



Westario Power Inc.

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February 24, 2012

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

**Re: Ontario Energy Board File #EB-2011-0205
2012 IRM3 Electricity Distribution Rate Application
Westario Power Inc.
Vulnerable Energy Consumers Coalition (VECC)**

Dear Ms Walli:

In accordance with the Notice of Application and Written Hearing, please find attached Westario Power Inc.'s (WPI) responses to the Vulnerable Energy Consumers Coalition (VECC) Interrogatories in the above proceeding. We enclose two (2) hard copies of WPI's Interrogatory Responses and WPI will also file electronic versions via e-mail to boardsec@oeb.gov.on.ca and an electronic filing of the application through the Board's RESS portal.

If there are any questions, please contact myself at 519-507-6666 ext. 211, email alvin.allim@westario.com or Lisa Milne at 519-507-6666 ext. 216, email lisa.milne@westario.com.

Yours truly,

Alvin E. Allim, H.B. Com, CGA
Chief Financial Officer

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
Westario Power 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, Elenchus LRAM Report dated October 4, 2011

Preamble: Westario Power seeks an LRAM claim of \$357,937.04 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 Westario Power is seeking to recover in this application are new amounts not included in past LRAM claims.
- b) When was Westario Power's load forecast last approved by the Board? Please discuss how any CDM savings have been accounted for in Westario Power's approved load forecast.

Westario Power Response:

- a) 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 Westario Power.
- b) Westario Power's load forecast was last approved by the Board on its 2009 COS Rate Application (EB-2008-0238, dated April 24, 2009). Westario Power confirms that there were no direct CDM savings from OPA programs included in the approved load forecast.

VECC Question # 2

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

- a) Please complete the following table by year at the program measure level to add to the data shown in Table One:

Program	Energy Measure	# Units	Free Ridership Rate	Energy Savings (kWh/yr)	Measure Life	Contribution to LRAM (kWh)

List and confirm OPA's input assumptions for Every Kilowatt Counts (EKC) 2006 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.

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

Westario Power Response:

- a) The annual OPA program/measure level details (i.e. number of units, measure life, free ridership, annual savings (kWh/a) and annual peak demand savings (kW/a)) may be found in the worksheet tab labeled "Measures – LDC" located in the Final OPA CDM Results released November 15, 2011. These details and the data shown in the above-mentioned Table One were those provided to Westario Power by the OPA.

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 into 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, Westario Power relies on the veracity of OPA data for its LRAM claim.

- b) 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 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) These adjustments are already taken into account in the claim.
- d) This was a design error in the report, which has been corrected in the updated attachment.

VECC Question # 3

Reference: Exhibit 1, Tab 1, Schedule 6, Page 1, Elenchus LRAM Report

Preamble: The report indicates that the most recently published OPA 2010 Final CDM Results Summary released September 16, 2011 were used to calculate LRAM amounts.

- a) When does Westario Power expect to receive the OPA 2010 Final CDM Detailed Results?
- b) How will these results impact the LRAM claim?

Westario Power Response:

- a) Westario Power received the final 2010 evaluation results on November 15, 2011. The final report effectively changes the amount requested. This is detailed in the attached updated LRAM claim.
- b) Westario Power Inc.'s updated LRAM claim is for \$368,916.56 and was previously calculated at \$357,937.04

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February 9, 2012

Alvin Allim
Chief Financial Officer
Westario Power Inc.
24 Eastridge Road R.R. 2
Walkerton, ON
N0G 2V0

Re: Updated 2006 to 2012 LRAM Report

Dear Alvin:

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

Elenchus concludes that Westario Power Inc.'s electricity rates should be adjusted to reflect an LRAM claim of \$368,916.56 (previously calculated at \$357,937.04)

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 that reads "M Benum".

Martin Benum
Senior Consultant



2006 to 2012 LRAM REPORT

Prepared on: February 9, 2012

Prepared for:

**Westario Power Inc.
24 Eastridge Road R.R. 2
Walkerton, ON
N0G 2V0**

This document was prepared for Westario Power Inc.

by Elenchus Research Associates Inc.

