAM Recommendations	1	1	5		
Works Sited and Referenced	1	1	6		
Tables	1	2			
Input Tables OPA Results	1	2	1		
OPA Results	1	2	1	1	
OPA Results Net kWh	1	2	1	1	1
OPA Results kWh Net Adjusted for April 30, 2012	1	2	1	1	2
OPA Results Net kW	1	2	1	1	3
OPA Results Net kW Adjusted for April 30, 2012	1	2	1	1	4
Output Tables LRAM Calculations	1	2	2		
LRAM Calculations	1	2	2	1	
Residential	1	2	2	1	1
General Service Less Than 50 kW	1	2	2	1	2
General Service Greater than 50 kW	1	2	2	1	3
Elenchus Personnel	1	3			
Elenchus Regulatory Solutions Consultants	1	3	1		

Executive Review

The Ontario Energy Board (OEB) Guidelines for Electricity Distributor Conservation and Demand Management (EB-2008-0037) permit Renfrew Hydro Inc. to make application for recovery of lost revenue that results from the successful operation of CDM initiatives within its boundaries. A third-party review of that recovery claim is required and is the subject of this report.

Elenchus Research Associates Inc. (Elenchus) acted as the third party reviewer. Personnel details can be found in Tab 3 Schedule 1.

The third party review included Renfrew Hydro Inc.'s CDM activities from 2006 through 2010, consisting of programs initiated by the Ontario Power Authority (OPA) only. There is no claim for activity related to 2005 to 2009 Third Tranche of Market Adjustment Revenue Requirement (MARR) funding or post-Third Tranche funding.

The LRAM claim, correspondingly, includes energy and demand savings that result from those 2006 – 2010 programs, some of which continue through to the end of the filing period, which is April 30, 2012.

There has been no previous LRAM application by Renfrew Hydro Inc.

Total net energy savings for which LRAM is being claimed amount to over 3.3 GWh in the residential rate class and 0.9 GWh in the GS < 50 kW rate class. Summer peak demand savings in the GS 50 to 4,999 kW rate class totaled approximately 1.9 MW.

Elenchus concludes that Renfrew Hydro Inc.'s electricity rates should be adjusted to reflect an LRAM claim of \$58,310.02

1 Introduction

3 The Lost Revenue Adjustment Mechanism (LRAM) is designed to ensure that Local
4 Distribution Companies (LDC) “remain whole” despite the lower consumption levels that
5 are, by design, the result of successful conservation and demand management initiatives.
6 There should not be a disincentive for LDC’s to encourage energy efficiency and energy
7 conservation efforts. Therefore, an LDC is compensated for these lost revenues.

9 This claim for lost revenue (LRAM) respects the process outlined in the March 28, 2008
10 OEB Guidelines for Electricity Distributor Conservation and Demand Management EB-
11 2008-0037) (“CDM Guidelines”) for rate-based applications to recover revenues lost to
12 customer energy conservation.

14 The LRAM calculation is based on the sum of the electricity savings over the period of the
15 claim, which are then valued at the appropriate distribution rate depending on the timing
16 (year) of the savings and to which rate class they belonged.

18 The savings themselves are the product of an energy program evaluation process, often
19 referred to as Evaluation, Measurement and Verification (EM&V). Fortunately, in the case
20 of this claim, all savings estimates are for OPA programs and are provided by the OPA.

22 These savings estimates include persistence—the installation of energy conservation
23 measures whose savings that last past the initial year that they are installed. A four-year
24 program that installed 10 widgets per year with a savings of 1,000 kWh each would result
25 in the following savings profile if the widgets lasted 4 or more years (which is common):

27 **Example Savings Profile Showing Effect of Persistence**

Year	In-Year Savings (kWh)	Cumulative Savings (kWh)
1	10,000	10,000
2	20,000	30,000
3	30,000	60,000
4	40,000	100,000

28
29 The OPA designed and delivered some initial programs in 2006 and 2007, but then set-out
30 to build a portfolio of programs to address a broad cross-section of customer types that

1 would run from 2008 to 2010. This latter time frame corresponds to an Ontario goal of
2 shaving 1,350 MW from the electricity system in the province. Savings from these
3 programs typically follow a pattern similar to the one illustrated in the table above. Energy
4 program evaluations determine the energy and demand savings estimates to a reasonable
5 degree of accuracy and also determine the persistence including patterns, or effective
6 useful life (EUL) of new measures being installed and the remaining useful life (RUL) of
7 measures being replaced. It is assumed that the tables provided to each LDC, Renfrew
8 Hydro Inc., by the OPA contain accurate interpretations and transcriptions of the results
9 from those evaluations (available on the OPA Website).

10
11 There are “gross” savings and “net” savings for energy efficiency programs. OPA
12 documentation details the differences between these two, and both are provided to LDC's
13 by the OPA, but for the purposes of this LRAM claim only “net” savings are utilized. Net
14 savings are determined to be those savings that would not have occurred unless the energy
15 efficiency program was running. They are not natural conservation or savings that
16 someone could claim would have occurred anyway. They do not include savings from “free
17 riders.”

