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September 25, 2011

Michelle Delia Soucie
Regulatory Analyst
Essex Powerlines Corporation
2730 Highway #3
Oldcastle, ON
N0R 1L0

Re: 2006 to 2012 LRAM Report

Dear Michelle:

Elenchus is pleased to attach the 2006 to 2012 LRAM Report For Essex Powerlines Corporation for inclusion in your 2012 IRM3 Rate Application.

Elenchus concludes that Essex Powerlines Corporation's electricity rates should be adjusted to reflect an LRAM claim of \$508,029.80

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: September 25, 2011

Prepared for:

**Essex Powerlines Corporation
2730 Highway #3
Oldcastle, ON
N0R 1L0**

This document was prepared for Essex Powerlines Corporation
by Elenchus Research Associates Inc.

For additional information regarding this document please contact:

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September 25, 2011



Exhibit 1

LRAM REPORT



Exhibit 1

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Report

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Executive Review

The Ontario Energy Board (OEB) Guidelines for Electricity Distributor Conservation and Demand Management (EB-2008-0037) permit Essex Powerlines Corporation 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 Essex Powerlines Corporation'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 Essex Powerlines Corporation

Total net energy savings for which LRAM is being claimed amount to over 29.1 GWh in the residential rate class and 14.7 GWh in the GS < 50 kW rate class. Summer peak demand savings in the GS 50 to 2,999 kW rate class totaled approximately 10.2 MW.

Elenchus concludes that Essex Powerlines Corporation's electricity rates should be adjusted to reflect an LRAM claim of \$508,029.80

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, Essex
8 Powerlines Corporation, by the OPA contain accurate interpretations and transcriptions of
9 the results 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 Essex Powerlines Corporation are therefore the net energy and
26 demand savings that can be attributed to the programs and initiatives that operated in
27 Essex Powerlines Corporation territory during the 2006-2010 period and as apportioned
28 to Essex Powerlines Corporation by the OPA according to its established formulae.
29

Assumptions

This report for Essex Powerlines Corporation 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 29.1 GWh in the residential rate class and 14.7 GWh in the GS < 50 kW rate class. Summer peak demand savings in the GS 50 to 2,999 kW rate class totaled approximately 10.2 MW.

Elenchus has concluded that Essex Powerlines Corporation can justifiably claim \$508,029.80 in LRAM, allocated by rate class as shown in the table below.

Customer Class	Savings	LRAM
Residential	29.1 GWh	\$393,658.40
General Service Less Than 50 kW	14.7 GWH	\$87,945.40
General Service 50 to 2,999 kW	10.2 MW	\$26,426.00
Total		\$508,029.80

Works Sited and Referenced

1. OPA Estimated allocation of 2006-2009 provincial conservation results to Local Distribution Company service territories - update to December 2010 report January 24, 2011
 - 2006-2009 Final OPA CDM Results-Update Essex Powerlines Corporation.xls
2. OPA Final 2010 CDM Summary Results September 16, 2011
 - 2010 Final CDM Results Summary_Essex Powerlines Corporation.xlsx
3. OEB Conservation and Demand Management Code for Electricity Distributors Issued: September 16, 2010

Exhibit 1

Tab 2 of 3

Tables

Input Tables OPA Results

- | | |
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| 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 kWh

