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September 28, 2015

Board Secretary
Ontario Energy Board
PO Box 2319
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Attn: Kirsten Walli

RE: EB-2010-0215 - 2014 CDM Annual Report - Collus PowerStream

Following please find the 2014 CDM Annual Report prepared by Collus PowerStream.

The Conservation and Demand Management Code for Electricity Distributors requires a distributor to file an annual report with the Board. The following Annual Report is therefore prepared accordingly and covers the period January 1, 2014 to December 31, 2014.

The 2014 CDM Annual Report for Collus PowerStream also includes an overview document which relates to the experience of the CHEC Member LDC's which Collus PowerStream works in collaboration with to deliver CDM programs.

Sincerely,

Ed Houghton, CET, MAATO

President & CEO

Encl

# **Cornerstone Hydro Electric Concepts (CHEC)**

# Combined Conservation and Demand Management Annual Report 2014

EB-2010-0215

# **Collaboration for Conservation**

























# Cornerstone Hydro Electric Concepts Association Inc.

# **Executive Summary:**

This report represents the 2014 annual reporting as required by the CDM Code for 13 of the 15 CHEC Association LDCs. The results and comments provided in this overview section are based on the combined experience of the CHEC LDCs.

The report format contains an overview section relating the combined experience of CHEC LDCs and thirteen addendums containing the individual LDC Annual CDM Reports. The overview section provides a summary of the overall target achieved, conditions impacting strategy progress and tracking of the CDM Strategy.

In the fourth year of the program the residential portfolio performed better than in previous years on an incremental level. The residential program experienced improved kW performance over the previous year. Three programs contributed to the demand which included: Coupons, HVAC and the *peaksaver*PLUS® Initiative which showed a marked improvement. Energy contribution to target on an incremental basis was much improved in the final year. The coupon initiative experienced significant growth contributing approximately a third of the total energy savings from coupons in 2014. The HVAC initiative continued to show good performance remaining fairly consistent across the framework period. The Low Income Initiative performed below expectations. The ability to engage eligible customers has been difficult in this program.

The Demand Response (DR) Initiative contribution to the targets was finalized in the last year of the framework. A number of LDCs had customers enrol in DR but then exit prior to the end of the framework. Any future DR initiative, if offered, will require designs which maintain the customer's interest and provides customer benefit over the longer term.

The Commercial and Institutional program continues to be a significant contributor to targets achieved. This portfolio accounts for 43% of the kWh achieved to the end of 2014. The retrofit initiative along with the Direct Installed Lighting Initiative continues to provide savings and continues to be of interest to the customers. The Direct Installed Lighting Initiative, which is focused primarily on lighting, is approaching market saturation and will need some renewal to maintain traction in the sector. The Retrofit Initiative continues to experience good participation and is well established in the conservation industry. It is anticipated that the Retrofit Initiative will continue to achieve energy and demand savings if offered in the future.





# Cornerstone Hydro Electric Concepts Association Inc.

CHEC maintained the Roving Energy Manager (REM) position throughout 2014. The position has demonstrated value with successful approaches to industry and commercial customers. The REM continues to be instrumental in supporting CHEC LDCs and their commercial customers to identify potential savings and to implement projects. The REM's ability to work with customers has a direct impact on retrofit and monitoring projects. A number of audit projects have been initiated which are anticipated to provide savings in future frameworks.

The combined strategy results (Table 4) indicate that the demand reduction is below the 2014 Revised Projection by a couple of percent. The combined achieved demand at 61.1% of target is slightly below the provincial achieved demand reduction of 69.8%. The combined energy reduction is ahead of the 2014 Revised Projection by approximately 20% for a total of 110.7% of target which compares with the provincial achieved energy reduction of 109.2%.





# Cornerstone Hydro Electric Concepts Association Inc.

# 1.0 Introduction:

Cornerstone Hydro Electric Concepts Association (CHEC) is an association of fifteen (15) Local Distribution Companies (LDCs) (in 2014). The CHEC member LDCs have prepared this Conservation and Demand Management (CDM) Annual Report 2014 as required by the Conservation and Demand Management Code for Electricity Distributors. The report is a collaborative initiative of 13 of the CHEC member LDCs. The report is consistent with the combined CDM Strategy filed in November 2010 and includes Orillia Power as of 2012 reporting.

# 1.1 <u>Distributors Included in CHEC Association CDM Strategy:</u>

CHEC LDCs work collaboratively to meet regulatory and operational requirements. The Association facilitates LDCs' abilities to address initiatives in a cost effective manner, sharing information, expertise and resources. The development of a collaborative CDM Strategy and the subsequent CDM Annual Report is consistent with the CHEC philosophy of working together to meet the needs of the member LDCs and to work effectively for the customers served.

The LDCs, all members of CHEC, covered under this CDM Annual Report include:

- Centre Wellington Hydro Ltd.
- COLLUS PowerStream (COLLUS Power)
- InnPower Corporation (Innisfil Hydro Distribution Systems Limited)
- Lakefront Utilities Inc.
- Lakeland Power Distribution Ltd.
- Midland Power Utility Corporation
- Orangeville Hydro Limited
- Orillia Power Distribution Corporation
- Parry Sound Corporation (Now merged with Lakeland Power)
- Rideau St. Lawrence Distribution Inc.
- Wasaga Distribution Inc.
- Wellington North Power Inc.
- West Coast Huron Energy Inc. (Goderich Hydro).

CHEC LDCs have worked collaboratively and as part of the Association since 2000. The CHEC Combined Annual CDM Report includes an overview section and separate addendums for each LDC. The LDC addendum format follows the provincial template.

# 2.0 CDM Targets for Electricity Demand (MW) and Electricity Consumption (GWh):

The CDM target for each LDC has been established by the Ontario Energy Board (OEB) utilizing a methodology developed by the Ontario Power Authority (OPA). The targets were later revised and incorporated into the LDC license requirements. Table 1 illustrates the final targets for each LDC.

**Table 1 – OEB Defined Targets** 

	MW	GWH
LDC	Revised Target	Revised Target
Centre Wellington Hydro	1.64	7.81
COLLUS Power	3.14	14.97
Innisfil Hydro	2.5	9.2
Lakefront Utilities	2.77	13.59
Lakeland Power	2.32	10.18
Midland Power	2.39	10.82
Orangeville Hydro	2.78	11.82
Orillia Power	3.07	15.05
Parry Sound Power	0.74	4.16
Rideau St. Lawrence	1.22	5.1
Wasaga Distribution	1.34	4.01
Wellington North Power	0.93	4.52
West Coast Huron Energy	0.88	8.28
Total	25.72	119.51

# 3.0 **Progress toward Achieving Target**

Table 2 and Table 3 provide summaries of the progress made by CHEC LDCs in 2014 towards the combined demand and energy targets. The combined results are the summation for the 13 member LDCs and represent reported savings as per the IESO. The individual savings for each LDC are represented in the associated Addendum.

**Table 2** Combined Net Demand Savings at End User Level Including DR Contribution

Implementation Period	Annual								
implementation renou	2011	2012	2013	2014					
2011 - Verified	5.1	2.3	2.3	2.1					
2012 - Verified†	0.0	4.6	2.3	2.3					
2013 - Verified†	0.0	0.0	5.9	2.1					
2014 - Verified†	0.0	0.0	0.0	9.3					
Verifie	ed Net Annual Peal	k Demand Saving	s Persisting in 2014:	15.7					
	25.7								
Verified Portion	n of Peak Demand	Savings Target A	chieved in 2014 (%):	61.1%					

<sup>†</sup>Includes adjustments to previous years' verified results

Results presented using scenario 1 which assumes that demand response resources have a persistence of 1 year

Contribution toward the peak target at the end of the framework, while slightly below the revised prediction is in the general range anticipated.

**Table 3** Combined Net Energy Savings at End User Level

Implementation Period		Cumulative					
implementation Period	2011	2012	2013	2014	2011-2014		
2011 - Verified	10.5	10.4	10.4	9.7	41.0		
2012 - Verified†		10.0	9.9	9.8	30.1		
2013 - Verified†	0.0	0.0	9.5	9.4	19.9		
2014 - Verified†	0.0	0.0		24.9	41.3		
	Veri	fied Net Cumu	lative Energy Savi	ngs 2011-2014:	132.4		
Combined CHEC 2011-2014 Cumulative CDM Energy Target:							
Verified Portion of Cumulative Energy Target Achieved in 2014 (%):							

<sup>†</sup>Includes adjustments to previous years' verified results

Incremental energy savings in 2014 continue to be strong when compared to other years in the framework. Performance was generally as predicted in the revised strategy document for 2014. The total achieved energy savings exceed the target with a total of 110.7%. A large portion of the kWh achieved was due to one project which added approximately 16% of the target. This clearly illustrates the impact that a given project can have on results.

# 4.0 General Conditions Impacting Strategy Performance:

This section outlines issues which have impacted on the progress of Strategies and some of the general lessons learned over the fourth year of the program. While there have been many successes there remain many challenges within the CDM portfolio and specific challenges in some service territories. These specifics are outlined in the LDC specific reports contained in the addendums.

# 4.1 Portfolio Reduction and OEB Approved Programs:

As stated in previous reports the overall portfolio reduction as a result of midstream and OEB approved programs not being developed has reduced the overall potential to achieve target. The commercial programs aimed at demand, namely DR1 and DR3 were either never in market or withdrawn part way through the framework. The in-market initiatives, which were generally focused on kWh savings, did meet target on a provincial basis.

# 4.2 Roving Energy Manager:

CHEC LDCs collaborative application for a Roving Energy Manager (REM) provided an excellent resource to assist LDCs and their customers in the investigation and implementation of energy savings projects. The REM has been active across the CHEC LDC service territories and truly represents a "roving energy manager". The REM has consistently met program requirements for target resulting in contract renewal. As noted in previous reports, the delay in funding approval impacted on the initial start of the REM. An earlier start would have seen more projects implemented within the current framework, recognizing that the lead time for commercial and industrial projects can be extensive. The lead time for projects has pushed out the final implementation of many projects beyond December 31, 2014 but the resultant savings will be accounted for in the Conservation First Framework.

# 4.3 Residential Program Performance:

The residential programs performed well over 2014 as compared to other years in the framework and exceeded the projected performance for 2014.

The Appliance Retirement Initiative, while being in the market for several years and showing some signs of saturation, did produce results similar to 2013. Perhaps the impending termination of the program produced additional savings with customers taking part in the program prior to the final date.

The Coupon Initiative experienced significant growth in 2014 contributing approximately a third of the total energy savings from coupons in the final year. The continued performance of

coupons clearly illustrates the value of this customer outreach in the residential sector. Experience over the course of the program has clearly indicated that continued promotion of the coupons, coupons being in market over the course of the year and evaluation of spillover impact has maintained the continued value of the coupon program.