18
19 Some energy efficiency programs are operated at a province-wide scale. These include
20 some behavioural-based programs and some residential/consumer-orientated initiatives
21 like discount coupons. In certain of these cases, savings are apportioned to LDC's by the
22 OPA rather than an attempt made to track individual transactions (which is sometimes
23 impossible).

24
25 The savings claimed by Renfrew Hydro Inc. are therefore the net energy and demand
26 savings that can be attributed to the programs and initiatives that operated in Renfrew
27 Hydro Inc. territory during the 2006-2010 period and as apportioned to Renfrew Hydro
28 Inc. by the OPA according to its established formulae.
29

Assumptions

This report for Renfrew Hydro Inc. was created with the following assumptions that are often peculiar to the 2006-2010 period:

- “Consumer” kWh classified as the Residential rate class
- “Business” and/or “Industrial” kWh classified as General Service <50 kW because larger industrial projects were not yet part of the program mix by the end of 2010
- “Consumer” kW savings were omitted because they are immaterial
- Designated “business and industrial” kW classified as General Service >50 kW because it consists primarily of Demand Response initiatives utilized by large industrial participants

LRAM Recommendations

During the period of the LRAM claim, total net energy savings for which LRAM is being claimed amount to over 3.3 GWh in the residential rate class and 0.9 GWh in the GS < 50 kW rate class. Summer peak demand savings in the GS 50 to 4,999 kW rate class totaled approximately 1.9 MW.

Elenchus has concluded that Renfrew Hydro Inc. can justifiably claim \$58,310.02 in LRAM, allocated by rate class as shown in the table below.

Customer Class	Savings	LRAM
Residential	3.3 GWh	\$43,369.53
General Service Less Than 50 kW	0.9 GWH	\$10,880.79
General Service 50 to 4,999 kW	1.9 MW	\$4,059.70
Total To April 2012		\$58,310.02

Works Sited and Referenced

1. OPA Estimated allocation of 2006-2010 provincial conservation results to Local Distribution Company service territories - update to December 2010 report November 15, 2011
 - 2006-2010 Final OPA CDM Results-Update Renfrew Hydro Inc..xls
2. OEB Conservation and Demand Management Code for Electricity Distributors Issued: September 16, 2010

Exhibit 1

Tab 2 of 3

Tables

Input Tables OPA Results

- | | |
|----------------|--|
| 1. Table One | OPA Results Net kWh |
| 2. Table Two | OPA Results Net kWh Adjusted to April 30, 2012 |
| 3. Table Three | OPA Results Net kW |
| 4. Table Four | OPA Results Net kW Adjusted to April 30, 2012 |

Table One - OPA Results Net kW

#	Initiative Name	Program Name	Program Year	Results Status	2006	2007	2008	2009	2010	2011	2012	Total
1	Secondary Refrigerator Retirement Pilot	Consumer	2006	Final	4,252	4,252	4,252	4,252	4,252	4,252	-	25,515
2	Cool & Hot Savings Rebate	Consumer	2006	Final	10,497	10,497	10,497	10,497	10,497	10,497	10,497	73,482
3	Every Kilowatt Counts	Consumer	2006	Final	272,384	272,384	272,384	272,384	35,119	35,119	35,119	1,194,895
6	Great Refrigerator Roundup	Consumer	2007	Final	-	9,224	9,224	9,224	9,224	9,224	9,224	55,344
7	Cool & Hot Savings Rebate	Consumer	2007	Final	-	16,467	16,467	16,467	16,467	16,467	15,687	98,023
8	Every Kilowatt Counts	Consumer	2007	Final	-	98,712	97,504	97,504	97,504	97,504	94,175	582,903
10	Summer Savings	Consumer	2007	Final	-	137,039	23,098	8,743	8,743	8,743	8,743	195,110
13	Social Housing Pilot	Consumer Low-Income	2007	Final	-	8,972	8,972	8,972	8,972	8,972	8,972	53,830
20	Great Refrigerator Roundup	Consumer	2008	Final	-	-	23,787	23,787	23,787	23,787	23,751	118,899
21	Cool Savings Rebate	Consumer	2008	Final	-	-	18,109	18,109	18,109	18,109	18,109	90,547
22	Every Kilowatt Counts Power Savings Event	Consumer	2008	Final	-	-	91,928	91,528	91,528	91,528	77,686	444,196
24	Summer Sweepstakes	Consumer	2008	Final	-	-	49,133	17,730	17,730	17,730	17,730	120,052
27	High Performance New Construction	Business	2008	Final	-	-	246	246	246	246	246	1,230
35	Great Refrigerator Roundup	Consumer	2009	Final	-	-	-	19,652	19,652	19,652	19,652	78,609
36	Cool Savings Rebate	Consumer	2009	Final	-	-	-	22,315	22,315	22,315	22,236	89,182
37	Every Kilowatt Counts Power Savings Event	Consumer	2009	Final	-	-	-	38,803	37,193	37,193	37,191	150,379
41	High Performance New Construction	Business	2009	Final	-	-	-	7,457	7,457	7,457	7,457	29,827
44	Demand Response 1	Business, Industrial	2009	Final	-	-	-	6,488	-	-	-	6,488
45	Demand Response 2	Business, Industrial	2009	Final	-	-	-	61,764	-	-	-	61,764
46	Demand Response 3	Business, Industrial	2009	Final	-	-	-	1,180	-	-	-	1,180
53	Great Refrigerator Roundup	Consumer	2010	Final	-	-	-	-	46,674	46,674	46,674	140,022
54	Cool Savings Rebate	Consumer	2010	Final	-	-	-	-	22,590	22,590	22,590	67,769
55	Every Kilowatt Counts Power Savings Event	Consumer	2010	Final	-	-	-	-	14,237	12,513	12,115	38,865
56	peaksaver®	Consumer, Business	2010	Final	-	-	-	-	190	190	190	570
57	Electricity Retrofit Incentive	Business	2010	Final	-	-	-	-	37,578	37,578	37,578	112,734
59	High Performance New Construction	Business	2010	Final	-	-	-	-	24,442	24,442	24,442	73,327
60	Power Savings Blitz	Business	2010	Final	-	-	-	-	208,732	208,732	208,732	626,196
61	Multi-Family Energy Efficiency Rebates	Consumer, Consumer Low-Income	2010	Final	-	-	-	-	2,244	2,244	2,244	6,732
62	Demand Response 2	Business, Industrial	2010	Final	-	-	-	-	115,513	-	-	115,513
63	Demand Response 3	Business, Industrial	2010	Final	-	-	-	-	4,094	-	-	4,094
					287,134	557,548	625,602	737,104	905,089	783,759	761,039	4,657,276