#	Initiative Name	Program Name	Program Year	Results Status	2006	2007	2008	2009	2010	2011	2012	Total
1	Secondary Refrigerator Retirement Pilot	Consumer	2006	Final	39,484	39,484	39,484	39,484	39,484	39,484	-	236,901
2	Cool & Hot Savings Rebate	Consumer	2006	Final	97,468	97,468	97,468	97,468	97,468	97,468	97,468	682,278
3	Every Kilowatt Counts	Consumer	2006	Final	2,529,072	2,529,072	2,529,072	2,529,072	326,077	326,077	326,077	11,094,518
6	Great Refrigerator Roundup	Consumer	2007	Final	-	67,137	67,137	67,137	67,137	67,034	66,930	402,513
7	Cool & Hot Savings Rebate	Consumer	2007	Final	-	149,211	149,211	149,211	149,211	149,211	142,137	888,193
8	Every Kilowatt Counts	Consumer	2007	Final	-	894,436	883,497	883,497	883,497	883,497	853,326	5,281,753
10	Summer Savings	Consumer	2007	Final	-	527,928	88,984	33,682	33,682	33,682	33,682	751,639
13	Social Housing Pilot	Consumer Low-Income	2007	Final	-	81,293	81,293	81,293	81,293	81,293	81,293	487,757
15	Electricity Retrofit Incentive	Business	2007	Final	-	51,290	51,290	51,290	51,290	51,290	-	256,448
20	Great Refrigerator Roundup	Consumer	2008	Final	-	-	79,004	79,004	79,004	79,004	78,968	394,984
21	Cool Savings Rebate	Consumer	2008	Final	-	-	150,749	150,749	150,749	150,749	150,749	753,745
22	Every Kilowatt Counts Power Savings Event	Consumer	2008	Final	-	-	765,239	761,910	761,910	761,910	646,684	3,697,654
23	peaksaver®	Consumer, Business	2008	Final	-	-	13,250	13,250	13,250	13,250	13,250	66,250
24	Summer Sweepstakes	Consumer	2008	Final	-	-	342,732	123,676	123,676	123,676	123,676	837,435
25	Electricity Retrofit Incentive	Business	2008	Final	-	-	230,125	230,124	230,124	230,124	230,124	1,150,621
27	High Performance New Construction	Business	2008	Final	-	-	989	989	989	989	989	4,944
28	Power Savings Blitz	Business	2008	Final	-	-	100,845	100,845	58,422	58,422	58,422	376,957
35	Great Refrigerator Roundup	Consumer	2009	Final	-	-	-	42,747	42,747	42,747	42,747	170,986
36	Cool Savings Rebate	Consumer	2009	Final	-	-	-	190,786	190,786	190,786	190,108	762,466
37	Every Kilowatt Counts Power Savings Event	Consumer	2009	Final	-	-	-	331,748	317,982	317,982	317,963	1,285,675
38	peaksaver®	Consumer, Business	2009	Final	-	-	-	358	358	358	358	1,432
39	Electricity Retrofit Incentive	Business	2009	Final	-	-	-	813,409	813,409	813,409	813,409	3,253,636
41	High Performance New Construction	Business	2009	Final	-	-	-	33,746	33,746	33,746	33,746	134,985
42	Power Savings Blitz	Business	2009	Final	-	-	-	1,560,861	1,560,861	1,560,861	1,560,861	6,243,445
44	Demand Response 1	Business, Industrial	2009	Final	-	-	-	29,363	-	-	-	29,363
45	Demand Response 2	Business, Industrial	2009	Final	-	-	-	279,522	-	-	-	279,522
46	Demand Response 3	Business, Industrial	2009	Final	-	-	-	5,339	-	-	-	5,339
101	Cool Savings Rebate	Consumer	2010	Final	-	-	-	-	258,222	258,222	258,222	774,667
102	Every Kilowatt Counts Power Savings Event	Consumer	2010	Final	-	-	-	-	131,588	131,588	131,588	394,765
103	Great Refrigerator Roundup	Consumer	2010	Final	-	-	-	-	63,686	63,686	63,686	191,058
104	peaksaver®	Consumer	2010	Final	-	-	-	-	692	692	692	2,076
106	Electricity Retrofit Incentive Program	Business	2010	Final	-	-	-	-	256,973	256,973	256,973	770,920
107	High Performance New Construction*	Business	2010	Final	-	-	-	-	117,155	117,155	117,155	351,466
109	Multifamily Energy Efficiency Rebates	Business	2010	Final	-	-	-	-	89,790	89,790	89,790	269,371
110	peaksaver®	Business	2010	Final	-	-	-	-	19	19	19	58
111	Power Savings Blitz	Business	2010	Final	-	-	-	-	330,777	330,777	330,777	992,330
112	Demand Response 3	Business, Industrial	2010	Final	-	-	-	-	19,631	-	-	19,631
114	Demand Response 2	Business, Industrial	2010	Final	-	-	-	-	553,668	-	-	553,668
					2,666,023	4,437,319	5,670,368	8,680,559	7,929,356	7,355,953	7,111,872	43,851,450