For additional information regarding this document please contact:

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February 9, 2012



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		

1 Executive Review

2

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

8

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

11

12 The third party review included Westario Power Inc.'s CDM activities from 2006 through
13 2010, consisting of programs initiated by the Ontario Power Authority (OPA) only. There is
14 no claim for activity related to 2005 to 2009 Third Tranche of Market Adjustment Revenue
15 Requirement (MARR) funding or post-Third Tranche funding.

16

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

20

21 There has been no previous LRAM application by Westario Power Inc.

22

23 Total net energy savings for which LRAM is being claimed amount to over 23.6 GWh in the
24 residential rate class and 2.7 GWh in the GS < 50 kW rate class. Summer peak demand
25 savings in the GS 50 to 4,999 kW rate class totaled approximately 7.1 MW.

26

27 Elenchus concludes that Westario Power Inc.'s electricity rates should be adjusted to reflect
28 an LRAM claim of \$368,916.56

29

1 Introduction

2

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.

8

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.

13

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.

17

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.

21

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):

26

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, Westario
8 Power 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 Westario Power Inc. are therefore the net energy and demand
26 savings that can be attributed to the programs and initiatives that operated in Westario
27 Power Inc. territory during the 2006-2010 period and as apportioned to Westario Power
28 Inc. by the OPA according to its established formulae.
29

1 Assumptions

2

3 This report for Westario Power Inc. was created with the following assumptions that are
4 often peculiar to the 2006-2010 period:

5

6 • “Consumer” kWh classified as the Residential rate class

7 • “Business” and/or “Industrial” kWh classified as General Service <50 kW because
8 larger industrial projects were not yet part of the program mix by the end of 2010

9 • “Consumer” kW savings were omitted because they are immaterial

10 • Designated “business and industrial” kW classified as General Service >50 kW
11 because it consists primarily of Demand Response initiatives utilized by large
12 industrial participants
13

1 LRAM Recommendations

2

3 During the period of the LRAM claim, total net energy savings for which LRAM is being
4 claimed amount to over 23.6 GWh in the residential rate class and 2.7 GWh in the GS < 50
5 kW rate class. Summer peak demand savings in the GS 50 to 4,999 kW rate class totaled
6 approximately 7.1 MW.

7

8 Elenchus has concluded that Westario Power Inc. can justifiably claim \$368,916.56 in
9 LRAM, allocated by rate class as shown in the table below.

10

Customer Class	Savings	LRAM
Residential	23.6 GWh	\$323,757.05
General Service Less Than 50 kW	2.7 GWH	\$27,516.84
General Service 50 to 4,999 kW	7.1 MW	\$17,642.68
Total		\$368,916.56