Table Two - OPA Results Net kWh Adjusted to April 30, 20

#	Initiative Name	Program Name	Program Year	Results Status	2006	2007	2008	2009	2010	2011	2012	Total
1	Secondary Refrigerator Retirement Pilot	Consumer	2006	Final	4,252	4,252	4,252	4,252	4,252	4,252	-	25,515
2	Cool & Hot Savings Rebate	Consumer	2006	Final	10,497	10,497	10,497	10,497	10,497	10,497	3,499	66,484
3	Every Kilowatt Counts	Consumer	2006	Final	272,384	272,384	272,384	272,384	35,119	35,119	11,706	1,171,482
6	Great Refrigerator Roundup	Consumer	2007	Final	-	9,224	9,224	9,224	9,224	9,224	3,075	49,195
7	Cool & Hot Savings Rebate	Consumer	2007	Final	-	16,467	16,467	16,467	16,467	16,467	5,229	87,565
8	Every Kilowatt Counts	Consumer	2007	Final	-	98,712	97,504	97,504	97,504	97,504	31,392	520,120
10	Summer Savings	Consumer	2007	Final	-	137,039	23,098	8,743	8,743	8,743	2,914	189,281
13	Social Housing Pilot	Consumer Low-Income	2007	Final	-	8,972	8,972	8,972	8,972	8,972	2,991	47,849
20	Great Refrigerator Roundup	Consumer	2008	Final	-	-	23,787	23,787	23,787	23,787	7,917	103,065
21	Cool Savings Rebate	Consumer	2008	Final	-	-	18,109	18,109	18,109	18,109	6,036	78,474
22	Every Kilowatt Counts Power Savings Event	Consumer	2008	Final	-	-	91,928	91,528	91,528	91,528	25,895	392,406
24	Summer Sweepstakes	Consumer	2008	Final	-	-	49,133	17,730	17,730	17,730	5,910	108,232
27	High Performance New Construction	Business	2008	Final	-	-	246	246	246	246	82	1,066
35	Great Refrigerator Roundup	Consumer	2009	Final	-	-	-	19,652	19,652	19,652	6,551	65,508
36	Cool Savings Rebate	Consumer	2009	Final	-	-	-	22,315	22,315	22,315	7,412	74,358
37	Every Kilowatt Counts Power Savings Event	Consumer	2009	Final	-	-	-	38,803	37,193	37,193	12,397	125,586
41	High Performance New Construction	Business	2009	Final	-	-	-	7,457	7,457	7,457	2,486	24,856
44	Demand Response 1	Business, Industrial	2009	Final	-	-	-	6,488	-	-	-	6,488
45	Demand Response 2	Business, Industrial	2009	Final	-	-	-	61,764	-	-	-	61,764
46	Demand Response 3	Business, Industrial	2009	Final	-	-	-	1,180	-	-	-	1,180
53	Great Refrigerator Roundup	Consumer	2010	Final	-	-	-	-	46,674	46,674	15,558	108,906
54	Cool Savings Rebate	Consumer	2010	Final	-	-	-	-	22,590	22,590	7,530	52,709
55	Every Kilowatt Counts Power Savings Event	Consumer	2010	Final	-	-	-	-	14,237	12,513	4,038	30,789
56	peaksaver®	Consumer, Business	2010	Final	-	-	-	-	190	190	63	444
57	Electricity Retrofit Incentive	Business	2010	Final	-	-	-	-	37,578	37,578	12,526	87,682
59	High Performance New Construction	Business	2010	Final	-	-	-	-	24,442	24,442	8,147	57,032
60	Power Savings Blitz	Business	2010	Final	-	-	-	-	208,732	208,732	69,577	487,042
61	Multi-Family Energy Efficiency Rebates	Consumer, Consumer Low-Income	2010	Final	-	-	-	-	2,244	2,244	748	5,236
62	Demand Response 2	Business, Industrial	2010	Final	-	-	-	-	115,513	-	-	115,513
63	Demand Response 3	Business, Industrial	2010	Final	-	-	-	-	4,094	-	-	4,094
					287,134	557,548	625,602	737,104	905,089	783,759	253,680	4,149,917