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	39,484	39,484	39,484	39,484	39,484	39,484	-	236,901
2	Cool & Hot Savings Rebate	Consumer	2006	Final	97,468	97,468	97,468	97,468	97,468	97,468	32,489	682,278
3	Every Kilowatt Counts	Consumer	2006	Final	2,529,072	2,529,072	2,529,072	2,529,072	326,077	326,077	108,692	11,094,518
6	Great Refrigerator Roundup	Consumer	2007	Final	-	67,137	67,137	67,137	67,137	67,034	22,310	402,513
7	Cool & Hot Savings Rebate	Consumer	2007	Final	-	149,211	149,211	149,211	149,211	149,211	47,379	888,193
8	Every Kilowatt Counts	Consumer	2007	Final	-	894,436	883,497	883,497	883,497	883,497	284,442	5,281,753
10	Summer Savings	Consumer	2007	Final	-	527,928	88,984	33,682	33,682	33,682	11,227	751,639
13	Social Housing Pilot	Consumer Low-Income	2007	Final	-	81,293	81,293	81,293	81,293	81,293	27,098	487,757
15	Electricity Retrofit Incentive	Business	2007	Final	-	51,290	51,290	51,290	51,290	51,290	-	256,448
20	Great Refrigerator Roundup	Consumer	2008	Final	-	-	79,004	79,004	79,004	79,004	26,323	394,984
21	Cool Savings Rebate	Consumer	2008	Final	-	-	150,749	150,749	150,749	150,749	50,250	753,745
22	Every Kilowatt Counts Power Savings Event	Consumer	2008	Final	-	-	765,239	761,910	761,910	761,910	215,561	3,697,654
23	peaksaver®	Consumer, Business	2008	Final	-	-	13,250	13,250	13,250	13,250	4,417	66,250
24	Summer Sweepstakes	Consumer	2008	Final	-	-	342,732	123,676	123,676	123,676	41,225	837,435
25	Electricity Retrofit Incentive	Business	2008	Final	-	-	230,125	230,124	230,124	230,124	76,708	1,150,621
27	High Performance New Construction	Business	2008	Final	-	-	989	989	989	989	330	4,944
28	Power Savings Blitz	Business	2008	Final	-	-	100,845	100,845	58,422	58,422	19,474	376,957
35	Great Refrigerator Roundup	Consumer	2009	Final	-	-	-	42,747	42,747	42,747	14,249	170,986
36	Cool Savings Rebate	Consumer	2009	Final	-	-	-	190,786	190,786	190,786	63,369	762,466
37	Every Kilowatt Counts Power Savings Event	Consumer	2009	Final	-	-	-	331,748	317,982	317,982	105,988	1,285,675
38	peaksaver®	Consumer, Business	2009	Final	-	-	-	358	358	358	119	1,432
39	Electricity Retrofit Incentive	Business	2009	Final	-	-	-	813,409	813,409	813,409	271,136	3,253,636
41	High Performance New Construction	Business	2009	Final	-	-	-	33,746	33,746	33,746	11,249	134,985
42	Power Savings Blitz	Business	2009	Final	-	-	-	1,560,861	1,560,861	1,560,861	520,287	6,243,445
44	Demand Response 1	Business, Industrial	2009	Final	-	-	-	29,363	-	-	-	29,363
45	Demand Response 2	Business, Industrial	2009	Final	-	-	-	279,522	-	-	-	279,522
46	Demand Response 3	Business, Industrial	2009	Final	-	-	-	5,339	-	-	-	5,339
101	Cool Savings Rebate	Consumer	2010	Final	-	-	-	-	258,222	258,222	86,074	774,667
102	Every Kilowatt Counts Power Savings Event	Consumer	2010	Final	-	-	-	-	131,588	131,588	43,863	394,765
103	Great Refrigerator Roundup	Consumer	2010	Final	-	-	-	-	63,686	63,686	21,229	191,058
104	peaksaver®	Consumer	2010	Final	-	-	-	-	692	692	231	2,076
106	Electricity Retrofit Incentive Program	Business	2010	Final	-	-	-	-	256,973	256,973	85,658	770,920
107	High Performance New Construction*	Business	2010	Final	-	-	-	-	117,155	117,155	39,052	351,466
109	Multifamily Energy Efficiency Rebates	Business	2010	Final	-	-	-	-	89,790	89,790	29,930	269,371
110	peaksaver®	Business	2010	Final	-	-	-	-	19	19	6	58
111	Power Savings Blitz	Business	2010	Final	-	-	-	-	330,777	330,777	110,259	992,330
112	Demand Response 3	Business, Industrial	2010	Final	-	-	-	-	19,631	-	-	19,631
114	Demand Response 2	Business, Industrial	2010	Final	-	-	-	-	553,668	-	-	553,668
					2,666,023	4,437,319	5,670,368	8,680,559	7,929,356	7,355,953	2,370,624	43,851,450