The Low Income Initiative did not meet savings expectations in the final year nor did it meet the four year expectation. The challenge to engage eligible customers as well as issues around self-identification presented difficulties with obtaining the required traction for this program. In many instances the ability to obtain deep installs has been challenging.

Within the funding envelope provided for conservation programs there was limited opportunity to fund general conservation education programs. While specific marketing of programs was undertaken this does not replace education initiatives. With the focus on target achievement, investment in educational programs where savings may be difficult to quantify was not undertaken. In future frameworks the ability to incorporate educational programs, in a cost effective manner, may be an area for investigation.

# 4.4 Peaksaver Plus:

The Residential Demand Response Initiative (*peaksaver* PLUS®) has been identified in most strategies as being a key contributor to obtaining significant peak demand target from the residential sector. This program has fallen well below initial performance target achievement expectations.

CHEC LDCs released an RFP for a supplier of service and technology in late 2012. Issues with respect to launching the program moved the in-market date later than anticipated including postponement into 2014 awaiting communication capabilities for some LDCs. Further complicating the issue was the need to terminate installation as colder weather approached to avoid completing the initial test installations when the AC would not be operating. The benefits of the "in home devices" as part of this program did not meet expectations as it was determined that there was no statistically valid energy savings from these devices. This finding impacted on the kWh savings which had been planned for in the initial CDM Strategies.

# 4.5 CDM Awareness:

The continued offering of conservation programs has raised the general awareness and readiness to participate among customers. Customer experience within one program appears to foster continued participation as opportunities present themselves.

Within the residential portfolio, as programs continue or special offerings are repeated, customers appear to be "looking towards" the program. This should assist with marketing efforts and make the resulting participation easier on a go forward basis. Of course to maintain

this interest offerings need to be continually revised to ensure they are meeting both the customer expectations and technology advancements as well as producing savings for LDCs.

# 4.6 Commercial Programs:

The Direct Installed Lighting Initiative has been in market for some time however continued to show good performance in 2014. The ability to achieve results in this program was assisted by the addition of LED lamps and continued out-reach to customers who have not participated.

The Retrofit Initiative continues to be a stable and important program delivering approximately 60% of the 2014 energy savings. The program has significant traction within the sector with opportunities being pursued in a variety of technologies. As noted previously the Roving Energy Manager has been active in supporting LDC efforts with their customers and the Retrofit Initiative provides an excellent tool for the REM to use in assisting customers with implementation of energy efficiency projects.

# 4.8 DR 3 Contribution:

Within the strategies filed by CHEC LDCs, DR 3 accounted for approximately 3.4 MW of demand. In evaluating the demand contribution of various programs it is apparent that DR 3 or a similar demand focused program is required to obtain the demand reduction. Early in the framework customers participated in the DR3 program however over the course of the framework a number withdrew from the program. Overall a total of 2.6 MW of demand was obtained through the DR 3 Program.

# 5.0 Variation from CDM Strategy:

The Addendums for each LDC include tracking of the CDM Strategy. A number of the LDCs have modified their strategies based on their results to the end of 2013. The combined strategy for the 13 CHEC LDCs is summarized in Table 4.

The final results are slightly below the expected demand savings while energy achieved savings exceed the expected results by about 20%. The impact of one project increased the energy savings by approximately 16%. Without this project included the combined strategy savings is 94.9 approximately 3% above the revised strategy expectation.

CHEC LDCs remain committed to CDM and obtaining kW and kWh savings. The experience gained and relationships developed in the 2011-2014 Framework will assist CHEC LDCs within the Conservation First Framework.

The specific activities associated with each LDC are outlined in the attached Addendums.

# **Table 4 – CHEC CDM Combined Strategy:**

Summary	Annual Mil	estone - Con	tribution to 2	014 Target																
-	2011 Origi	nal Strategy ection		011 Results		sed Strategy ection	Actual 20	12 Results		sed Strategy ection	Actual 2	013 Results		sed Strategy jection	Actual 20	014 Results		otal Projected luction	Contribu	tion to Target
Category - Consumer	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh
Provincial Programs																				
Appliance Retirement	73	2,124,285	74	2,102,677	94	1,124,617	72	1,216,018	58	732,121	61	532,404	63	380,084	66	288,970	270	4,231,182	274	4,140,068
Instant Discounts (Rebates)	28	2,893,444	58	3,942,109	28	1,787,544	33	1,713,721	19	907,638	34	1,008,998	20	459,212	210	3,132,718	144	7,124,040	334	9,797,546
HVAC Discounts (Rebates)	205	1,286,117	410	3,173,721	336	1,588,507	280	1,514,923	214	764,551	287	1,047,261	289	607,656	369	692,825	1,267	6,343,561	1,347	6,428,730
Demand Response	607	3,846,518	0	338	130	338	0	0	953	2,977,503	146	0	832	255,731	394	0	978	256,068	540	338
Midstream Incentives	3	82,243	0	0	0	0	0	0	2	19,945	0	0	2	6,207	0	0	2	6,207	0	0
New Construction	25	250,419	0	0	1	6,486	0	1,232	26	131,323	1	24,771	24	106,557	2	18,533	26	132,560	3	44,536
Low Income	0	0	0	0	12	186,345	13	387,814	152	1,552,205	47	866,648	116	798,077	30	191,197	177	2,052,539	90	1,445,659
Provincial Consumer Total	941	10,483,027	542	9,218,844	601	4,693,837	398	4,833,707	1,423	7,085,286	576	3,480,082	1,347	2,613,524	1,071	4,324,243	2,863	20,146,158	2,588	21,856,877
OEB Approved Programs																				
General Consumer	36	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0
Low Income	5	0	0	0	0	0	0	0	5	0	0	0	1	8,775	0	0	1	8,775	0	0
OEB Approved Programs Total	41	0	0	0	0	0	0	0	15	0	0	0	1	8,775	0	0	1	8,775	0	0
Consumer Program Total	982	10,483,027	542	9,218,844	601	4,693,837	398	4,833,707	1,438	7,085,286	576	3,480,082	1,348	2,622,299	1,071	4,324,243	2,864	20,154,933	2,588	21,856,877
	Annual Mil	estone - Con	tribution to 2	014 Target																
		nal Strategy ection	Actual 20	011 Results		sed Strategy jection	Actual 20	12 Results		sed Strategy ection	Actual 2	013 Results		sed Strategy jection	Actual 20	014 Results		otal Projected luction	Contribu	ition to Target
Category - Commercial & Institutional	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh
Provincial Programs																				
rofits – Medium and Large Buildings	987	7,342,065	266	7,087,736	1,712	9,875,529	957	12,473,024	1,446	6,773,176	688	7,648,637	1,760	9,345,757	1,209	8,576,956	3,672	36,555,155	3,121	35,784,972
Existing Building Retrofits – Small																				
Buildings	835	16,571,055	451	5,894,370	576	7,733,791	628	7,346,407	1,049	7,686,179	441	3,260,774	1,004	2,937,019	1,042	3,895,407	2,524	19,438,570	2,563	20,396,958
Small Commercial Demand																				
Response	19	39,713	0	12	19	1,070	0	0	39	56,981	15	148,792	56	291,415	2	0	71	440,218	17	148,804
Demand Response 1 & 3	0	37	526	7,522	120	15,376	-341	19,359	375	60,075	169	6,270	357	13,684	87	0	711	46,835	441	33,150
Provincial Commercial & Inst.																				
Total	1,841	23,952,871	1,243	12,989,640	2,427	17,625,765	1,245	19,838,789	2,910	14,576,411	1,314	11,064,473	3,178	12,587,875	2,340	12,472,363	6,979	56,480,778	6,141	56,363,885
OEB Approved Programs																				
Retrofits	79	0	0	0	0	0	0	0	79	0	0	0	0	0	0	0	0	0	0	0
New Construction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	78,171	0	0	15	78,171
OEB Approved Programs Total	79	0	0	0	0	0	0	0	79	0	0	0	0	0	15	78,171	0	0	15	78,171
																				56,442,056

# Cornerstone Hydro Electric Concepts Association

	Annual Mil	estone - Cont	ribution to 2	2014 Target																
		inal Strategy ection	Actual 2	011 Results		sed Strategy ection	Actual 201	2 Results		sed Strategy ection	Actual 2	2013 Results		sed Strategy ection	Actual 2	014 Results		otal Projected luction	Contribu	tion to Target
Category - Industrial	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh
Program Name																				
Industrial Accelerator	55	1,284,928	0	0	0	0	0	0	0	0	149	712,800	0	0	-81	5,582	149	712,800	68	718,38
Industrial Equipment Replacement	431	10,125,877	53	2,938,736	436	5,576,430	0	0	357	3,098,905	0	0	183	1,026,032	0	0	236	3,964,769	53	2,938,73
Demand Response 1	0	7	0	0	0	0	0	0	0	4	0	0	1	1	0	0	1	1	0	(
Demand Response 3	24	524,494	1,549	90,925	21	436,972	66	52,874	410	678	1,111	48,065	75	775	-527	0	2,801	192,638	2,199	191,86
Provincial Industrial Total	511	11,935,306	1,602	3,029,661	457	6,013,402	66	52,874	767	3,099,587	1,260	760,865	259	1,026,809	-608	5,582	3,187	4,870,208	2,320	3,848,98
DEB Approved Programs																				
A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
В	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
OEB Approved Programs Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Industrial Total	511	11,935,306	1,602	3,029,661	457	6,013,402	66	52,874	767	3,099,587	1,260	760,865	259	1,026,809	-608	5,582	3,187	4,870,208	2,320	3,848,98
	Note: Sui	ns above do l	not include	Orillia Power's	projected o	r actuals as S	trategy not iter	nized by intiati	ves											
		inal Strategy	Actual 2	011 Results		sed Strategy	Actual 201	2 Doculte		sed Strategy	Actual 3	2013 Results		sed Strategy	Actual 2	014 Results		otal Projected	Contribu	tion to Target
	Pro	ection	Actual 2		Proj	ection	Actual 20		Proj	ection	Actual 2		Proj	ection	Actual 2		Red	luction		
CDM Strategy Total	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh
Program Total	3,933	48,501,204	4,134	29,589,650	3,975	32,093,004	1,840	28,356,940	5,414	28,881,284	3,478	17,059,738	6,384	20,666,984	3,084	18,334,221	15,860	95,945,920	12,535	93,339,16
2010 Contribution	0	0	577	11,452,775	6	29,450	32	307,683	0	0	0	0	0	0	0	0	439	8,540,239	610	11,760,458
Time Of Use Savings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,058	0	U	0	1,058	(
Adjustments to Verified Final Results	0	0	0	0	0	0	860	19,411,939	0	0	255	5,383,811	0	0	398	2,455,885	203	5,289,504	1,513	27,251,635
Adjusted Total	3,933	48,501,204	4,711	41,042,426	3,981	32,122,454	2,732	48,076,562	5,414	28,881,284	3,733	22,443,549	6,384	20,666,984	4,540	20,790,106	16,501	109,775,662	15,716	132,351,26
															Target	to Achieve	25,720	119,510,000		
		inal Strategy ection	Actual 2	011 Results		sed Strategy ection	Actual 201	2 Results		sed Strategy ection	Actual 2	2013 Results		sed Strategy ection	Actual 2	014 Results		otal Projected Juction	Contribu	tion to Target
Percentage of Target	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh
Ū Ū**	15.3%	40.6%	18.3%	34.3%	15.5%	26.9%	10.6%	40.2%	21.0%	24.2%	14.5%	18.8%	24.8%	17.3%	17.7%	17.4%	64%	91.9%	61.1%	110.79
	Note: Tota	Projection is f	ormed of 201	11, 2012 & 2013	Actuals adde	d with 2014 Re	evised Strategy	Projection												