Table Three - OPA Results Net

#	Initiative Name	Program Name	Program Year	Results Status	2006	2007	2008	2009	2010	2011	2012	Total
1	Secondary Refrigeration	Consumer	2006	Final	1	1	1	1	1	1	-	6
2	Cool & Hot Savings	Consumer	2006	Final	10	10	10	10	10	10	10	68
3	Every Kilowatt Count	Consumer	2006	Final	3	3	3	3	3	3	3	22
4	Demand Response 1	Business, Industrial	2006	Final	223	-	-	-	-	-	-	223
5	Loblaw & York Region	Business, Industrial	2006	Final	11	-	-	-	-	-	-	11
6	Great Refrigerator Rebate	Consumer	2007	Final	-	1	1	1	1	1	1	6
7	Cool & Hot Savings	Consumer	2007	Final	-	11	11	11	11	11	10	65
8	Every Kilowatt Count	Consumer	2007	Final	-	4	3	3	3	3	3	21
10	Summer Savings	Consumer	2007	Final	-	77	23	11	11	11	11	144
13	Social Housing Pilot	Consumer Low-Income	2007	Final	-	1	1	1	1	1	1	6
17	Demand Response 1	Business, Industrial	2007	Final	-	258	-	-	-	-	-	258
18	Loblaw & York Region	Business, Industrial	2007	Final	-	21	-	-	-	-	-	21
20	Great Refrigerator Rebate	Consumer	2008	Final	-	-	3	3	3	3	2	13
21	Cool Savings Rebate	Consumer	2008	Final	-	-	11	11	11	11	11	57
22	Every Kilowatt Count	Consumer	2008	Final	-	-	5	5	5	5	4	24
24	Summer Sweepstakes	Consumer	2008	Final	-	-	12	7	7	7	7	41
27	High Performance Network	Business	2008	Final	-	-	0	0	0	0	0	1
29	Demand Response 1	Business, Industrial	2008	Final	-	-	377	-	-	-	-	377
30	Demand Response 3	Business, Industrial	2008	Final	-	-	73	-	-	-	-	73
31	Loblaw & York Region	Business, Industrial	2008	Final	-	-	25	-	-	-	-	25
35	Great Refrigerator Rebate	Consumer	2009	Final	-	-	-	3	3	3	3	12
36	Cool Savings Rebate	Consumer	2009	Final	-	-	-	15	15	15	15	59
37	Every Kilowatt Count	Consumer	2009	Final	-	-	-	4	4	4	4	16
41	High Performance Network	Business	2009	Final	-	-	-	3	3	3	3	13
44	Demand Response 1	Business, Industrial	2009	Final	-	-	-	148	-	-	-	148
45	Demand Response 2	Business, Industrial	2009	Final	-	-	-	100	-	-	-	100
46	Demand Response 3	Business, Industrial	2009	Final	-	-	-	143	-	-	-	143
47	Loblaw & York Region	Business, Industrial	2009	Final	-	-	-	25	-	-	-	25
53	Great Refrigerator Rebate	Consumer	2010	Final	-	-	-	-	8	8	8	24
54	Cool Savings Rebate	Consumer	2010	Final	-	-	-	-	14	14	14	42
55	Every Kilowatt Count	Consumer	2010	Final	-	-	-	-	1	1	1	4
56	peaksaver®	Consumer, Business	2010	Final	-	-	-	-	48	48	48	144
57	Electricity Retrofit Incentive	Business	2010	Final	-	-	-	-	7	7	7	20
59	High Performance Network	Business	2010	Final	-	-	-	-	11	11	11	32
60	Power Savings Blitz	Business	2010	Final	-	-	-	-	68	68	68	204
61	Multi-Family Energy	Consumer, Commercial	2010	Final	-	-	-	-	0	0	0	1
62	Demand Response 2	Business, Industrial	2010	Final	-	-	-	-	99	-	-	99
63	Demand Response 3	Business, Industrial	2010	Final	-	-	-	-	209	-	-	209
64	Loblaw & York Region	Business, Industrial	2010	Final	-	-	-	-	24	-	-	24
					248	387	560	508	581	249	247	2,780