Table Three - OPA Results Net kW

#	Initiative Name	Program Name	Program Year	Results Status	2006	2007	2008	2009	2010	2011	2012	Total
1	Secondary Refrigerat	Consumer	2006	Final	9	9	9	9	9	9	-	54
2	Cool & Hot Savings R	Consumer	2006	Final	90	90	90	90	90	90	90	632
3	Every Kilowatt Count	Consumer	2006	Final	30	30	30	30	30	30	30	209
4	Demand Response 1	Business, Industrial	2006	Final	506	-	-	-	-	-	-	506
5	Loblaw & York Regio	Business, Industrial	2006	Final	25	-	-	-	-	-	-	25
6	Great Refrigerator R	Consumer	2007	Final	-	8	8	8	8	8	8	47
7	Cool & Hot Savings R	Consumer	2007	Final	-	100	100	100	100	100	92	590
8	Every Kilowatt Count	Consumer	2007	Final	-	35	31	31	31	31	31	192
9	peaksaver®	Consumer, Business	2007	Final	-	188	188	188	188	188	188	1,129
10	Summer Savings	Consumer	2007	Final	-	296	88	42	42	42	42	553
13	Social Housing Pilot	Consumer Low-Inco	2007	Final	-	10	10	10	10	10	10	57
15	Electricity Retrofit I	Business	2007	Final	-	18	18	18	18	18	-	92
17	Demand Response 1	Business, Industrial	2007	Final	-	1,073	-	-	-	-	-	1,073
18	Loblaw & York Regio	Business, Industrial	2007	Final	-	89	-	-	-	-	-	89
20	Great Refrigerator R	Consumer	2008	Final	-	-	8	8	8	8	8	41
21	Cool Savings Rebate	Consumer	2008	Final	-	-	95	95	95	95	95	477
22	Every Kilowatt Count	Consumer	2008	Final	-	-	42	40	40	40	36	198
23	peaksaver®	Consumer, Business	2008	Final	-	-	663	663	663	663	663	3,313
24	Summer Sweepstake	Consumer	2008	Final	-	-	87	50	50	50	50	286
25	Electricity Retrofit I	Business	2008	Final	-	-	45	45	45	45	45	225
27	High Performance N	Business	2008	Final	-	-	1	1	1	1	1	6
28	Power Savings Blitz	Business	2008	Final	-	-	14	14	8	8	8	52
29	Demand Response 1	Business, Industrial	2008	Final	-	-	1,514	-	-	-	-	1,514
30	Demand Response 3	Business, Industrial	2008	Final	-	-	293	-	-	-	-	293
31	Loblaw & York Regio	Business, Industrial	2008	Final	-	-	101	-	-	-	-	101
35	Great Refrigerator R	Consumer	2009	Final	-	-	-	6	6	6	6	24
36	Cool Savings Rebate	Consumer	2009	Final	-	-	-	126	126	126	125	502
37	Every Kilowatt Count	Consumer	2009	Final	-	-	-	34	33	33	33	133
38	peaksaver®	Consumer, Business	2009	Final	-	-	-	193	193	193	193	771
39	Electricity Retrofit I	Business	2009	Final	-	-	-	121	121	121	121	483
41	High Performance N	Business	2009	Final	-	-	-	15	15	15	15	59
42	Power Savings Blitz	Business	2009	Final	-	-	-	400	400	400	400	1,600
44	Demand Response 1	Business, Industrial	2009	Final	-	-	-	668	-	-	-	668
45	Demand Response 2	Business, Industrial	2009	Final	-	-	-	454	-	-	-	454
46	Demand Response 3	Business, Industrial	2009	Final	-	-	-	648	-	-	-	648
47	Loblaw & York Regio	Business, Industrial	2009	Final	-	-	-	111	-	-	-	111
106	Electricity Retrofit I	Business	2010	Final	-	-	-	-	46	46	46	137
107	High Performance N	Business	2010	Final	-	-	-	-	51	51	51	154
109	Multifamily Energy E	Business	2010	Final	-	-	-	-	8	8	8	23
110	peaksaver®	Business	2010	Final	-	-	-	-	2	2	2	6
111	Power Savings Blitz	Business	2010	Final	-	-	-	-	108	108	108	324
112	Demand Response 3	Business, Industrial	2010	Final	-	-	-	-	1,002	-	-	1,002
113	Loblaw & York Regio	Business, Industrial	2010	Final	-	-	-	-	116	-	-	116
114	Demand Response 2	Business, Industrial	2010	Final	-	-	-	-	474	-	-	474
					659	1,945	3,435	4,218	4,136	2,544	2,504	19,442