# 6.0 Addendums:

Centre Wellington Hydro	Addendum 1
COLLUS Power Stream	Addendum 2
Innisfil Hydro Distribution Systems	Addendum 3
Lakefront Utilities	Addendum 4
Lakeland Power Distribution	Addendum 5
Midland Power Utility	Addendum 6
Orangeville Hydro	Addendum 7
Orillia Power	Addendum 8
Parry Sound Power	Addendum 9
Rideau St. Lawrence Distribution	Addendum 10
Wasaga Distribution Ltd	Addendum 11
Wellington North Power	Addendum 12
West Coast Huron Energy	

# Collus PowerStream Corp.

Addendum 2 - CHEC Combined Annual Report 2014

# Conservation and Demand Management 2014 Annual Report

Submitted to:

**Ontario Energy Board** 

Submitted on September 30, 2015

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# **Executive Summary**

This annual report is submitted by Collus PowerStream in accordance with the filing requirements set out in the Conservation and Demand Management ("CDM") Code for Electricity Distributors, issued September 16, 2010, Board File No. EB-2010-0215 specifically, the Appendix C Annual Report Template, as a progress report and update to Collus PowerStream's Strategy filed with the Ontario Energy Board ("Board" or "OEB") on November 1, 2010. Accordingly, this report outlines Collus PowerStream's CDM activities for the period of January 1, 2014 to December 31, 2014. It includes net peak demand and net energy savings achieved in 2011, 2012, 2013, and 2014, CDM program activities, successes and challenges.

Collus PowerStream did not apply for any Board-approved CDM programs during 2014, however, as noted in the Guidelines for Electricity Distributors Conservation and Demand Management ("CDM Guidelines"), released April 26, 2012, the Board has deemed Time-of-Use ("TOU") pricing to be a province-wide Board-approved CDM program. The Ontario Power Authority ("OPA"), now Independent Electricity System Operator ("IESO"), is to provide measurement and verification on TOU. The TOU savings allocated to Collus PowerStream's 2011 -2014 targets are 129 kW and 0 kWh.

In 2011 – 2014, Collus PowerStream contracted with the IESO to deliver a portfolio of IESO-contracted province-wide CDM programs ("IESO Programs") to all customer segments including residential, commercial, institutional, industrial and low income. Most of these programs were rolled-out by the IESO in June 2011. In 2011 program activities were centered on building a foundation for full program execution over the next three years of the program term, including staffing, procurement, and program delivery. Highlights from each year of the framework include the following:

In 2011, Collus PowerStream contracted with the Ontario Power Authority (OPA) to deliver a portfolio of OPA-Contracted Province-Wide CDM Programs to all customer segments including residential, commercial, institutional, industrial and low income. These programs were rolled-out by the OPA in June 2011. In 2011 Program activities were centered on building a foundation for full program execution over the next three years of the program term, including staffing, procurement, and program delivery.

In 2012, Collus PowerStream continued to place significant emphasis on the programs in market. The delivery of ERII and Direct Install programs continued to be active and the Home Assistance Program was launched. To date Collus PowerStream has:

- Launched all available OPA Programs following their release by the OPA:
- Delivered marketing to inform consumers in all sectors:
- Informed industry stakeholders about OPA Programs, the use of online application system,
- Partnered with CHEC LDCs to form partnerships and delivery models for the various programs;
- In conjunction with other CHEC LDCs engaged the services of a Roving Energy Manager:
- Actively participated in Electrical Distribution Association (EDA, LDC and OPA working groups through our own staff or CHEC resources in order to improve and simplify the existing programs and processes; and
- Transitioned pre-2011 projects into 2011.

In 2013, Collus PowerStream continued to deliver all in market programs with the associated marketing and customer support. The commercial programs such as ERII and Small Business continued to have good traction in the market place and demonstrated industry recognition. In August, the peaksaverPLUS program was launched to all residential customers. This program was launched alongside an extensive marketing campaign which brought with it very good results in the last few months of the year.

During this period the Roving Energy Manager's contract was renewed to continue this important collaborative resource for CHEC LDCs.

In 2014 – Collus PowerStream continued to deliver all in-market programs with the associated marketing and customer support. The Small Business Lighting program continued to have strong success with participation levels reaching those originally seen with the Power Savings Blitz program in 2008/2009. The year finished with record participants for this framework (244) which included achieving over 1,000 Collus PowerStream small business customers participating in this program. The commercial programs, specifically the RETROFIT program continued to have good market awareness and uptake over the year. Three AUDIT FUNDING projects were received and completed and although we were promoting it we had not forecasted participation in this program. The Roving Energy Manager position was continued as part of the CHEC collaborative effort and assisted in maintaining focus and performance in this sector. The peaksaverPLUS continued, however, uptake did not reach forecasted levels of participation which means this program did not meet the associated demand reduction.

Collus PowerStream has achieved 1.0 MW of net incremental peak demand savings and 3.0 GWh of net incremental energy savings in 2014. A summary of the achievements towards the CDM targets is shown below:

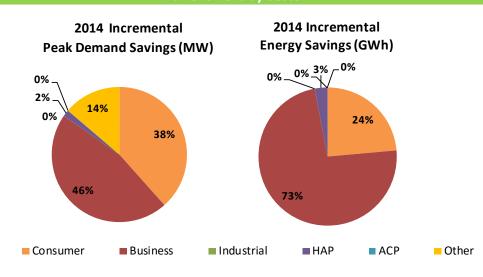
# IESO-Contracted Province-Wide CDM Programs: 2011-2014 Final Results Report

**LDC:** COLLUS Power Corporation

Final 2014 Achievement Against Targets	2014 Incremental	2011-2014 Achievement Against Target	% of Target Achieved
Net Annual Peak Demand Savings (MW)	1.0	1.8	56.3%
Net Energy Savings (GWh)	3.0	13.6	90.7%

Unless otherwise noted, results are presented using scenario 1 which assumes that demand response resources have a persistence of 1 year

# Achievement by Sector



From the above table, Collus PowerStream has achieved 1.76 MW or 56.3% and 13.58 MWh or 90.7% towards Collus PowerStream's 2014 peak demand reduction target and energy consumption reduction targets respectively. The shortfall of peak demand targets was mainly due to late start of programs, cancellation of planned province wide programs including Direct Space Cooling and projects primarily focused on kWh. The suite of programs, while supporting kW savings did not see significant demand focused projects implemented at the customer level. While many projects resulted in significant kWh the demand was minimal. The shortfall of energy targets were mainly due to the lost opportunity in the first year which had a cumulative effect on the target and as noted previously a limited number of program offerings. While interest in the commercial sector remained strong the long planning and implementation cycle for many of the commercial and industrial customers resulted in project implementation dates beyond December 31, 2014. These projects will carry forward into the Conservation First Framework.

In 2015, the Conservation First Framework (CFF) for the period 2015 -2020 will be implemented effective on July 1, 2015, to ensure a smooth transition; most 2011-2014 Programs and Rules were extended into 2015 until the effective implementation start date of July 1, 2015 under the Conservation First Framework.

# **Background**

On March 31, 2010, the Minister of Energy and Infrastructure of Ontario, under the guidance of sections 27.1 and 27.2 of the *Ontario Energy Board Act, 1998*, directed the OEB to establish Conservation and Demand Management ("CDM") targets to be met by electricity distributors. Accordingly, on November 12, 2010, the OEB amended the distribution license of LDC to require LDC, as a condition of its license, to achieve 14.978 GWh of energy savings and 3.14 MW of summer peak demand savings, over the period beginning January 1, 2011 through December 31, 2014.

In accordance with the same Minister's directive, the OEB issued the Conservation and Demand Management Code for Electricity Distributors (the "Code") on September 16, 2010. The Code sets out the obligations and requirements with which electricity distributors must comply in relation to the CDM targets set out in their licenses. To comply with the Code requirements, Collus PowerStream submitted its CDM Strategy on November 1, 2010 which provided a high level of description of how Collus PowerStream intended to achieve its CDM targets.

The Code also requires a distributor to file annual reports with the Board. This is the fourth Annual Report by Collus PowerStream and has been prepared in accordance with the Code requirements and covers the period from January 1, 2014 to December 31, 2014.

Collus PowerStream submitted its 2011 Annual Report on September 30, 2012 which summarized the CDM activities, successes and challenges experienced by Collus PowerStream for the January 1, 2011 to December 31, 2011 period. The OEB's 2011 CDM Results Report identified that the delay in the full suite of CDM programs being made available by the IESO, and the absence of some programs negatively impacted the final 2011 results for the LDCs. This issue was also highlighted in Volumes I and II of the Environmental Commissioner's Report on Ontario's Annual Energy Conservation Progress.

On December 21, 2012, the Minister of Energy directed the IESO to fund CDM programs which meet the definition and criteria for IESO-contracted province-wide CDM programs for an additional one-year period from January 1, 2015 to December 31, 2015.

The Ministerial Directive did not amend the timelines for LDCs to achieve their energy savings and demand savings targets. Therefore, the main focus of the LDCs remains the achievement of CDM targets by December 31, 2014.

Collus PowerStream submitted its 2013 Annual Report on September 30, 2014 which summarized the CDM activities undertaken by Collus PowerStream for the January 1, 2013 to December 31, 2013 period. The OEB's 2013 CDM Results report identified that the majority of LDCs achieved close to 50% of their net peak demand (MW) target from their 2013 results. However, LDCs generally advised the Board that meeting their peak demand (MW) target is not likely and that a shortfall is expected.

In 2014, LDCs collectively achieved over 1TWh of the net incremental energy savings (GWh) target, adding to the overall cumulative result of approximately 109% of the net energy target of 6,000 GWh.

The report identifies that although there have been improvements to programs there still remains some shortcomings to the design and delivery of certain initiatives that have resulted in a negative impact to some programs. In particular, the change management process still requires improvements to expedite enhancements to initiatives. The report also noted that certain initiatives may be reaching the point of market saturation and that new initiatives may need to be developed in order to take the place of the existing initiatives under the new framework.