Table Four - OPA Results Net kW Adjusted to April 30, 20

#	Initiative Name	Program Name	Program Year	Results Status	2006	2007	2008	2009	2010	2011	2012	Total
1	Secondary Refrigeration	Consumer	2006	Final	1	1	1	1	1	1	-	6
2	Cool & Hot Savings	Consumer	2006	Final	10	10	10	10	10	10	3	62
3	Every Kilowatt Count	Consumer	2006	Final	3	3	3	3	3	3	1	20
4	Demand Response 1	Business, Industrial	2006	Final	223	-	-	-	-	-	-	223
5	Loblaw & York Region	Business, Industrial	2006	Final	11	-	-	-	-	-	-	11
6	Great Refrigerator Rebate	Consumer	2007	Final	-	1	1	1	1	1	0	6
7	Cool & Hot Savings	Consumer	2007	Final	-	11	11	11	11	11	3	58
8	Every Kilowatt Count	Consumer	2007	Final	-	4	3	3	3	3	1	19
10	Summer Savings	Consumer	2007	Final	-	77	23	11	11	11	4	136
13	Social Housing Pilot	Consumer Low-Income	2007	Final	-	1	1	1	1	1	0	6
17	Demand Response 1	Business, Industrial	2007	Final	-	258	-	-	-	-	-	258
18	Loblaw & York Region	Business, Industrial	2007	Final	-	21	-	-	-	-	-	21
20	Great Refrigerator Rebate	Consumer	2008	Final	-	-	3	3	3	3	1	11
21	Cool Savings Rebate	Consumer	2008	Final	-	-	11	11	11	11	4	50
22	Every Kilowatt Count	Consumer	2008	Final	-	-	5	5	5	5	1	21
24	Summer Sweepstakes	Consumer	2008	Final	-	-	12	7	7	7	2	36
27	High Performance Network	Business	2008	Final	-	-	0	0	0	0	0	1
29	Demand Response 1	Business, Industrial	2008	Final	-	-	377	-	-	-	-	377
30	Demand Response 3	Business, Industrial	2008	Final	-	-	73	-	-	-	-	73
31	Loblaw & York Region	Business, Industrial	2008	Final	-	-	25	-	-	-	-	25
35	Great Refrigerator Rebate	Consumer	2009	Final	-	-	-	3	3	3	1	10
36	Cool Savings Rebate	Consumer	2009	Final	-	-	-	15	15	15	5	49
37	Every Kilowatt Count	Consumer	2009	Final	-	-	-	4	4	4	1	13
41	High Performance Network	Business	2009	Final	-	-	-	3	3	3	1	11
44	Demand Response 1	Business, Industrial	2009	Final	-	-	-	148	-	-	-	148
45	Demand Response 2	Business, Industrial	2009	Final	-	-	-	100	-	-	-	100
46	Demand Response 3	Business, Industrial	2009	Final	-	-	-	143	-	-	-	143
47	Loblaw & York Region	Business, Industrial	2009	Final	-	-	-	25	-	-	-	25
53	Great Refrigerator Rebate	Consumer	2010	Final	-	-	-	-	8	8	3	19
54	Cool Savings Rebate	Consumer	2010	Final	-	-	-	-	14	14	5	32
55	Every Kilowatt Count	Consumer	2010	Final	-	-	-	-	1	1	0	3
56	peaksaver®	Consumer, Business	2010	Final	-	-	-	-	48	48	16	112
57	Electricity Retrofit Incentive	Business	2010	Final	-	-	-	-	7	7	2	16
59	High Performance Network	Business	2010	Final	-	-	-	-	11	11	4	25
60	Power Savings Blitz	Business	2010	Final	-	-	-	-	68	68	23	159
61	Multi-Family Energy	Consumer, Commercial	2010	Final	-	-	-	-	0	0	0	0
62	Demand Response 2	Business, Industrial	2010	Final	-	-	-	-	99	-	-	99
63	Demand Response 3	Business, Industrial	2010	Final	-	-	-	-	209	-	-	209
64	Loblaw & York Region	Business, Industrial	2010	Final	-	-	-	-	24	-	-	24
					248	387	560	508	581	249	82	2,616

Output Tables LRAM Calculations

1. Table Five Residential LRAM Calculation
2. Table Six GS Less Than 50 kW LRAM Calculation
3. Table Seven GS 50 to 4,999 kW LRAM Calculation