11

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 Westario Power 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	28,763	28,763	28,763	28,763	28,763	28,763	-	172,575
2	Cool & Hot Savings Rebate	Consumer	2006	Final	71,003	71,003	71,003	71,003	71,003	71,003	71,003	497,018
3	Every Kilowatt Counts	Consumer	2006	Final	1,842,350	1,842,350	1,842,350	1,842,350	237,537	237,537	237,537	8,082,010
6	Great Refrigerator Roundup	Consumer	2007	Final	-	70,257	70,257	70,257	70,257	69,843	69,429	420,301
7	Cool & Hot Savings Rebate	Consumer	2007	Final	-	113,138	113,138	113,138	113,138	113,138	107,774	673,462
8	Every Kilowatt Counts	Consumer	2007	Final	-	678,195	669,901	669,901	669,901	669,901	647,024	4,004,824
10	Summer Savings	Consumer	2007	Final	-	358,344	60,400	22,862	22,862	22,862	22,862	510,193
13	Social Housing Pilot	Consumer Low-Income	2007	Final	-	61,639	61,639	61,639	61,639	61,639	61,639	369,836
14	Energy Efficiency Assistance for Houses Pilot	Consumer Low-Income	2007	Final	-	41,419	41,419	41,419	41,419	41,419	41,419	248,516
20	Great Refrigerator Roundup	Consumer	2008	Final	-	-	181,812	181,812	181,812	181,812	181,563	908,810
21	Cool Savings Rebate	Consumer	2008	Final	-	-	122,719	122,719	122,719	122,719	122,719	613,596
22	Every Kilowatt Counts Power Savings Event	Consumer	2008	Final	-	-	622,953	620,243	620,243	620,243	526,442	3,010,124
27	High Performance New Construction	Business	2008	Final	-	-	901	901	901	901	901	4,507
32	Renewable Energy Standard Offer	Consumer, Business	2008	Final	-	-	4,920	4,920	4,920	4,920	4,920	24,598
35	Great Refrigerator Roundup	Consumer	2009	Final	-	-	-	216,032	216,032	216,032	215,221	863,317
36	Cool Savings Rebate	Consumer	2009	Final	-	-	-	160,470	160,470	160,470	159,899	641,309
37	Every Kilowatt Counts Power Savings Event	Consumer	2009	Final	-	-	-	279,033	267,454	267,454	267,438	1,081,378
41	High Performance New Construction	Business	2009	Final	-	-	-	28,387	28,387	28,387	28,387	113,549
44	Demand Response 1	Business, Industrial	2009	Final	-	-	-	24,700	-	-	-	24,700
45	Demand Response 2	Business, Industrial	2009	Final	-	-	-	235,133	-	-	-	235,133
46	Demand Response 3	Business, Industrial	2009	Final	-	-	-	4,491	-	-	-	4,491
53	Great Refrigerator Roundup	Consumer	2010	Final	-	-	-	-	273,750	273,750	273,750	821,249
54	Cool Savings Rebate	Consumer	2010	Final	-	-	-	-	82,004	82,004	82,004	246,011
55	Every Kilowatt Counts Power Savings Event	Consumer	2010	Final	-	-	-	-	101,679	89,368	86,524	277,571
57	Electricity Retrofit Incentive	Business	2010	Final	-	-	-	-	313,014	313,014	313,014	939,043
59	High Performance New Construction	Business	2010	Final	-	-	-	-	97,812	97,812	97,812	293,437
60	Power Savings Blitz	Business	2010	Final	-	-	-	-	400,030	400,030	400,030	1,200,091
61	Multi-Family Energy Efficiency Rebates	Consumer, Consumer Low-Income	2010	Final	-	-	-	-	966,881	966,881	966,881	2,900,643
62	Demand Response 2	Business, Industrial	2010	Final	-	-	-	-	462,254	-	-	462,254
63	Demand Response 3	Business, Industrial	2010	Final	-	-	-	-	16,383	-	-	16,383
					1,942,115	3,265,107	3,892,174	4,800,172	5,633,264	5,141,902	4,986,193	29,660,928