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	9	9	9	9	9	9	-	54
2	Cool & Hot Savings R	Consumer	2006	Final	90	90	90	90	90	90	30	632
3	Every Kilowatt Count	Consumer	2006	Final	30	30	30	30	30	30	10	209
4	Demand Response 1	Business, Industrial	2006	Final	506	-	-	-	-	-	-	506
5	Loblaw & York Regio	Business, Industrial	2006	Final	25	-	-	-	-	-	-	25
6	Great Refrigerator R	Consumer	2007	Final	-	8	8	8	8	8	3	47
7	Cool & Hot Savings R	Consumer	2007	Final	-	100	100	100	100	100	31	590
8	Every Kilowatt Count	Consumer	2007	Final	-	35	31	31	31	31	10	192
9	peaksaver®	Consumer, Business	2007	Final	-	188	188	188	188	188	63	1,129
10	Summer Savings	Consumer	2007	Final	-	296	88	42	42	42	14	553
13	Social Housing Pilot	Consumer Low-Inco	2007	Final	-	10	10	10	10	10	3	57
15	Electricity Retrofit I	Business	2007	Final	-	18	18	18	18	18	-	92
17	Demand Response 1	Business, Industrial	2007	Final	-	1,073	-	-	-	-	-	1,073
18	Loblaw & York Regio	Business, Industrial	2007	Final	-	89	-	-	-	-	-	89
20	Great Refrigerator R	Consumer	2008	Final	-	-	8	8	8	8	3	41
21	Cool Savings Rebate	Consumer	2008	Final	-	-	95	95	95	95	32	477
22	Every Kilowatt Count	Consumer	2008	Final	-	-	42	40	40	40	12	198
23	peaksaver®	Consumer, Business	2008	Final	-	-	663	663	663	663	221	3,313
24	Summer Sweepstake	Consumer	2008	Final	-	-	87	50	50	50	17	286
25	Electricity Retrofit I	Business	2008	Final	-	-	45	45	45	45	15	225
27	High Performance N	Business	2008	Final	-	-	1	1	1	1	0	6
28	Power Savings Blitz	Business	2008	Final	-	-	14	14	8	8	3	52
29	Demand Response 1	Business, Industrial	2008	Final	-	-	1,514	-	-	-	-	1,514
30	Demand Response 3	Business, Industrial	2008	Final	-	-	293	-	-	-	-	293
31	Loblaw & York Regio	Business, Industrial	2008	Final	-	-	101	-	-	-	-	101
35	Great Refrigerator R	Consumer	2009	Final	-	-	-	6	6	6	2	24
36	Cool Savings Rebate	Consumer	2009	Final	-	-	-	126	126	126	42	502
37	Every Kilowatt Count	Consumer	2009	Final	-	-	-	34	33	33	11	133
38	peaksaver®	Consumer, Business	2009	Final	-	-	-	193	193	193	64	771
39	Electricity Retrofit I	Business	2009	Final	-	-	-	121	121	121	40	483
41	High Performance N	Business	2009	Final	-	-	-	15	15	15	5	59
42	Power Savings Blitz	Business	2009	Final	-	-	-	400	400	400	133	1,600
44	Demand Response 1	Business, Industrial	2009	Final	-	-	-	668	-	-	-	668
45	Demand Response 2	Business, Industrial	2009	Final	-	-	-	454	-	-	-	454
46	Demand Response 3	Business, Industrial	2009	Final	-	-	-	648	-	-	-	648
47	Loblaw & York Regio	Business, Industrial	2009	Final	-	-	-	111	-	-	-	111
106	Electricity Retrofit I	Business	2010	Final	-	-	-	-	46	46	15	137
107	High Performance N	Business	2010	Final	-	-	-	-	51	51	17	154
109	Multifamily Energy E	Business	2010	Final	-	-	-	-	8	8	3	23
110	peaksaver®	Business	2010	Final	-	-	-	-	2	2	1	6
111	Power Savings Blitz	Business	2010	Final	-	-	-	-	108	108	36	324
112	Demand Response 3	Business, Industrial	2010	Final	-	-	-	-	1,002	-	-	1,002
113	Loblaw & York Regio	Business, Industrial	2010	Final	-	-	-	-	116	-	-	116
114	Demand Response 2	Business, Industrial	2010	Final	-	-	-	-	474	-	-	474
					659	1,945	3,435	4,218	4,136	2,544	835	19,442