Table Five - Residential LRAM Calculati

#	Initiative Name	Program Name	Program Year	Results Status	2006	2007	2008	2009	2010	2011	2012	Total
1	Secondary Refrigerator Retirement Pilot	Consumer	2006	Final	4,252	4,252	4,252	4,252	4,252	4,252	-	25,515
2	Cool & Hot Savings Rebate	Consumer	2006	Final	10,497	10,497	10,497	10,497	10,497	10,497	3,499	66,484
3	Every Kilowatt Counts	Consumer	2006	Final	272,384	272,384	272,384	272,384	35,119	35,119	11,706	1,171,482
6	Great Refrigerator Roundup	Consumer	2007	Final	-	9,224	9,224	9,224	9,224	9,224	3,075	49,195
7	Cool & Hot Savings Rebate	Consumer	2007	Final	-	16,467	16,467	16,467	16,467	16,467	5,229	87,565
8	Every Kilowatt Counts	Consumer	2007	Final	-	98,712	97,504	97,504	97,504	97,504	31,392	520,120
10	Summer Savings	Consumer	2007	Final	-	137,039	23,098	8,743	8,743	8,743	2,914	189,281
13	Social Housing Pilot	Consumer Low-Income	2007	Final	-	8,972	8,972	8,972	8,972	8,972	2,991	47,849
20	Great Refrigerator Roundup	Consumer	2008	Final	-	-	23,787	23,787	23,787	23,787	7,917	103,065
21	Cool Savings Rebate	Consumer	2008	Final	-	-	18,109	18,109	18,109	18,109	6,036	78,474
22	Every Kilowatt Counts Power Savings Event	Consumer	2008	Final	-	-	91,928	91,528	91,528	91,528	25,895	392,406
24	Summer Sweepstakes	Consumer	2008	Final	-	-	49,133	17,730	17,730	17,730	5,910	108,232
35	Great Refrigerator Roundup	Consumer	2009	Final	-	-	-	19,652	19,652	19,652	6,551	65,508
36	Cool Savings Rebate	Consumer	2009	Final	-	-	-	22,315	22,315	22,315	7,412	74,358
37	Every Kilowatt Counts Power Savings Event	Consumer	2009	Final	-	-	-	38,803	37,193	37,193	12,397	125,586
53	Great Refrigerator Roundup	Consumer	2010	Final	-	-	-	-	46,674	46,674	15,558	108,906
54	Cool Savings Rebate	Consumer	2010	Final	-	-	-	-	22,590	22,590	7,530	52,709
55	Every Kilowatt Counts Power Savings Event	Consumer	2010	Final	-	-	-	-	14,237	12,513	4,038	30,789
61	Multi-Family Energy Efficiency Rebates	Consumer, Consumer Low-Income	2010	Final	-	-	-	-	2,244	2,244	748	5,236
					287,134	557,548	625,356	659,969	506,838	505,114	160,798	3,302,758
Residential Distribution Volumetric Rate					\$/kWh	0.0117	0.0118	0.0118	0.0133	0.0149	0.0146	0.0146
LRAM					\$ 3,359.47	\$ 6,579.07	\$ 7,379.21	\$ 8,777.59	\$ 7,551.88	\$ 7,374.66	\$ 2,347.65	\$ 43,369.53

Table Six - GS Less Than 50 kW LRAM Calculati

#	Initiative Name	Program Name	Program Year	Results Status	2006	2007	2008	2009	2010	2011	2012	Total
27	High Performance New Construction	Business	2008	Final	-	-	246	246	246	246	82	1,066
41	High Performance New Construction	Business	2009	Final	-	-	-	7,457	7,457	7,457	2,486	24,856
44	Demand Response 1	Business, Industrial	2009	Final	-	-	-	6,488	-	-	-	6,488
45	Demand Response 2	Business, Industrial	2009	Final	-	-	-	61,764	-	-	-	61,764
46	Demand Response 3	Business, Industrial	2009	Final	-	-	-	1,180	-	-	-	1,180
57	Electricity Retrofit Incentive	Business	2010	Final	-	-	-	-	37,578	37,578	12,526	87,682
59	High Performance New Construction	Business	2010	Final	-	-	-	-	24,442	24,442	8,147	57,032
60	Power Savings Blitz	Business	2010	Final	-	-	-	-	208,732	208,732	69,577	487,042
62	Demand Response 2	Business, Industrial	2010	Final	-	-	-	-	115,513	-	-	115,513
63	Demand Response 3	Business, Industrial	2010	Final	-	-	-	-	4,094	-	-	4,094
					-	-	246	77,135	398,061	278,455	92,818	846,715
GSLT50 Distribution Volumetric Rate					\$/kWh	0.0078	0.0079	0.0079	0.0089	0.0132	0.0133	0.0133
LRAM					\$ -	\$ -	\$ 1.94	\$ 686.50	\$ 5,254.41	\$ 3,703.45	\$ 1,234.48	\$ 10,880.79