Table Two - OPA Results Net kWh Adjusted to April 30, 2012

#	Initiative Name	Program Name	Program Year	Results Status	2006	2007	2008	2009	2010	2011	2012	Total
1	Secondary Refrigerator Retirement Pilot	Consumer	2006	Final	28,763	28,763	28,763	28,763	28,763	28,763	-	172,575
2	Cool & Hot Savings Rebate	Consumer	2006	Final	71,003	71,003	71,003	71,003	71,003	71,003	23,668	449,683
3	Every Kilowatt Counts	Consumer	2006	Final	1,842,350	1,842,350	1,842,350	1,842,350	237,537	237,537	79,179	7,923,652
6	Great Refrigerator Roundup	Consumer	2007	Final	-	70,257	70,257	70,257	70,257	69,843	23,143	374,015
7	Cool & Hot Savings Rebate	Consumer	2007	Final	-	113,138	113,138	113,138	113,138	113,138	35,925	601,612
8	Every Kilowatt Counts	Consumer	2007	Final	-	678,195	669,901	669,901	669,901	669,901	215,675	3,573,474
10	Summer Savings	Consumer	2007	Final	-	358,344	60,400	22,862	22,862	22,862	7,621	494,951
13	Social Housing Pilot	Consumer Low-Income	2007	Final	-	61,639	61,639	61,639	61,639	61,639	20,546	328,743
14	Energy Efficiency Assistance for Houses Pilot	Consumer Low-Income	2007	Final	-	41,419	41,419	41,419	41,419	41,419	13,806	220,903
20	Great Refrigerator Roundup	Consumer	2008	Final	-	-	181,812	181,812	181,812	181,812	60,521	787,768
21	Cool Savings Rebate	Consumer	2008	Final	-	-	122,719	122,719	122,719	122,719	40,906	531,783
22	Every Kilowatt Counts Power Savings Event	Consumer	2008	Final	-	-	622,953	620,243	620,243	620,243	175,481	2,659,162
27	High Performance New Construction	Business	2008	Final	-	-	901	901	901	901	300	3,906
32	Renewable Energy Standard Offer	Consumer, Business	2008	Final	-	-	4,920	4,920	4,920	4,920	1,640	21,318
35	Great Refrigerator Roundup	Consumer	2009	Final	-	-	-	216,032	216,032	216,032	71,740	719,837
36	Cool Savings Rebate	Consumer	2009	Final	-	-	-	160,470	160,470	160,470	53,300	534,709
37	Every Kilowatt Counts Power Savings Event	Consumer	2009	Final	-	-	-	279,033	267,454	267,454	89,146	903,086
41	High Performance New Construction	Business	2009	Final	-	-	-	28,387	28,387	28,387	9,462	94,624
44	Demand Response 1	Business, Industrial	2009	Final	-	-	-	24,700	-	-	-	24,700
45	Demand Response 2	Business, Industrial	2009	Final	-	-	-	235,133	-	-	-	235,133
46	Demand Response 3	Business, Industrial	2009	Final	-	-	-	4,491	-	-	-	4,491
53	Great Refrigerator Roundup	Consumer	2010	Final	-	-	-	-	273,750	273,750	91,250	638,749
54	Cool Savings Rebate	Consumer	2010	Final	-	-	-	-	82,004	82,004	27,335	191,342
55	Every Kilowatt Counts Power Savings Event	Consumer	2010	Final	-	-	-	-	101,679	89,368	28,841	219,889
57	Electricity Retrofit Incentive	Business	2010	Final	-	-	-	-	313,014	313,014	104,338	730,366
59	High Performance New Construction	Business	2010	Final	-	-	-	-	97,812	97,812	32,604	228,229
60	Power Savings Blitz	Business	2010	Final	-	-	-	-	400,030	400,030	133,343	933,404
61	Multi-Family Energy Efficiency Rebates	Consumer, Consumer Low-Income	2010	Final	-	-	-	-	966,881	966,881	322,294	2,256,055
62	Demand Response 2	Business, Industrial	2010	Final	-	-	-	-	462,254	-	-	462,254
63	Demand Response 3	Business, Industrial	2010	Final	-	-	-	-	16,383	-	-	16,383
					1,942,115	3,265,107	3,892,174	4,800,172	5,633,264	5,141,902	1,662,064	26,336,799