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	39,484	39,484	39,484	39,484	39,484	39,484	-	236,901	
2	Cool & Hot Savings Rebate	Consumer	2006	Final	97,468	97,468	97,468	97,468	97,468	97,468	32,489	682,278	
3	Every Kilowatt Counts	Consumer	2006	Final	2,529,072	2,529,072	2,529,072	2,529,072	326,077	326,077	108,692	11,094,518	
6	Great Refrigerator Roundup	Consumer	2007	Final	-	67,137	67,137	67,137	67,137	67,034	22,310	402,513	
7	Cool & Hot Savings Rebate	Consumer	2007	Final	-	149,211	149,211	149,211	149,211	149,211	47,379	888,193	
8	Every Kilowatt Counts	Consumer	2007	Final	-	894,436	883,497	883,497	883,497	883,497	284,442	5,281,753	
10	Summer Savings	Consumer	2007	Final	-	527,928	88,984	33,682	33,682	33,682	11,227	751,639	
13	Social Housing Pilot	Consumer Low-Income	2007	Final	-	81,293	81,293	81,293	81,293	81,293	27,098	487,757	
20	Great Refrigerator Roundup	Consumer	2008	Final	-	-	79,004	79,004	79,004	79,004	26,323	394,984	
21	Cool Savings Rebate	Consumer	2008	Final	-	-	150,749	150,749	150,749	150,749	50,250	753,745	
22	Every Kilowatt Counts Power Savings Event	Consumer	2008	Final	-	-	765,239	761,910	761,910	761,910	215,561	3,697,654	
24	Summer Sweepstakes	Consumer	2008	Final	-	-	342,732	123,676	123,676	123,676	41,225	837,435	
35	Great Refrigerator Roundup	Consumer	2009	Final	-	-	-	42,747	42,747	42,747	14,249	170,986	
36	Cool Savings Rebate	Consumer	2009	Final	-	-	-	190,786	190,786	190,786	63,369	762,466	
37	Every Kilowatt Counts Power Savings Event	Consumer	2009	Final	-	-	-	331,748	317,982	317,982	105,988	1,285,675	
101	Cool Savings Rebate	Consumer	2010	Final	-	-	-	-	258,222	258,222	86,074	774,667	
102	Every Kilowatt Counts Power Savings Event	Consumer	2010	Final	-	-	-	-	131,588	131,588	43,863	394,765	
103	Great Refrigerator Roundup	Consumer	2010	Final	-	-	-	-	63,686	63,686	21,229	191,058	
104	peaksaver®	Consumer	2010	Final	-	-	-	-	692	692	231	2,076	
					2,666,023	4,386,029	5,273,869	5,561,464	3,798,892	3,798,788	1,201,999	29,091,062	