Table Seven - GS 50 to 4,999 kW LRAM Calculati

#	Initiative Name	Program Name	Program Year	Results Status	2006	2007	2008	2009	2010	2011	2012	Total
4	Demand Response 1	Business, Industrial	2006	Final	223	-	-	-	-	-	-	223
5	Loblaw & York Region Demand Response	Business, Industrial	2006	Final	11	-	-	-	-	-	-	11
17	Demand Response 1	Business, Industrial	2007	Final	-	258	-	-	-	-	-	258
18	Loblaw & York Region Demand Response	Business, Industrial	2007	Final	-	21	-	-	-	-	-	21
27	High Performance New Construction	Business	2008	Final	-	-	0	0	0	0	0	1
29	Demand Response 1	Business, Industrial	2008	Final	-	-	377	-	-	-	-	377
30	Demand Response 3	Business, Industrial	2008	Final	-	-	73	-	-	-	-	73
31	Loblaw & York Region Demand Response	Business, Industrial	2008	Final	-	-	25	-	-	-	-	25
41	High Performance New Construction	Business	2009	Final	-	-	-	3	3	3	1	11
44	Demand Response 1	Business, Industrial	2009	Final	-	-	-	148	-	-	-	148
45	Demand Response 2	Business, Industrial	2009	Final	-	-	-	100	-	-	-	100
46	Demand Response 3	Business, Industrial	2009	Final	-	-	-	143	-	-	-	143
47	Loblaw & York Region Demand Response	Business, Industrial	2009	Final	-	-	-	25	-	-	-	25
57	Electricity Retrofit Incentive	Business	2010	Final	-	-	-	-	7	7	2	16
59	High Performance New Construction	Business	2010	Final	-	-	-	-	11	11	4	25
60	Power Savings Blitz	Business	2010	Final	-	-	-	-	68	68	23	159
62	Demand Response 2	Business, Industrial	2010	Final	-	-	-	-	99	-	-	99
63	Demand Response 3	Business, Industrial	2010	Final	-	-	-	-	209	-	-	209
64	Loblaw & York Region Demand Response	Business, Industrial	2010	Final	-	-	-	-	24	-	-	24
					234	279	475	419	421	89	30	1,947
GSGT50 Distribution Volumetric Rate					\$/kWh	2.1085	2.1275	2.1254	1.8578	2.1683	2.2841	2.2841
LRAM					\$ 493.14	\$ 594.44	\$ 1,009.11	\$ 779.09	\$ 912.98	\$ 203.20	\$ 67.73	\$ 4,059.70

Exhibit 1

Tab 3 of 3

Elenchus Personnel

Elenchus Regulatory Solutions Consultants

John Todd, President (Lead Consultant)

John Todd is President of Elenchus Research Associates Inc. He has specialized in the theory and practice of regulation and de-regulation for over 25 years and has actively participated in regulatory hearings and reform initiatives in several sectors of the Canadian economy, including natural gas, electricity and telecommunications.

John has served as an expert advisor or witness in 200 proceedings before the energy Boards in Ontario, Manitoba, British Columbia, Quebec, and Newfoundland and other tribunals including the Canadian Radio-television and Telecommunications Commission (CRTC) and the Ontario Securities Commission. His clients have included regulated utilities, regulatory agencies, generators and producers, and a variety of customer groups.

Martin Benum, Senior Consultant (Rate Applications)

Martin has over twenty years progressive experience in the Ontario electrical industry with regulatory, LDC and Retail electricity exposure. Prior to joining Elenchus, he was an advisor in electricity rate applications with the Ontario Energy Board. He has a strong working knowledge and application experience with OEB handbook rules, regulations, and guidelines.

Marc Collins – Director, Elenchus Energy Conservation

Energy Program Evaluation and Conservation and Demand-Side Management (CDM) professional with a very diverse career history. Founding Director of the Evaluation, Measurement and Verification (EM&V) department at the Ontario Power Authority in 2007. Marc led that function for the OPA from inception to maturity, leaving sophisticated evaluation protocols (new for 2011-14), world-class measures and assumptions lists and a portfolio of high-quality evaluations to show for the effort.

Specialties:

Energy program evaluation (EM&V)

- Planning and management

- 1 - Protocols and standards
- 2 - Impact evaluation
- 3 - Process evaluation
- 4 - Market effects evaluation
- 5 - Cost effectiveness testing
- 6 Demand-side management programs
- 7 Demand response programs
- 8 Use of advanced IT for energy-related applications
- 9 Regulatory aspects of EM&V and DSM tracking and reporting for utilities and central agencies
- 10 Potential studies
- 11

File Number: EB-2011-0195

Exhibit: 4

Tab: 2

Schedule: 1

Date Filed: December 22, 2011

Appendix 2 of 2

Appendix 2 Revenue Requirement Calculation

COST OF SERVICE - APPROVED 2010

Fixed

Customer Class	Monthly	Volume	Rate	Revenue
Residential	3635	43,620	14.49	\$632,054
GS<50	474	5,688	29.96	\$170,412
GS>50	64	768	162.01	\$124,424
Unmetered	30	360	32.83	\$11,819
Street Lighting	1173	14,076	1.49	\$20,973
				\$959,682