Table Three - OPA Results Net

#	Initiative Name	Program Name	Program Year	Results Status	2006	2007	2008	2009	2010	2011	2012	Total	
1	Secondary Refrigerat	Consumer	2006	Final	7	7	7	7	7	7	7	-	39
2	Cool & Hot Savings R	Consumer	2006	Final	66	66	66	66	66	66	66	66	461
3	Every Kilowatt Count	Consumer	2006	Final	22	22	22	22	22	22	22	22	152
4	Demand Response 1	Business, Industrial	2006	Final	828	-	-	-	-	-	-	-	828
5	Loblaw & York Regio	Business, Industrial	2006	Final	41	-	-	-	-	-	-	-	41
6	Great Refrigerator R	Consumer	2007	Final	-	10	10	10	10	10	8	8	55
7	Cool & Hot Savings R	Consumer	2007	Final	-	75	75	75	75	75	75	70	447
8	Every Kilowatt Count	Consumer	2007	Final	-	26	24	24	24	24	24	24	145
10	Summer Savings	Consumer	2007	Final	-	201	60	29	29	29	29	29	376
13	Social Housing Pilot	Consumer Low-Inco	2007	Final	-	7	7	7	7	7	7	7	44
14	Energy Efficiency Ass	Consumer Low-Inco	2007	Final	-	13	13	13	13	13	13	13	79
17	Demand Response 1	Business, Industrial	2007	Final	-	949	-	-	-	-	-	-	949
18	Loblaw & York Regio	Business, Industrial	2007	Final	-	79	-	-	-	-	-	-	79
20	Great Refrigerator R	Consumer	2008	Final	-	-	20	20	20	20	20	19	97
21	Cool Savings Rebate	Consumer	2008	Final	-	-	78	78	78	78	78	78	389
22	Every Kilowatt Count	Consumer	2008	Final	-	-	34	32	32	32	32	30	161
27	High Performance N	Business	2008	Final	-	-	1	1	1	1	1	1	5
29	Demand Response 1	Business, Industrial	2008	Final	-	-	1,381	-	-	-	-	-	1,381
30	Demand Response 3	Business, Industrial	2008	Final	-	-	267	-	-	-	-	-	267
31	Loblaw & York Regio	Business, Industrial	2008	Final	-	-	92	-	-	-	-	-	92
32	Renewable Energy St	Consumer, Business	2008	Final	-	-	4	4	4	4	4	4	22
35	Great Refrigerator R	Consumer	2009	Final	-	-	-	33	33	33	33	32	130
36	Cool Savings Rebate	Consumer	2009	Final	-	-	-	106	106	106	106	105	422
37	Every Kilowatt Count	Consumer	2009	Final	-	-	-	28	28	28	28	28	112
41	High Performance N	Business	2009	Final	-	-	-	12	12	12	12	12	50
44	Demand Response 1	Business, Industrial	2009	Final	-	-	-	562	-	-	-	-	562
45	Demand Response 2	Business, Industrial	2009	Final	-	-	-	382	-	-	-	-	382
46	Demand Response 3	Business, Industrial	2009	Final	-	-	-	545	-	-	-	-	545
47	Loblaw & York Regio	Business, Industrial	2009	Final	-	-	-	94	-	-	-	-	94
53	Great Refrigerator R	Consumer	2010	Final	-	-	-	-	47	47	47	47	142
54	Cool Savings Rebate	Consumer	2010	Final	-	-	-	-	51	51	51	51	152
55	Every Kilowatt Count	Consumer	2010	Final	-	-	-	-	9	9	9	8	26
57	Electricity Retrofit In	Business	2010	Final	-	-	-	-	55	55	55	55	166
59	High Performance N	Business	2010	Final	-	-	-	-	43	43	43	43	129
60	Power Savings Blitz	Business	2010	Final	-	-	-	-	130	130	130	130	391
61	Multi-Family Energy	Consumer, Consum	2010	Final	-	-	-	-	82	82	82	82	246
62	Demand Response 2	Business, Industrial	2010	Final	-	-	-	-	395	-	-	-	395
63	Demand Response 3	Business, Industrial	2010	Final	-	-	-	-	836	-	-	-	836
64	Loblaw & York Regio	Business, Industrial	2010	Final	-	-	-	-	97	-	-	-	97
					963	1,455	2,159	2,149	2,313	981	964	10,984	