# 1. Conservation Framework

# 1.1 2011-2014 Framework

Ontario's current CDM framework is a key step towards creating a culture of conservation in the Province. The Ontario Government ("Government") Directive to the OEB to establish CDM targets that would be met by electricity distributors recognizes the importance of CDM for both electricity customers and the electricity system. CDM helps customers manage rising energy costs, supports the provincial integrated supply plan, and addresses local distribution and transmission supply constraints. The past framework was intended to enable customers to benefit from a suite of both Board-approved and IESO province-wide programs and provide a portfolio that would meet both broad and specific customer needs.

The state of Board-approved programs and the current suite of province-wide IESO programs have limited CDM offerings to customers. This has produced limited savings and has restricted the associated opportunity for LDCs to meet their targets. The process to introduce changes to current program initiatives or to pilot new initiatives has been challenging, involving considerable cost and effort, which has resulted in limited benefits to customers and CDM savings.

Challenges faced by LDCs in the 2011-2014 framework, such as overbuilt governance and unnecessarily excessive legal requirements and misalignment of control and risks, have been addressed by the new directive. However, there are still many challenges to overcome and the new CDM framework should address other challenges of the current framework and build on its strengths.

# 1.2 Conservation First Framework

LDCs are supportive of the Government's renewed commitment for CDM in Ontario. LDCs are committed to working with the Government, IESO, Natural Gas Utilities and other stakeholders to develop programs for the new framework for CDM in the Province.

Long-term commitment for CDM funding and confirmation of the role of LDCs have been provided in the Minister's directive dated March 31, 2014, allowing LDCs to maintain current program infrastructure, including LDC staff and third party contracts as required.

The commitment also provided LDCs the program extensions required for continuity into the Conservation First Framework which was critical for all customers.

# 2.0 Board-approved CDM Programs

# 2.1 Introduction

In its Decision and Order dated November 12, 2010 in EB-2010-0215 and EB-2010-0216, the OEB ordered that, to meet its mandatory CDM targets, "Each licensed electricity distributor must, as a condition of its licence, deliver Board-approved CDM programs, IESO-contracted province-wide CDM programs, or a combination of the two."

At this time, the implementation of TOU pricing is the only Board-approved CDM program that is being offered in Collus PowerStream's service area.

# 2.2 TOU Pricing

# 2.2.1 Background

In its April 26, 2012 CDM Guidelines, the OEB recognizes that a portion of the aggregate electricity demand target was intended to be attributable to savings achieved through the implementation of TOU pricing. The OEB establishes TOU prices and has made the implementation of this pricing mechanism mandatory for distributors. On this basis, the OEB has determined that distributors will not have to file a Board-approved CDM program application regarding TOU pricing. The OEB has deemed the implementation of TOU pricing to be a Board-approved CDM program for the purposes of achieving the CDM targets. The costs associated with the implementation of TOU pricing are recoverable through distribution rates, and not through the Global Adjustment Mechanism ("GAM").

In accordance with the Ministry directive dated March 31, 2010 by the Minister of Energy and Infrastructure, the OEB is of the view that any evaluation of savings from TOU pricing should be conducted by the IESO for the Province, and then allocated to distributors. Collus PowerStream has included the results provided by the IESO in this report.

In 2013, IESO had retained the Brattle Group as the evaluation contractor and has been working with an expert panel convened to provide advice on methodology, data collection, models, savings allocation, etc. The initial evaluations were conducted in 2013 with five LDCs — Hydro One Networks Inc., Toronto Hydro-Electric System Limited, Hydro Ottawa Limited, Thunder Bay Hydro Electricity Distribution Inc. and Newmarket-Tay Power Distribution Ltd. Preliminary results from these five LDCs were issued to the five LDCs involved in the study in August 2013 and are now publically available on the IESO website. Preliminary results demonstrated load shifting behaviours from the residential customer class.

Three additional LDCs were added to the study in 2014 – Cambridge-North Dumphries, PowerStream and Sudbury. Preliminary results from this study were planned to be issued to the eight LDCs in September 2014. The IESO advised that the TOU study will be completed in the summer of 2015 and final verified savings will be available for LDCs to include in the 2014 Annual Report.

The TOU savings as reported by the IESO is included in this report and accounts for 129 kW which represents 4% of the Collus PowerStream peak demand target.

### 2.2.2 TOU PROGRAM DESCRIPTION

Target Customer Type(s): Residential and small business customers (up to 250,000 kWh per year)

Initiative Frequency: Year-round

**Objectives:** TOU pricing is designed to incent the shifting of energy usage. Therefore peak demand reductions are expected, and energy conservation benefits may also be realized.

**Description**: In August of 2010, the OEB issued a final determination to mandate TOU pricing for Regulated Price Plan ("RPP") customers by June 2011, in order to support the Government's expectation for 3.6 million RPP consumers to be on TOU pricing by June 2011, and to ensure that smart meters funded at ratepayer expense are being used for their intended purpose.

The RPP TOU price is adjusted twice annually by the OEB. A summary of the RPP TOU pricing is provided below.

**Table 1: RPP TOU Pricing Summary** 

	Prices (cents/kWh)					
Effective Date	On Peak	Mid Peak	Off Peak			
November 1, 2010	9.9	8.1	5.1			
May 1, 2011	10.7	8.9	5.9			
November 1, 2011	10.8	9.2	6.2			
May 1, 2012	11.7	10.0	6.5			
November 1, 2012	11.8	9.9	6.3			
May 1, 2013	12.4	10.4	6.7			
November 1, 2013	12.9	10.9	7.2			
May 1, 2014	13.5	11.2	7.5			
November 1, 2014	14.0	11.4	7.7			

Delivery: The OEB sets the TOU prices; LDCs install and maintain the smart meters; LDCs convert customers to TOU billing.

# 2.2.3 TOU Initiative Activities/Progress

Collus PowerStream began transitioning its RPP customers to TOU billing on January 1, 2012. At December 31<sup>st</sup>, 2014, we had 15,054 customers on TOU billing which represents over 99% of our RPP eligible customers.

# 2.3 Collus PowerStream's Application with the OEB

Collus PowerStream did not submit a CDM program application to the OEB in 2014.

# 2.4 Collus PowerStream's Application with the IESO's Conservation Fund

In 2013, the IESO introduced the Conservation Fund's Program Innovation stream to help meet LDC interest in the development and launch of new local, regional and province-wide initiatives. The Conservation Fund's LDC Program Innovation stream fast-tracks LDC-led program design and the launch of successfully piloted initiatives prior to full scale deployment. By driving program innovation through the Conservation Fund, LDCs have the opportunity to both realize additional savings through the piloting and implementation of initiatives not currently addressed by the IESO portfolio and the means to test concepts for future local or province wide programs post 2014. As per the IESO, as of March 2014, three

pilots have been contracted and are underway with Toronto Hydro and Niagara Peninsula Energy and ten others are in various stages of the contracting and development process.

In addition, building on LDC interest in social benchmarking services for the residential sector, in 2013 the Conservation Fund in collaboration with Hydro One, Milton Hydro and Horizon Utilities completed the procurement of three social benchmarking pilot projects. Beginning in 2014 these services will be offered to more than 100,000 customers for a one year period, with evaluation reports published shortly thereafter.

Collus PowerStream did not submit a CDM program application to the IESO's Conservation Fund in 2014.

# 3 IESO-Contracted Province-Wide CDM Programs

# 3.1 Introduction

Effective March 13, 2011, Collus PowerStream entered into an agreement with the IESO to deliver CDM programs extending from January 1, 2011 to December 31, 2014. The programs included under this agreement are listed in Table 4 below. Further program details are included in Appendix A. In addition, results include projects started pre 2011 which were completed in or after 2011:

**Table 2: IESO-Contracted Province-Wide CDM Program Initiatives** 

Initiative	Schedule	Date schedule posted	Collus PowerStream in Market Date
Residential Programs			
Appliance Retirement	Schedule B-1, Exhibit D	Jan 26,2011	March 13, 2011
Appliance Exchange	Schedule B-1, Exhibit E	Jan 26, 2011	March 13, 2011
HVAC Incentives	Schedule B-1, Exhibit B	Jan 26, 2011	March 13, 2011
Conservation Instant Coupon Booklet	Schedule B-1, Exhibit A	Jan 26, 2011	March 13, 2011
Bi-Annual Retailer Event	Schedule B-1, Exhibit C	Jan 26, 2011	March 13, 2011
Retailer Co-op	n/a	n/a	March 13, 2011
Residential Demand Response	Schedule B-3	Aug 22, 2011	August 29, 2013
New Construction Program	Schedule B-2	Jan 26, 2011	March 13, 2011
Home Assistance Program	Schedule E-1	May 9, 2011	April 23, 2012
Commercial & Institutional Programs			
Efficiency: Equipment Replacement	Schedule C-2	Jan 26, 2011	March 13, 2011
Direct Install Lighting	Schedule C-3	Jan 26, 2011	March 13, 2011
Existing Building Commissioning Incentive	Schedule C-6	Feb 2011	March 13, 2011
New Construction and Major Renovation Initiative	Schedule C-4	Feb 2011	March 13, 2011
Energy Audit	Schedule C-1	Jan 26, 2011	March 13, 2011
Commercial Demand Response	Schedule B-3	<del>Jan 26, 2011</del>	General Service <50 kW
Industrial Programs			
Process & System Upgrades	Schedule D-1	May 31, 2011	March 13, 2011
Monitoring & Targeting	Schedule D-2	May 31, 2011	March 13, 2011
Energy Manager	Schedule D-3	May 31, 2011	September, 2012
Key Account Manager ("KAM")	Schedule D-4	May 31,2011	General Service 50 kW & above
Demand Response 3	Schedule D-6	May 31, 2011	March 13, 2011

In addition, results were realized towards Collus PowerStream's 2011-2014 targets through the following pre-2011 programs:

- Electricity Retrofit Incentive Program
- High Performance New Construction

As per the table below, several program initiatives are no longer available to customer.

**Table 3: Pre-2011 IESO Programs** 

Not in Market	Objective	Status
Residential Program		
Midstream Electronics	Encourages retailers to promote and sell high efficency televisions, and for distributors to distribute high efficiency set top boxes.	Did not launch and removed from Schedule in Q2, 2013.
Midstream Pool Equipment	Encourage pool installers to sell and install efficient pool pump equipment in residential in-ground pools.	Did not launch and removed from Schedule in Q2, 2013.
Home Energy Audit Tool	This is a provincial online audit tool to engage customers in conservation and help drive customer participation to CDM programs.	Did not launch and removed from Schedule in Q2, 2013.
Commercial & Institutional P	rogram	
Direct Service Space Cooling	Offers free servicing of air conditioning systems and refrigeration units for the purpose of achieving energy savings and demand reduction.	Did not launch.
Demand Response 1 ("DR1")	This initiative allows distribution customers to voluntarily reduce electricity demand during certain periods of the year pursuant to the DR 1 contract. The initiative provides DR payment for service for the actual electricity reduction provided during a demand response event.	No customer uptake for this initiative. As a result this Initiative was removed from the Schedule in Q4, 2012.
Industrial Program		
DR1	As above	No customer uptake for this initiative. Removed in Q4, 2012.