Variable

Customer Class	Volume	Rate	Revenue
Residential	31,881,465	0.0149	\$475,034
GS<50	12,958,689	0.0132	\$171,055
GS>50	142,778	2.1683	\$309,586
Unmetered	142,827	0.0074	\$1,057
Street Lighting	3,110	3.6732	\$11,424
			\$968,155
			\$968,155
			\$1,927,837

2010 COST OF SERVICE			
BASE REVENUE	\$1,877,960		
TRANSF. ALLOWANCE	\$50,977		
	\$1,928,937	\$1,927,837	
LOW VOLTAGE	\$98,962	\$99,914	
	\$2,027,899	\$2,027,750	

COST OF SERVICE volumes - with APPROVED 2011 rates

Fixed

Customer Class	Monthly	Volume	Rate	Revenue
Residential	3635	43,620	14.11	\$615,478
GS<50	474	5,688	30.07	\$171,038
GS>50	64	768	170.67	\$131,075
Unmetered	30	360	35.87	\$12,913
Street Lighting	1173	14,076	1.99	\$28,011
				\$958,515

Variable

Customer Class	Volume	Rate	Revenue
Residential	31,881,465	0.0146	\$465,469
GS<50	12,958,689	0.0133	\$172,351
GS>50	142,778	2.2841	\$326,119
Unmetered	142,827	0.0081	\$1,157

LOW VOLTAGE

Customer Class	Monthly	Volume	Rate	Revenue
Residential	3635	43,620		0
GS<50	474	5,688		0
GS>50	64	768		0
Unmetered	30	360		0
Street Lighting	1173	14,076		0
				0

Variable

Customer Class	Volume	Rate	Revenue
Residential	31,881,465	0.0011	\$35,070
GS<50	12,958,689	0.001	\$12,959
GS>50	142,778	0.3564	\$50,886
Unmetered	142,827	0.001	\$143
Street Lighting	3,110	0.2754	\$856
			\$99,914

LOW VOLTAGE

Customer Class	Monthly	Volume	Rate
Residential	3635	43,620	
GS<50	474	5,688	
GS>50	64	768	
Unmetered	30	360	
Street Lighting	1173	14,076	

Variable

Customer Class	Volume	Rate	Revenue
Residential	31,881,465	0.0011	\$35,070
GS<50	12,958,689	0.001	\$12,959
GS>50	142,778	0.3564	\$50,886
Unmetered	142,827	0.001	\$143

Street Lighting	3,110	4.8878	\$15,201	
			<u>\$980,297</u>	<u>\$980,297</u>
				\$1,938,812

Street Lighting	3,110	0.2754	\$856	
			<u>\$99,914</u>	

<u>2010 COST OF SERVICE</u>				
BASE REVENUE		\$1,877,960		
TRANSF. ALLOWANCE		<u>\$50,977</u>		
		\$1,928,937		\$1,938,812
LOW VOLTAGE		<u>\$98,962</u>		<u>\$99,914</u>
		<u>\$2,027,899</u>		<u>\$2,038,726</u>

2010 volumes - with APPROVED 2011 rates

Fixed

Customer Class	Monthly	Volume	Rate	Revenue
Residential	3654	43,848	14.11	\$618,695
GS<50	442	5,304	30.07	\$159,491
GS>50	59	708	170.67	\$120,834
Unmetered	34	408	35.87	\$14,635
Street Lighting	1174	14,088	1.99	\$28,035
				<u>\$941,691</u>

Variable

Customer Class	Volume	Rate	Revenue	
Residential	30,305,144	0.0146	\$442,455	
GS<50	12,427,065	0.0133	\$165,280	
GS>50	141,797	2.2841	\$323,879	
Unmetered	150,176	0.0081	\$1,216	
Street Lighting	3,098	4.8878	\$15,142	
			<u>\$947,972</u>	<u>\$947,972</u>
				\$1,889,663

LOW VOLTAGE

Customer Class	Monthly	Volume	Rate	
Residential	3654	43,848		
GS<50	442	5,304		
GS>50	59	708		
Unmetered	34	408		
Street Lighting	1174	14,088		

Variable

Customer Class	Volume	Rate	Revenue	
Residential	30,305,144	0.0011	\$33,336	
GS<50	12,427,065	0.001	\$12,427	
GS>50	141,797	0.3564	\$50,536	
Unmetered	150,176	0.001	\$150	
Street Lighting	3,098	0.2754	\$853	
			<u>\$97,303</u>	

<u>2010 COST OF SERVICE</u>				
BASE REVENUE		\$1,877,960		
TRANSF. ALLOWANCE		<u>\$50,977</u>		
		\$1,928,937		\$1,889,663
LOW VOLTAGE		<u>\$98,962</u>		<u>\$97,303</u>
		<u>\$2,027,899</u>		<u>\$1,986,966</u>