Table Four - OPA Results Net kW Adjusted to April 30, 2012

#	Initiative Name	Program Name	Program Year	Results Status	2006	2007	2008	2009	2010	2011	2012	Total	
1	Secondary Refrigerat	Consumer	2006	Final	7	7	7	7	7	7	7	-	39
2	Cool & Hot Savings R	Consumer	2006	Final	66	66	66	66	66	66	66	22	417
3	Every Kilowatt Count	Consumer	2006	Final	22	22	22	22	22	22	22	7	138
4	Demand Response 1	Business, Industrial	2006	Final	828	-	-	-	-	-	-	-	828
5	Loblaw & York Regio	Business, Industrial	2006	Final	41	-	-	-	-	-	-	-	41
6	Great Refrigerator R	Consumer	2007	Final	-	10	10	10	10	10	8	3	50
7	Cool & Hot Savings R	Consumer	2007	Final	-	75	75	75	75	75	75	23	401
8	Every Kilowatt Count	Consumer	2007	Final	-	26	24	24	24	24	24	8	129
10	Summer Savings	Consumer	2007	Final	-	201	60	29	29	29	29	10	356
13	Social Housing Pilot	Consumer Low-Inco	2007	Final	-	7	7	7	7	7	7	2	39
14	Energy Efficiency Ass	Consumer Low-Inco	2007	Final	-	13	13	13	13	13	13	4	70
17	Demand Response 1	Business, Industrial	2007	Final	-	949	-	-	-	-	-	-	949
18	Loblaw & York Regio	Business, Industrial	2007	Final	-	79	-	-	-	-	-	-	79
20	Great Refrigerator R	Consumer	2008	Final	-	-	20	20	20	20	20	6	84
21	Cool Savings Rebate	Consumer	2008	Final	-	-	78	78	78	78	78	26	337
22	Every Kilowatt Count	Consumer	2008	Final	-	-	34	32	32	32	32	10	141
27	High Performance N	Business	2008	Final	-	-	1	1	1	1	1	0	5
29	Demand Response 1	Business, Industrial	2008	Final	-	-	1,381	-	-	-	-	-	1,381
30	Demand Response 3	Business, Industrial	2008	Final	-	-	267	-	-	-	-	-	267
31	Loblaw & York Regio	Business, Industrial	2008	Final	-	-	92	-	-	-	-	-	92
32	Renewable Energy St	Consumer, Business	2008	Final	-	-	4	4	4	4	4	1	19
35	Great Refrigerator R	Consumer	2009	Final	-	-	-	33	33	33	33	11	108
36	Cool Savings Rebate	Consumer	2009	Final	-	-	-	106	106	106	106	35	352
37	Every Kilowatt Count	Consumer	2009	Final	-	-	-	28	28	28	28	9	93
41	High Performance N	Business	2009	Final	-	-	-	12	12	12	12	4	42
44	Demand Response 1	Business, Industrial	2009	Final	-	-	-	562	-	-	-	-	562
45	Demand Response 2	Business, Industrial	2009	Final	-	-	-	382	-	-	-	-	382
46	Demand Response 3	Business, Industrial	2009	Final	-	-	-	545	-	-	-	-	545
47	Loblaw & York Regio	Business, Industrial	2009	Final	-	-	-	94	-	-	-	-	94
53	Great Refrigerator R	Consumer	2010	Final	-	-	-	-	47	47	47	16	110
54	Cool Savings Rebate	Consumer	2010	Final	-	-	-	-	51	51	51	17	118
55	Every Kilowatt Count	Consumer	2010	Final	-	-	-	-	9	9	9	3	20
57	Electricity Retrofit In	Business	2010	Final	-	-	-	-	55	55	55	18	129
59	High Performance N	Business	2010	Final	-	-	-	-	43	43	43	14	100
60	Power Savings Blitz	Business	2010	Final	-	-	-	-	130	130	130	43	304
61	Multi-Family Energy	Consumer, Consum	2010	Final	-	-	-	-	82	82	82	27	191
62	Demand Response 2	Business, Industrial	2010	Final	-	-	-	-	395	-	-	-	395
63	Demand Response 3	Business, Industrial	2010	Final	-	-	-	-	836	-	-	-	836
64	Loblaw & York Regio	Business, Industrial	2010	Final	-	-	-	-	97	-	-	-	97
					963	1,455	2,159	2,149	2,313	981	321		10,342