The Master CDM Program Agreement between LDC and the IESO includes a program change management provision in Article 3. Collaboration between the IESO and LDC commenced in 2011, and continued in 2012, 2013 and 2014, as the change management process was implemented to enhance the saveONenergy program suite. The change management process allows for modifications to the Master CDM Program Agreement and initiative Schedules. The program enhancements give LDCs additional tools and greater flexibility to deliver programs in a way that meets the needs of customers and further drives participation in the Initiatives.

# 3.2 Program Descriptions

Full descriptions of IESO-contracted province-wide CDM programs are available on the IESO's intranet LDC and additional initiative information can be found on the saveONenergy website at <a href="https://saveonenergy.ca">https://saveonenergy.ca</a>. The targeted customer types, objectives, and individual descriptions for each program initiative are detailed in Appendix A. Discussion of LDC's experience with these programs is provided below.

# 3.2.1 RESIDENTIAL PROGRAM

**Description:** Provides residential customers with programs and tools to help them understand and manage the amount of energy they use in their home and help the environment.

**Objective:** To provide incentives to both existing homeowners and developers/builders to motivate the installation of energy efficiency measures in both existing and new home construction.

### Discussion:

The addition of Light Emitting Diode ("LED") technology into the bi-annual retailer events in 2012 and the annual coupons in 2013, as well as LDC custom coded coupons, has had a positive effect on consumer engagement and provided LDC with opportunities to achieve additional savings in their service territory. The Residential Demand Response program is the main residential initiative which drives savings for LDCs and has been well received by consumers eager to utilize an In-Home Display ("IHD") to help manage their energy consumption. Unfortunately, there were no savings associated with the Energy Display attributed to LDCs in the IESO's final verified results as included in this report.

The Heating and Cooling Incentives program continues to be one of the strongest performers in the residential suite of programs. This program is mainly driven by contractors participating in the program but they may not always deliver results in the required manner (e.g. allowing customers to apply for their own incentives and tardy reporting).

The Residential Program Portfolio is predominately a carryover of initiatives from previous programs. Three new initiatives were never launched and subsequently removed from the schedule in 2013 with no new additions. Delays in communication with regards to initiative offerings and results reporting have hampered LDCs' abilities to engage customers and promote participation. Province-wide advertising has provided value in all residential programs except for *peaksaver* **PLUS** due to technological inconsistency across LDCs.

Work to revitalize and increase the effectiveness and breadth of the initiatives through the residential program needs to be a high priority. There are opportunities within the residential marketplace that need to be addressed, program developed and offered to customers. The Version 5 schedules changes under the Master Agreement implemented in Q1/Q2 2014 have increased the number of LDC-coded coupons available and made new installations of central heating and cooling systems eligible for the Heating and Cooling Incentive.

# 3.2.1.1 Appliance Retirement Initiative (Exhibit D)

### **Initiative Activities/Progress:**

A marketing plan was developed to promote this program to residential customers, which included the following for the Fridge & Freezer program:

- Bill inserts were distributed to all 17,000 customers during the months of May/June and September/October that promoted the Fridge & Freezer Pickup program.
- A blog post was written about the Fridge & Freezer Pickup program and posted on Simcoe.com from June December.
- Website banner advertising also appeared on Simcoe.com featuring the Fridge & Freezer Pickup program during the months of April/May.
- Email blasts were sent our residential customers twice during the year and the Fridge & Freezer Pickup program was promoted
- A pull up banner was displayed in the lobby at our office and at community events to promote the Fridge & Freezer program.
- Literature for the Fridge & Freezer program was displayed in our office lobby.
- Literature for the Fridge & Freezer program was given out to participants of the peaksaverPLUS program as part of a leave-behind package that also include the saveONenergy COUPONS and Heating & Cooling incentive literature.
- A meeting was held in June with several real estate agents from the community and the Fridge & Freezer Pickup program was explained to them and collateral provided for them to give out to clients.

- Due to the duration of the program, and the revised appliance eligibility requirements to a minimum age of 20 years old, this initiative appears to have reached market saturation and has been under consideration for removal from the portfolio.
- As results are very responsive to province-wide advertising, IESO provincial marketing should continue to play a key role.
- Better relationships with retailers may play a role in increasing participation in this initiative. Retailers can provide opportunities to capture replacement appliances and have them decommissioned after a sale has been committed.
- In an effort to capture additional savings in the perceived last year of the initiative, the eligibility requirement for refrigerators was revised from 20 years old to 15 years old in Q2 2014, prior to the conclusion of this program by December 31, 2014.
- Due to the announcement by the IESO that the Appliance Retirement program was going to cease at the end of 2014, many LDCs lowered (or removed) their marketing support for the program.

# 3.2.1.2 Appliance Exchange Initiative (Exhibit E)

# **Initiative Activities/Progress:**

A marketing plan was developed to promote this program to residential customers, which included the following for the Exchange Event:

- News Release was issued to local media outlets to make them aware of the Exchange Event and the eligibility requirements, dates and locations in Collingwood.
- Tweets were issued from the Collus PowerStream twitter account to promote the event.
- A poster was displayed in the office.
- Email blast sent to customers that featured a promo for the exchange event.

- The design of the initiatives, including eligible measures and incentives amounts are developed through the Residential Working Group. Retail partner(s) are contracted by the IESO to deliver the initiatives province-wide. Individual LDCs have the opportunity to stage in-store events to drive the distribution of LDC coded coupons and promotion of other programs in the portfolio
- This initiative, eligible measures and incentive amounts are influenced by the retail partner with very limited involvement from the LDCs. The restrictive, limited and sometimes non-participation of local stores can diminish the savings potential for this initiative.
- To date there has only been one retailer participant in the Appliance Exchange Initiative.
- Evaluation, Measurement, and Verification ("EM&V") results indicated that the value of savings for retired room air conditioners ("AC") has dropped resulting in the retail participant not accepting window ACs during the Spring 2013 event.
- Notification to LDCs regarding retailer participation and eligible measures continues to be delayed. Improved communications will aid in appropriate resource allocation and marketing of the initiative.
- This initiative may benefit from the disengagement of the retailer and allowing LDCs to conduct these events, possibly as part of a larger community engagement effort, with the backing of the IESO's contractor for appliance removal.
- The initiative appears to require more promotion from retailers and LDCs.

# 3.2.1.3 HVAC Incentives Initiative (Exhibit B)

# **Initiative Activities/Progress:**

A marketing plan was developed to promote this program to residential customers, which included the following for the Heating & Cooling Incentive:

- A pull up banner was displayed in the lobby at our office and at community events to promote the Heating & Cooling incentive.
- Literature for the Heating & Cooling incentive was displayed in our office lobby.
- Literature for the Heating & Cooling incentive was given out to participants of the peaksaverPLUS program as part of a leave-behind package that also include the saveONenergy COUPONS and Fridge & Freezer Pickup program literature.
- In January a bill insert ran to all 17,000 customers that promoted the Heating & Cooling Incentive along with peaksaverPLUS and the COUPON programs.
- In the months of February; July/August and December a bill insert ran to all 17,000 customers that promoted the Heating & Cooling Incentive.
- A meeting was held in June with several real estate agents from the community and the HVAC program was explained to them and collateral given out.
- In March a mat story and advertisement appeared in a local monthly paper to promote the HVAC program.
- Throughout the year the HVAC program was promoted on Collus PowerStream's twitter account.
- Several times during the year the HVAC program was mentioned in the e-blasts sent to Collus PowerStream customers.
- In November collateral for the HVAC program was distributed via a flyer drop in the local Collingwood and Stanyer newspapers.

- Incentive levels appear to be insufficient to prompt participants to upgrade HVAC equipment prior to end of useful life. An Air Miles incentive was introduced in 2013 to try and encourage early replacement.
- This initiative is contractor driven with LDCs responsible for marketing efforts to customers. More engagement with the HVAC contractor channel should be undertaken to drive a higher proportion of furnace and central air conditioner sales to eligible units.
- There are cases where non-participating contractors are offering their own incentives (by discounting their installations to match the value of the IESO incentive) to make the sale. As this occurs outside of the initiative, savings are not credited to LDCs. IESO should consider this in future program impact evaluation studies.

• Changes to the schedules in 2014 to allow for incentives for new installations, rather than strictly replacement units, may prove to be effective in providing greater results, increasing provincial participation by 20% over 2013.

# 3.2.1.4 Conservation Instant Coupon Initiative (Exhibit A)

### **Initiative Activities/Progress:**

A marketing plan was developed to promote this program to residential customers, which included the following for the COUPON program:

- In January a bill insert ran to all 17,000 customers that promoted the COUPON program along with peaksaverPLUS and the Heating & Cooling Incentive.
- The top five COUPONS were printed and given to customers throughout the year in various ways.
- COUPONS were given out to participants of the peaksaverPLUS program as part of a leave-behind package that also include literature on the Heating & Cooling Incentive and Fridge & Freezer Pickup program.
- COUPONS were left behind at the homes of Home Assistance Participants.
- A meeting was held in June with several real estate agents from the community and the COUPON program was explained to them and COUPON collateral was provided for them to give out to clients.
- IESO radio commercials for the COUPONS program aired on two of our local stations (The Peak FM & The Beach FM) from the end of March-end of April. During this time we scheduled an interview on The Peak FM's morning show and had a utility representative and conservation expert go on-air and promote the COUPONS program.
- All of the Collus PowerStream branded COUPONS were added to a unique URL on our website www.CollusPowerStream.ca/COUPONS for customers to download and print.
- In September and November printed COUPONS were distributed via a flyer drop in the local Collingwood and Stayner newspapers.
- Throughout the year the COUPONS program was promoted on Collus PowerStream's twitter account.
- Several times during the year the COUPNS program was promoted in e-blasts sent to Collus PowerStream customers.

### **Additional Comments:**

 The timeframe for retailer submission of redeemed coupons vary from retailer to retailer, and in some cases has been lengthy. The delays and incomplete results reporting limits the ability to react and respond to initiative performance or changes in consumer behaviour.