Residential Distribution Volumetric Rate					\$/kWh	0.0132	0.0151	0.0149	0.015	0.0148	0.0148		
LRAM						\$ 35,191.51	\$ 66,229.04	\$ 78,580.65	\$ 83,421.95	\$ 56,223.60	\$ 56,222.06	\$ 17,789.58	\$ 393,658.40

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
15	Electricity Retrofit Incentive	Business	2007	Final	-	51,290	51,290	51,290	51,290	51,290	-	256,448
25	Electricity Retrofit Incentive	Business	2008	Final	-	-	230,125	230,124	230,124	230,124	76,708	1,150,621
27	High Performance New Construction	Business	2008	Final	-	-	989	989	989	989	330	4,944
28	Power Savings Blitz	Business	2008	Final	-	-	100,845	100,845	58,422	58,422	19,474	376,957
39	Electricity Retrofit Incentive	Business	2009	Final	-	-	-	813,409	813,409	813,409	271,136	3,253,636
41	High Performance New Construction	Business	2009	Final	-	-	-	33,746	33,746	33,746	11,249	134,985
42	Power Savings Blitz	Business	2009	Final	-	-	-	1,560,861	1,560,861	1,560,861	520,287	6,243,445
44	Demand Response 1	Business, Industrial	2009	Final	-	-	-	29,363	-	-	-	29,363
45	Demand Response 2	Business, Industrial	2009	Final	-	-	-	279,522	-	-	-	279,522
46	Demand Response 3	Business, Industrial	2009	Final	-	-	-	5,339	-	-	-	5,339
106	Electricity Retrofit Incentive Program	Business	2010	Final	-	-	-	-	256,973	256,973	85,658	770,920
107	High Performance New Construction*	Business	2010	Final	-	-	-	-	117,155	117,155	39,052	351,466
109	Multifamily Energy Efficiency Rebates	Business	2010	Final	-	-	-	-	89,790	89,790	29,930	269,371
110	peaksaver®	Business	2010	Final	-	-	-	-	19	19	6	58
111	Power Savings Blitz	Business	2010	Final	-	-	-	-	330,777	330,777	110,259	992,330
112	Demand Response 3	Business, Industrial	2010	Final	-	-	-	-	19,631	-	-	19,631
114	Demand Response 2	Business, Industrial	2010	Final	-	-	-	-	553,668	-	-	553,668
					-	51,290	383,249	3,105,487	4,116,856	3,543,557	1,164,089	14,692,705
GSLT50 Distribution Volumetric Rate					\$/kWh	0.0045	0.005	0.005	0.005	0.007	0.0088	0.0088
LRAM					\$ -	\$ 256.45	\$ 1,916.24	\$ 15,527.44	\$ 28,817.99	\$ 31,183.30	\$ 10,243.98	\$ 87,945.40