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 Calculation

#	Initiative Name	Program Name	Program Year	Results Status	2006	2007	2008	2009	2010	2011	2012	Total
1	Secondary Refrigerator Retirement Pilot	Consumer	2006	Final	28,763	28,763	28,763	28,763	28,763	28,763	-	172,575
2	Cool & Hot Savings Rebate	Consumer	2006	Final	71,003	71,003	71,003	71,003	71,003	71,003	23,668	449,683
3	Every Kilowatt Counts	Consumer	2006	Final	1,842,350	1,842,350	1,842,350	1,842,350	237,537	237,537	79,179	7,923,652
6	Great Refrigerator Roundup	Consumer	2007	Final	-	70,257	70,257	70,257	70,257	69,843	23,143	374,015
7	Cool & Hot Savings Rebate	Consumer	2007	Final	-	113,138	113,138	113,138	113,138	113,138	35,925	601,612
8	Every Kilowatt Counts	Consumer	2007	Final	-	678,195	669,901	669,901	669,901	669,901	215,675	3,573,474
10	Summer Savings	Consumer	2007	Final	-	358,344	60,400	22,862	22,862	22,862	7,621	494,951
13	Social Housing Pilot	Consumer Low-Income	2007	Final	-	61,639	61,639	61,639	61,639	61,639	20,546	328,743
14	Energy Efficiency Assistance for Houses Pilot	Consumer Low-Income	2007	Final	-	41,419	41,419	41,419	41,419	41,419	13,806	220,903
20	Great Refrigerator Roundup	Consumer	2008	Final	-	-	181,812	181,812	181,812	181,812	60,521	787,768
21	Cool Savings Rebate	Consumer	2008	Final	-	-	122,719	122,719	122,719	122,719	40,906	531,783
22	Every Kilowatt Counts Power Savings Event	Consumer	2008	Final	-	-	622,953	620,243	620,243	620,243	175,481	2,659,162
35	Great Refrigerator Roundup	Consumer	2009	Final	-	-	-	216,032	216,032	216,032	71,740	719,837
36	Cool Savings Rebate	Consumer	2009	Final	-	-	-	160,470	160,470	160,470	53,300	534,709
37	Every Kilowatt Counts Power Savings Event	Consumer	2009	Final	-	-	-	279,033	267,454	267,454	89,146	903,086
53	Great Refrigerator Roundup	Consumer	2010	Final	-	-	-	-	273,750	273,750	91,250	638,749
54	Cool Savings Rebate	Consumer	2010	Final	-	-	-	-	82,004	82,004	27,335	191,342
55	Every Kilowatt Counts Power Savings Event	Consumer	2010	Final	-	-	-	-	101,679	89,368	28,841	219,889
61	Multi-Family Energy Efficiency Rebates	Consumer, Consumer Low-Income	2010	Final	-	-	-	-	966,881	966,881	322,294	2,256,055
					1,942,115	3,265,107	3,886,353	4,501,640	4,309,562	4,296,837	1,380,376	23,581,989
Residential Distribution Volumetric Rate					\$/kWh	0.0133	0.0134	0.0133	0.0137	0.0141	0.0141	0.0141
LRAM					\$ 25,830.13	\$ 43,752.44	\$ 51,688.49	\$ 61,672.46	\$ 60,764.82	\$ 60,585.40	\$ 19,463.30	\$ 323,757.05