- The product list could be distinctive from the Bi-Annual Retailer Event Initiative in order to gain more consumer interest and uptake.
- Program evolution, including new products and review of incentive pricing for the coupon initiatives, should be a regular activity to ensure continued consumer interest.
- All coupons have been provided with LDC custom coding in 2014 which allows LDCs to promote coupons based on local
  preferences. However, LDCs were not provided with customer coded coupon results until early 2015 and thus, had no
  indication of their redemption rates.
- Consumer experience varies amongst retailers offering coupon discounts which can limit redemptions. For example, a particular high volume 'participating retailer' does not accept coupons and have their own procedure. In addition, some retailers have static lists of eligible products and will not discount eligible products unless the product on the list.
- The saveONenergy programs would benefit from specific end cap displays, aisle product stands and product-specific areas. Having products throughout a retail environment weakens the impact.

# 3.2.1.5 Bi-Annual Retailer Event Initiative (Exhibit C)

# **Initiative Activities/Progress:**

A marketing plan was developed to promote this program to residential customers, which included the following for the biannual retailer event:

- News Release was issued to local media outlets to make them aware of the bi-annual retailer event.
- Tweets were issued from the Collus PowerStream twitter account to promote the event.
- A poster was displayed in the office.
- Email blast sent to customers that featured a promo on the bi-annual retailer event.

- This initiative is strongly influenced by the retail participants and has no direct involvement from the LDCs.
- LDCs have the opportunity to stage in-store events to drive the distribution of LDC-coded coupons and promotion of other programs in the portfolio; however, this requires cooperation from the local retailer and LDC staff resources.
- The product list has had minimal changes over the past four years.
- Limited engagement of local retailers can restrict the savings potential for this initiative.
- Program evolution, including new products and review of incentive pricing for the coupon initiatives, must be a regular
  activity to ensure continued consumer interest.

- The product list could be distinctive from the Conservation Instant Coupon Initiative in order to gain more consumer interest and uptake.
- A review conducted by the EDA Residential Working Group in 2011 identified three areas of need for initiative
  evolution: 1) introduction of product focused marketing; 2) enhanced product selection; and 3) improved training for
  retailers as retail staffs tend not to be knowledgeable regarding the products or promotion.
- This initiative may benefit from a more exclusive relationship with a retailer appropriate to the program. There should be a value proposition for both the retailer and LDC.
- Independently, the Retailer Co-op and Bi-Annual Retailer Event Initiative may not present a value for the investment of LDC resources to support these events and should be backed by a strong residential portfolio.

# 3.2.1.6 Retailer Co-op

### **Initiative Activities/Progress:**

Collus PowerStream did not directly participate in the retailer co-op.

### **Additional Comments:**

- This is a retailer initiative with no direct benefit to LDCs
- Limited engagement of local retailers can restrict the savings potential for this initiative.
- The availability of retailer and/or LDC staff with product knowledge and the ability to conduct demonstration in store
  during the events would be an asset. This could be a valuable role for LDCs, however many LDCs are limited by
  available resources and unable to participate.

# 3.2.1.7 New Construction Program (Schedule B-2)

# **Initiative Activities/Progress:**

Collus PowerStream did not have any participants in this program.

- This initiative provides incentives to home builders for incorporating energy efficiency into their buildings. To support
  this, LDCs need to provide education to consumers regarding the importance of choosing the energy efficient builder
  upgrade options without an immediate benefit to the consumer.
- In 2012 the application process was streamlined, however continues to be too cumbersome for builders. This, combined with limited return, has resulted in this initiative continuing to under-achieve.
- Administrative requirements, particularly with individual home modeling, must align with perceived stakeholder payback.

- The addition of LED light fixtures, application process improvement, and moving the incentive from the builder to the home-owner may increase participation.
- This initiative may benefit from collaboration with the natural gas utilities.

# 3.2.1.8 Residential Demand Response Program (Schedule B-3)

### **Initiative Activities/Progress:**

2014 was the first full year of the peaksaverPLUS program for Collus PowerStream, after launching the program in August, 2013. A comprehensive peaksaverPLUS marketing plan was developed and executed throughout 2014, which included:

- In January a bill insert ran to all 17,000 customers that promoted peaksaverPLUS along with the Heating & Cooling Incentive and the COUPON program.
- For the duration of the year, peaksaverPLUS was inserted into customer all 17,000 customers' bills on a bi-monthly basis. That way every other bill insert that they received was a different promo for peaksaverPLUS. In total customers received six bill inserts that promoted the peaksaverPLUS program.
- A direct mail piece was sent to 14,000 residential customers in the areas with the highest peaksaverPLUS participation in July and September.
- IESO radio commercials were aired in our area on two local stations during the month of January and April. We added onto these commercials by following up with our own peaksaverPLUS radio campaign. In January our commercials aired for three weeks following the IESO commercials and in May/June our campaign continued with commercials airing for another six weeks.
- A live on air interview was given on peaksaverPLUS in January and June during the timeframe the peaksaverPLUS radio campaign was being aired on The Peak FM.
- A total of 17 newspaper advertisements were included in all three weekly local papers (the Collingwood Connection; Stayner Sun and Blue Mountains Courier-Herald). The insertions were as follows: February two ads; March three ads; April six ads and May six ads.
- Collus PowerStream representative was interviewed about peaksaverPLUS by the Collingwood Enterprise Bulletin and they published a feature story on the program during the month of March, which included a photo and headline on the front page and a ½ page article and photo inside.
- Newspaper advertisements were included in the monthly publication Georgian Life for a five month period in the months of April/May/June/July/August.
- Two mat stories also appeared in the Georgian Life during the months of May and June.

- Advertisements were placed in the Summer Home Improvement sections of the Collingwood Connection and Stayner Sun which consisted of six ads running between June/July/August.
- Advertisements were placed in the Fall Home Improvement sections of the Collingwood Connection and Stayner Sun which consisted of eight ads running between September and October.
- Over 1,700 peaksaverPLUS collateral pieces were dropped as flyers into the Collingwood Connection during the weeks of September 22 & November 17.
- Online advertising focusing on peaksaverPLUS was carried out for seven weeks with Simcoe.Com between mid-April and the end of May.
- Online advertising in one month blocks was carried on HomeFinder.com during the months of May and July focusing on peaksaverPLUS.
- A series of blogs on Simcoe. Com were launched mid-May starting with one focused on peaksaverPLUS. These blog posts remained active for all of 2014.
- peaksaverPLUS door hangers were printed and delivered to the neighbouring houses after a peaksaverPLUS thermostat was installed at a customer's home. These were given to Honeywell in mid-February and were used throughout the year.
- A pull up banner was displayed in the lobby at our office and at events to promote peaksaverPLUS.
- Literature for peaksaverPLUS was displayed in our lobby.
- A meeting was held in June with several real estate agents from the community and the peaksaverPLUS program was explained to them and collateral was provided for them to give out to clients.
- peaksaverPLUS literature was left behind at the homes of Home Assistance Participants if they had central AC.
- Throughout the year the peaksaverPLUS program was promoted on Collus PowerStream's twitter account.
- Several times during the year the peaksaverPLUS program was promoted in e-blasts sent to Collus PowerStream customers.
- peaksaverPLUS participants received a Heat to Cool email blast in May and a Cool to Heat email blast in October so that they were aware of how to change their thermostat settings.

At the beginning of June we arranged for the Collingwood Mayor to have peaksaverPLUS installed in her home. We were able to use this as a media event and gather some publicity for the program with this install. A news release was issued following the install which included pictures of the install at the Mayor's home and the Mayor with her new thermostat and IHD. An email blast was created to promote the Mayor's install and send out along with many tweets about her participating in the program. An article and photos were also published in the Georgian Life newspaper.

### **Additional Comments:**

- Energy and demand savings have not been reported for the IHD portion of the program as 2013 EM&V results have
  determined zero savings associated with the IHD. IESO conducted another study in 2014, expanding its study territory
  beyond those included in the 2013 study to provincial rather than regional results. Results from the second study have
  not yet been announced.
- The variable funding associated with installing a load controllable thermostat is not sufficient unless it is combined with an IHD. This might not be possible at all times or when IHD is optional.
- Smart meters installed by most LDCs do not have the capability to communicate directly to an IHD and any mass replacement of newly installed meters with communicating abilities is not fiscally responsible. When proposing technical initiatives that rely on existing LDC infrastructure or technology there should be an extensive consultative process in order to prevent this type of problem in the future.
- Introduction of new technology requires incentives for the development of such technology. Appropriate lead times for LDC analysis and assessment, product procurement, and testing and integration into the smart meter environment are also required. Making seemingly minor changes to provincial technical specifications can create significant issues when all LDCs attempt to implement the solution in their individual environments.
- Given the different LDCs' smart meter environments and needs, each LDC is positioning the initiative with subtle differences. As such, greater program flexibility is required to address unique LDC needs

# 3.2.2 COMMERCIAL AND INSTITUTIONAL PROGRAM

**Description:** Provides commercial, institutional, agricultural and industrial organizations with energy-efficiency programs to help reduce their electrical costs while helping Ontario defer the need to build new generation and reduce its environmental footprint. Programs to help fund energy audits; replace energy-wasting equipment or pursue new construction that exceeds existing codes and standards. Businesses can also pursue incentives for controlling and reducing their electricity demand at specific times.

Targeted Customer Type(s): Commercial, institutional, agricultural, multi-family buildings, industrial.

**Objective:** Designed to assist building owners and operators as well as tenants and occupants in achieving demand and energy savings, and to facilitate a culture of conservation among these communities as well as the supply chains which serve them.

### Discussion:

Throughout 2014 the Commercial and Institutional ("C&I") Working Group continued its efforts to enhance the existing C&I programs and rectify identified program and system deficiencies. This has proven to be a challenging undertaking, normally taking months to complete sometimes relatively minor changes due to the current CDM framework. Overbuilt governance, numerous initiative requirements, complex program structure and lengthy change management have restricted growth without providing the anticipated improved measurement and verification results. In addition, Evaluation, Measurement

and Verification (EM&V) has not yet achieved transparency. LDCs are held accountable for these results yet are mostly completely removed from the process.

LDC program management has been hampered by varying rule interpretation, limited marketing ability, a somewhat inflexible online system of checks and balances and revolving IESO support personnel.

Despite these challenges the C&I Working Group, working in cooperation with the IESO, have managed to iron out many of the issues which could be rectified. In particular, an accomplishment of 2012 was the advent of the expedited change management as a mean to accelerate certain program changes. The benefits of expedited change management process were seen in 2013 and carried over into 2014.

Looking ahead there is an opportunity to make valuable changes to the current program suite for the Conservation First Framework, but LDCs and the IESO should look beyond the current initiatives and work to launch new programs, built on the strengths of the 2011-2014 programs, which will meet the needs of the industry and consumers.

Once again in 2014, Collus PowerStream along with the other CHEC LDCs benefited from the efforts of the Roving Energy Manager. The ability to collaboratively obtain this resource has increased the number of Collus PowerStream customers that were able to receive assistance with RETROFIT and AUDIT FUNING applications.