Table Seven - GS 50 to 2,999 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	506	-	-	-	-	-	-	506	
5	Loblaw & York Region Demand Response	Business, Industrial	2006	Final	25	-	-	-	-	-	-	25	
15	Electricity Retrofit Incentive	Business	2007	Final	-	18	18	18	18	18	-	92	
17	Demand Response 1	Business, Industrial	2007	Final	-	1,073	-	-	-	-	-	1,073	
18	Loblaw & York Region Demand Response	Business, Industrial	2007	Final	-	89	-	-	-	-	-	89	
25	Electricity Retrofit Incentive	Business	2008	Final	-	-	45	45	45	45	15	225	
27	High Performance New Construction	Business	2008	Final	-	-	1	1	1	1	0	6	
28	Power Savings Blitz	Business	2008	Final	-	-	14	14	8	8	3	52	
29	Demand Response 1	Business, Industrial	2008	Final	-	-	1,514	-	-	-	-	1,514	
30	Demand Response 3	Business, Industrial	2008	Final	-	-	293	-	-	-	-	293	
31	Loblaw & York Region Demand Response	Business, Industrial	2008	Final	-	-	101	-	-	-	-	101	
39	Electricity Retrofit Incentive	Business	2009	Final	-	-	-	121	121	121	40	483	
41	High Performance New Construction	Business	2009	Final	-	-	-	15	15	15	5	59	
42	Power Savings Blitz	Business	2009	Final	-	-	-	400	400	400	133	1,600	
44	Demand Response 1	Business, Industrial	2009	Final	-	-	-	668	-	-	-	668	
45	Demand Response 2	Business, Industrial	2009	Final	-	-	-	454	-	-	-	454	
46	Demand Response 3	Business, Industrial	2009	Final	-	-	-	648	-	-	-	648	
47	Loblaw & York Region Demand Response	Business, Industrial	2009	Final	-	-	-	111	-	-	-	111	
106	Electricity Retrofit Incentive Program	Business	2010	Final	-	-	-	-	46	46	15	137	
107	High Performance New Construction*	Business	2010	Final	-	-	-	-	51	51	17	154	
109	Multifamily Energy Efficiency Rebates	Business	2010	Final	-	-	-	-	8	8	3	23	
110	peaksaver®	Business	2010	Final	-	-	-	-	2	2	1	6	
111	Power Savings Blitz	Business	2010	Final	-	-	-	-	108	108	36	324	
112	Demand Response 3	Business, Industrial	2010	Final	-	-	-	-	1,002	-	-	1,002	
113	Loblaw & York Region Demand Response*	Business, Industrial	2010	Final	-	-	-	-	116	-	-	116	
114	Demand Response 2	Business, Industrial	2010	Final	-	-	-	-	474	-	-	474	
					530	1,181	1,986	2,496	2,415	823	268	10,235	
GSGT50 Distribution Volumetric Rate					\$/kWh	2.45	2.742	2.7365	2.7475	2.8494	2.4899	2.4899	
LRAM						\$ 1,299.36	\$ 3,237.23	\$ 5,435.41	\$ 6,857.43	\$ 6,880.21	\$ 2,048.76	\$ 667.60	\$ 26,426.00

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