Table Six - GS Less Than 50 kW LRAM Calculation

#	Initiative Name	Program Name	Program Year	Results Status	2006	2007	2008	2009	2010	2011	2012	Total
27	High Performance New Construction	Business	2008	Final	-	-	901	901	901	901	300	3,906
41	High Performance New Construction	Business	2009	Final	-	-	-	28,387	28,387	28,387	9,462	94,624
44	Demand Response 1	Business, Industrial	2009	Final	-	-	-	24,700	-	-	-	24,700
45	Demand Response 2	Business, Industrial	2009	Final	-	-	-	235,133	-	-	-	235,133
46	Demand Response 3	Business, Industrial	2009	Final	-	-	-	4,491	-	-	-	4,491
57	Electricity Retrofit Incentive	Business	2010	Final	-	-	-	-	313,014	313,014	104,338	730,366
59	High Performance New Construction	Business	2010	Final	-	-	-	-	97,812	97,812	32,604	228,229
60	Power Savings Blitz	Business	2010	Final	-	-	-	-	400,030	400,030	133,343	933,404
62	Demand Response 2	Business, Industrial	2010	Final	-	-	-	-	462,254	-	-	462,254
63	Demand Response 3	Business, Industrial	2010	Final	-	-	-	-	16,383	-	-	16,383
					-	-	901	293,613	1,318,783	840,145	280,048	2,733,491
GSLT50 Distribution Volumetric Rate					\$/kWh	0.0085	0.0086	0.0086	0.0181	0.0091	0.0091	0.0091
LRAM					\$ -	\$ -	\$ 7.75	\$ 5,314.39	\$ 12,000.92	\$ 7,645.32	\$ 2,548.44	\$ 27,516.84

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

#	Initiative Name	Program Name	Program Year	Results Status	2006	2007	2008	2009	2010	2011	2012	Total
4	Demand Response 1	Business, Industrial	2006	Final	828	-	-	-	-	-	-	828
5	Loblaw & York Region Demand Response	Business, Industrial	2006	Final	41	-	-	-	-	-	-	41
17	Demand Response 1	Business, Industrial	2007	Final	-	949	-	-	-	-	-	949
18	Loblaw & York Region Demand Response	Business, Industrial	2007	Final	-	79	-	-	-	-	-	79
27	High Performance New Construction	Business	2008	Final	-	-	1	1	1	1	0	5
29	Demand Response 1	Business, Industrial	2008	Final	-	-	1,381	-	-	-	-	1,381
30	Demand Response 3	Business, Industrial	2008	Final	-	-	267	-	-	-	-	267
31	Loblaw & York Region Demand Response	Business, Industrial	2008	Final	-	-	92	-	-	-	-	92
41	High Performance New Construction	Business	2009	Final	-	-	-	12	12	12	4	42
44	Demand Response 1	Business, Industrial	2009	Final	-	-	-	562	-	-	-	562
45	Demand Response 2	Business, Industrial	2009	Final	-	-	-	382	-	-	-	382
46	Demand Response 3	Business, Industrial	2009	Final	-	-	-	545	-	-	-	545
47	Loblaw & York Region Demand Response	Business, Industrial	2009	Final	-	-	-	94	-	-	-	94
57	Electricity Retrofit Incentive	Business	2010	Final	-	-	-	-	55	55	18	129
59	High Performance New Construction	Business	2010	Final	-	-	-	-	43	43	14	100
60	Power Savings Blitz	Business	2010	Final	-	-	-	-	130	130	43	304
62	Demand Response 2	Business, Industrial	2010	Final	-	-	-	-	395	-	-	395
63	Demand Response 3	Business, Industrial	2010	Final	-	-	-	-	836	-	-	836
64	Loblaw & York Region Demand Response	Business, Industrial	2010	Final	-	-	-	-	97	-	-	97
					869	1,028	1,740	1,596	1,571	242	81	7,128
GSGT50 Distribution Volumetric Rate					\$/kWh	2.207	2.2269	2.2158	3.3729	2.2138	2.2178	2.2178
LRAM					\$ 1,917.28	\$ 2,289.55	\$ 3,856.40	\$ 5,384.66	\$ 3,478.40	\$ 537.29	\$ 179.10	\$ 17,642.68

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