## 3.2.2.1 Efficiency: Equipment Replacement Incentive ("ERII") (Schedule C-2)

#### **Initiative Activities/Progress:**

The RETROFIT program is a very important part of the Collus PowerStream portfolio of conservation programs as it provides a large amount of savings towards our targets. All customers in the iCon system were contacted on a monthly basis to get updates on what stage their projects were at and to ensure that the projects were moving forward. Letters were typically sent via email and phone calls were made to customers who were more difficult to get a hold of. This helped to address customer concerns and also ensured that applications were followed through with.

The CHEC Roving Energy Manager (REM) met with a series of Collus PowerStream businesses and provided them with *Energy Savings Reports*, in order to help promote the saveONenergy business programs and also drive program participation.

The CHEC REM met with the CDM Manager on a monthly basis to review customers that he was meeting with and projects that were in process. He was also invited to attend the monthly Energy Managers Meeting's at PowerStream. He started attending these in the summer of 2013 and he continued to attend them throughout 2014 as they were a valuable place for him to make contact with other Energy Managers in the province and to learn about project success and issues that they are having.

Several marketing pieces were used to promote the RETROFIT program in 2014 which include;

- RETROFIT 'cheat sheet' and 'application tips' were created for the REM to use when meeting with customers and helping them through the program.
- RETROFIT specific sell sheet to be used at events and customer meetings

- RETROFIT pull up banner to be used at events and in office lobby.
- All C&I programs sell sheet to be used at events and customer meetings
- C&I saveONenergy presentation folder to be used at events and customer meetings

Collus PowerStream was part of the Simcoe County-Muskoka Regional IESO Event on February 25<sup>th</sup>. We had a booth setup to promote the business programs and also arranged for our CEO to attend the event and present a cheque to one of our RETROFIT customers. The cheque presentation occurred at the event and media release was issued with a photo from the event. The following week we also placed an advertorial in the local papers focused on the customer; their participation in RETROFIT and the cheque presentation.

In February we also worked closely with the IESO to develop a case study on one of our customers. This was released at the end of that month. Since this customer was also about to receive an incentive payment for their project we schedule a cheque presentation from the Collus PowerStream Board of Directors to the customer at our office location in March, 2014. We then placed an advertorial in the local papers focused on the customer; their participation in RETROFIT and the cheque presentation.

Some of the projects received in 2014 were not fully completed by December 31, 2014 and as such have transitioned into the extension framework.

#### **Additional Comments:**

- A large proportion of LDC savings are attributed to ERII.
- Capability building programs from industrial programs have had very positive contributions to ERII program.
- A number of customer-facing issues in iCon (the IESO's centralized application system) have been resolved; however, key LDC administrative back office processing issues continue to be a challenge. For example, currently LDCs are unable to record back office information to complete review and approval process using iCon.
- Applicants and applicant representatives continue to express dissatisfaction and difficulty with the online application system. This issue has been addressed by LDCs through application training workshops, Key Account Managers ("KAMs"), channel partner/contractor training and LDC staff acting as customer application representatives. Although this has been an effective method of overcoming these issues and encouraging submissions, it also reflects on the complexity and time consuming nature of the application process. As such, applicant representatives continue to influence the majority of applications submitted. Continued development of channel partners is essential to program success.
- Lighting is still the most popular measure. Other market sectors are not as engaged yet, specifically the mechanical sector. There continues to be significant barriers to program participation from HVAC (Unitary AC) and compressed air channel partners
- Prescriptive and engineered worksheets provide a much needed simplified application process for customers.
   However, the eligible measures need to be updated and expanded in both technology and incentive amounts to address changing product costs and evolution of the marketplace.

- A focus on demand incentives has limited some energy project opportunities. In particular, night lighting projects have significant savings potential for customers but tend to have incentives of 10% or less of project cost.
- The requirement to have a customer invoice the LDC for their incentive is very burdensome for the customer and results in a negative customer experience and another barrier to participation.
- There is redundancy in the application process as customers may need to complete a worksheet and then enter most of that information over to the online application form. This can be cumbersome.
- Processing head office application became much easier for the lead LDC after schedule changes came into effect in August 2013. The changes implemented allowed the lead LDC to review and approve all facilities in a head office application on behalf of all satellite LDCs under certain circumstances.
- The application process for head office projects remains a significant barrier. Applicants need to manually enter one
  application per facility associated with the project which can be extremely onerous, often requiring a dedicated
  resource.
- Streamlining of the settlements systems resulted in significant improvement in the payment process in 2013.
- IESO implemented a cut-off date of July 31, 2014 for approval of 2014 social housing adder (SHA) under ERII program. IESO had instructed that any SHA applications that will be submitted to IESO after July 31, 2014 will not be honored for SHA, however, they failed to mention that it is the timeline to submit the funding request to the IESO by the LDCs and not the submission date of the applications to IESO's ICON system by the Applicant (Customer). As a result there were some confusions and some of the applications that were submitted to IESO's iCON by July 31, 2014 but LDCs submitted the funding request to IESO at a later date (once LDCs have completed review of the applications) were not honored for SHA. Additionally, the formal letter confirming that the SHA annual allocation has been exceeded was received by conservation officers on July 15, 2014 leaving them only 15 days to inform the customers and this created a negative customer experience.
- Introduction of several new prescriptive measure worksheets including Plug Loads and Refrigeration were introduced in September 2014 allowed for new opportunities, albeit late in the framework.
- The Ministerial Directive provides continuity of the conservation programs for the participant, with clear direction on LDC administrative funding for 2015, which helps to avoid a gap in program delivery.

# 3.2.2.2 Direct Install Initiative ("DIL") (Schedule C-3)

# **Initiative Activities/Progress:**

The Small Business Lighting program continues to be an area of high participation and success for Collus PowerStream, having over 1,000 customers taking part in the program by the end of 2014.

At the beginning of 2014 we ensured that all assessors and installers working on the Small Business Lighting program were clearly branded and received:

• Collus PowerStream ID badges

- Collus PowerStream/saveONenergy branded golf shirts and baseball hats
- Small Business Lighting appointment cards, which the assessors could leave behind after their visits and when appointments were booked

In February, 2014 we sent a direct mail piece directly to our remaining eligible customers in Stayner. This was then followed up by targeted outbound calling to these same customers.

In March, 2014 we sent a direct mail piece to all remaining eligible customers. The mailer was followed up by targeted outbound calling to these same customers. While this campaign was in market we had a six week radio campaign airing on the local Collingwood station, the Peak FM. Print advertisements also ran in the Collingwood Business and Industrial Review; Collingwood Connection; Stayner Sun and Blue Mountains Courier Herald.

In the spring of 2014 our delivery agent for the program, brought an LED van to our service territory. This van would visit remaining eligible business and install LED lights on the spot if they met program qualifications. In advance of the van coming to our area we launched a promotional blitz to ensure customers were notified before the van stopped by their business:

- Small Business Lighting press release (sent May 20)
- Newspaper article appeared on Simcoe.com (May 21)
- Small Business Lighting e-blast (sent May 22)
- Golf shirts for installers (delivered May 23)
- Collus PowerStream vehicle magnet for van (delivered May 23)
- Name tags for installers (picked up May 26)
- Baseball hats for installers (picked up May 27)
- Newspaper advertising in Collingwood Connection (May 29)
- Mention of LED van on The Peak FM updates (May 26-28)
- Tweets issued about the LED van on the Collus PowerStream twitter account

A blog post was issued on Simceo.Com during the second week of June and this remained active for the duration of 2014.

The Small Business Lighting program was also promoted at community events all year long with signage about the program posted on either side of the Collus PowerStream quench buggy. Literature for the program was always available onsite at events and in our office lobby.

In the fall of 2014 we did a second push with the LED van that was extremely successful.

- Small Business Lighting e-blast
- Tweets issued about the LED van on the Collus PowerStream twitter account
- Golf shirts for installers
- Collus PowerStream vehicle magnet for van
- Name tags for installers
- Baseball hats for installers

Throughout the year we tried to work with our contractors to educate them on joined units/bulk metered accounts in an attempt to have some of these customers participate in the program as well. This brought us some new participants as a couple bulk metered accounts ended up participating in the program.

We worked with Simcoe County School Board to assess their leased spaces; portables; etc. for eligibility under the program and site visits were conducted at 12 locations, however, none of these locations met the program qualifications.

#### **Additional Comments:**

- LED lighting was introduced in 2013 as a new measure and has been well received by customers who may not have previously qualified for DIL eligible upgrades. This is an efficient product with a long estimate useful life.
- Cold start high output lighting was removed from the program. This particularly affected the farming customers who now have limited options within the program.
- Successful execution of the previous version of this initiative has resulted in reduced potential for the 2011-2014 initiative in some LDC's territories.
- The inclusion of a standard incentive for additional measures increased project size and drove higher energy and demand savings results in some situations. However, LDCs are unable to offer these standard incentives to prior participants. The ability to return to prior participants and offer a standard incentive on the remaining measures has potential to provide additional energy and demand savings.
- Many customers are not taking advantage of any additional measures, which may present an opportunity to for future savings with a new program offering.

## 3.2.2.3 Existing Building Commissioning Incentive Initiative (Schedule C-6)

## **Initiative Activities/Progress:**

Promotion of this initiative with similar programs was utilized. The opportunity for this initiative is limited in Collus PowerStream's service territory.

#### **Additional Comments:**

- Initiative name does not properly describe the initiative.
- There was minimal participation for this initiative. It is suspected that the lack of participation in the program is a result of the initiative being limited to space cooling and a limited window of opportunity (cooling season) for participation.
- Participation is mainly channel partner driven, however the particulars of the initiative have presented too much of a significant barrier for many channel partners to participate.
- The customer expectation is that the program be expanded to include a broader range of measures for a more holistic
  approach to building recommissioning and chilled water systems used for other purposes should be made eligible and
  considered through change management.

• This initiative should be reviewed for incentive alignment with ERII, as currently a participant will not receive an incentive if the overall payback is less than 2 years.

## 3.2.2.4 New Construction and Major Renovation Initiative ("HPNC") (Schedule C-4)

#### **Initiative Activities/Progress:**

This program is dependent upon the type of development and renovations proposed in the service territory. Development is monitored to determine projects available for this program. In 2014 there were no major construction projects.

#### **Additional Comments**

- With the Ministerial Directive issued December 21, 2012, facilities with a completion date near the end of 2014 with some confidence that they will be compensated for choosing efficiency measures.
- Participants have until the end of 2014 to submit their applications for the projects that will be completed in 2015. However savings achieved will be accounted for in the new framework (2015 2020).
- The custom application process requires considerable customer support and skilled LDC staff. The effort required to participate through the custom stream exceeds the value of the incentive for many customers.
- There are no custom measure options for items that do not qualify under the prescriptive or engineered track as the custom path does not allow for individual measures, only whole building modelling.
- The requirement to have a customer invoice the LDC for their incentive is very burdensome for the customer and results in a negative customer experience and a potential barrier to participation.

### 3.2.2.5 Energy Audit Initiative

### **Initiative Activities/Progress:**

Prior to 2014 Collus PowerStream had promoted the Audit Funding program but had only received one application. During this year we continued to promote the program and ended up receiving and completing three applications. In 2014 we used the following marketing pieces:

- AUDIT FUNDING specific sell sheet to be used at events and customer meetings
- All C&I programs sell sheet to be used at events and customer meetings
- C&I saveONenergy presentation folder to be used at events and customer meetings

To help with program promotion the CHEC Roving Energy Manager (REM) met with a series of Collus PowerStream businesses and provided them with *Energy Savings Reports*, in order to help promote the saveONenergy business programs and also drive program participation.

The CHEC REM met with the CDM Manager on a monthly basis to review customers that he was meeting with and projects that were in process. He was also invited to attend the monthly Energy Managers Meeting's at PowerStream. He started attending these in the summer of 2013 and he continued to attend them throughout 2014 as they were a valuable place for him to make contact with other Energy Managers in the province and to learn about project success and issues that they are having.

#### **Additional Comments**

- The introduction of the new audit component for one system (i.e. compressed air), has increased customer participation.
- The energy audit Initiative is considered an 'enabling' initiative and 'feeds into' other saveONenergy initiatives.
- LDCs are receiving some savings towards their targets from an audit which is mainly attributable to operational savings.
- Audit reports from consultants vary considerably and in some cases, while they adhere to the initiative requirements, do not provide value for the participant. A standard template with specific energy saving calculation requirements should be considered.
- Customers look to the LDCs to recommend audit companies. A centralized prequalified list provided by the IESO may be beneficial.
- Participants are limited to one energy audit which restricts enabling and direction to the other initiatives. This has been
  revised in 2014 and LDCs are now able to consider additional customer participation when presented with a new scope
  of work.
- Consideration should be given to allowing a building owner to undertake an audit limited to their lighting system. This way they may receive valuable information from a neutral third party regarding the appropriate lighting solution for their facility instead of what a local supplier would like to sell.
- The requirement to have a customer invoice the LDC for their incentive is very burdensome for the customer and results in a negative customer experience and a potential barrier to participation

### 3.2.3 INDUSTRIAL PROGRAM

**Description:** Owners of large facilities are discovering the benefits of energy efficiency through the Industrial Programs which are designed to help identify and promote energy saving opportunities. It includes financial incentives and technical expertise to help organizations modernize systems for enhanced productivity and product quality, as well as provide a substantial boost to energy productivity. This allows facilities to take control of their energy so they can create long-term competitive energy advantages which reach across the organization.

Targeted Customer Type(s): Industrial, Commercial, Institutional, Agricultural

#### Objective:

 Offer distribution customers capital incentives and enabling initiatives to assist with the implementation of large projects and project portfolios;

- Implement system optimization projects in systems which are intrinsically complex and capital intensive; and
- Increase the capability of distribution customers to implement energy management and system optimization projects.

#### Discussion:

The Industrial Program Portfolio has been able to provide valuable resources to large facilities such as energy managers and enabling engineering studies. The engineering studies in particular provide a unique opportunity for a customer to complete a comprehensive analysis of an energy intensive process that they would not otherwise be able to undertake. Energy managers provide customers with a skilled individual whose only role is to assist them with conservation initiatives. To date these energy managers have played a key role in customer participation. The KAM and the industrial project supervisors have also been instrumental in managing the embedded energy managers ("EEM") during the first and second half of the year respectively, and promoting activity to the Class A customers.

Within the Collus PowerStream service territory there are a limited number of customers who can take advantage of the industrial portfolio of programs. In many instances the focus has been on the ERII program from the C&I portfolio. The promotion of industrial programs has been assisted by the CHEC Roving Energy Manager, a position which was filled in the 3<sup>rd</sup> quarter of 2012.

Due to the size, scope and long lead time of these initiatives and associated projects, the December 2012 Ministerial Directive provides some security for the continuation of the conservation programs and associated compensation for the participant; however, the subsequent savings would not be attributed to an LDC's current target for projects that go into service after 2014.

Extensive legal documents, complex program structure and lengthy change management have restricted the change and growth of this portfolio. While the expedited change management has benefited the commercial portfolio, the industrial portfolio has not seen the same results due to the narrow scope of the process. For 2013 the change to the threshold for small capital projects and the new small capital project agreement improved the number of projects and savings achieved within Process and Systems Upgrades Initiation ("PSUI"). Likewise, a decision to proceed with applications for natural gas load displacement generation projects also increase uptake, although the limited time to bring new projects into service is a barrier.

#### 3.2.3.1 Process and Systems Upgrades Initiative ("PSUI") (Schedule D-1)

#### **Initiative Activities/Progress:**

Process and Systems Upgrades is promoted by the Roving Energy Manager where appropriate. The REM met with a number of customers in 2014 and was able to promote the benefits of the saveONenergy programs to them.

#### **Additional Comments:**

 Numerous energy studies have been submitted and completed. This is a strong indication that there is potential for large projects with corresponding energy savings. Most of these studies have been initiated through Energy Manager and Key Account Manager ("KAM") resources.

- This initiative is limited by the state of the economy and the ability of a facility to complete large capital upgrades.
- There is typically a long sales cycle for these projects, and a long project development cycle. As such, limited results are
  expected to be generated in 2014. The majority of the results are expected in 2015 with a much reduced benefit to
  cumulative energy savings targets.
- Delays with processing funding payments have caused delayed payments to participants beyond contract requirements. In some cases, LDCs have developed a separate side agreement between the LDC and participant acknowledging that the participant cannot be paid until the funds are received.
- Given the size of the projects involved, the contract required for PSUI is a lengthy and complicated document. A key to
  making PSUI successful is the new agreement for 'small' projects with simplified and less onerous conditions for the
  customer.
- To partially address this, changes were made to the ERII program which allowed smaller projects to be directed to the
  commercial stream. Most industrial projects to-date has been submitted as ERII projects due to less onerous contract
  and M&V requirements. Therefore, PSUI engineering studies and LDC's industrial resources (e.g., Energy
  managers, KAMs) contribute significant savings to other programs such as ERII.
- A business case was submitted by the Industrial Working Group in July 2012 which changed the limit for a small project
  from 700 MWh to 1 million dollars in incentives. This would allow more projects to be eligible for the new small capital
  project agreement and increase participant uptake, while still protecting the ratepayer. This small capital project
  agreement was finalized through change management in September 2013.
- With the considerable customer interest in on-site load displacement (co-generation) projects, the initiative should be reviewed to ensure that these projects may be accepted as part of the PSUI Initiative. The IESO was reviewing waste heat projects only and all other co-generation projects were on hold prior to June 2013, when a decision was made to allow natural gas load displacement generation projects to proceed under PSUI. It is expected that a number of projects may proceed although results may not be counted towards LDC 2011-2014 framework target unless applications are submitted before the end of 2014 and the projects are in service before December 31, 2015.
- The requirement for customer invoice to the LDC and provide proof of payment to consultants for their incentive is very burdensome for the customer and results in a negative customer experience and another barrier to participation.

### 3.2.3.2 Monitoring and Targeting ("M&T") Initiative (Schedule D-2)

#### **Initiative Activities/Progress:**

Monitoring and Targeting is promoted by the Roving Energy Manager where appropriate. The REM met with a number of customers in 2014 and was able to promote the benefits of the saveONenergy programs to them.

#### **Additional Comments:**

- The M&T initiative is targeted at larger customers with the capacity to review the M&T data. This review requires the
  customer facility to employ an energy manager, or a person with equivalent qualifications, which has been a barrier for
  some customers. As such, only five applications has been completed in 2014, province wide.
- The savings target required for this initiative can present a significant challenge for smaller customers.
- Through the change management process in 2013, changes were made to ERII to allow smaller facilities to employ M&T systems.

#### 3.2.3.3 Energy Manager Initiative (Schedule D-3)

#### **Initiative Activities/Progress:**

The CHEC Roving Energy Manager (REM) met with a series of Collus PowerStream businesses and provided them with *Energy Savings Reports*, in order to help promote the saveONenergy business programs and also drive program participation.

The CHEC REM met with the CDM Manager on a monthly basis to review customers that he was meeting with and projects that were in process. He was also invited to attend the monthly Energy Managers Meeting's at PowerStream. He started attending these in the summer of 2013 and he continued to attend them throughout 2014 as they were a valuable place for him to make contact with other Energy Managers in the province and to learn about project success and issues that they are having.

To support the efforts of the Roving Energy Manager access to the OPA training and other programs has been made available to the REM. This assists in building capacity and will lead to continued good performance in future years.

### **Additional Comments:**

- The Embedded Energy Managers ("EEMs") have proven to be a popular and useful resource for larger customers. There are approximately 50 EEMs and 22 Roving Energy Managers ("REMs") being utilized by customers across the province.
- LDCs that are too small to qualify for their own REM are teaming up with other utilities to hire a REM to be shared by the group of utilities.
- At the beginning, it took longer than expected to set up the energy manager application process and unclear communication resulted in marketing and implementation challenges for many LDCs.
- Some LDCs and customers are reporting difficulties in hiring capable Roving and Embedded Energy Managers (REM/EEM), in some instances taking up to several months to have a resource in place.
- There have been a number of studies identified by energy managers and they have been able to build capacity and deliver energy savings projects within their respective large commercial/industrial facilities.
- The requirement that 30% of targets must come from non-incented projects is identified as an issue for most EEMs/REMs. The EDA Industrial Working Group has proposed to remove this requirement for REMs only as they are not resident full time at a customer facility to find the non-incented savings.

# 3.2.3.4 Key Account Manager (Schedule D-4)

#### **Initiative Activities/Progress:**

Does not apply as large accounts are not present in service territory.

#### **Additional Comments**

- Customers appreciate dealing with a single contact to interface with an LDC, a resource that has both the technical and business background who can communicate easily with the customer and the LDC.
- Finding this type of skill set has been difficult. In addition, the short-term contract and associated energy targets discourage some skilled applicants resulting in longer lead times to acquire the right resource.
- This resource has been found by some LDCs to be of limited value due to the part-time nature of the position and limited funding. In addition, the position role has been too narrow in scope to provide assistance to the wider variety of projects with which LDCs may be struggling.

### 3.2.3.5 **Demand Response 3 ("DR3") (D-6)**

### **Initiative Activities/Progress:**

Does not apply as DR3 was cancelled for 2014.

#### **Additional Comments:**

- Until early 2013, customer data was not provided on an individual customer basis due to contractual requirements with the aggregators. This limited LDCs' ability to effectively market to prospective participants and confirm savings.
- The Industrial Working Group had a discussion with the IESO and representatives of the Ministry on proposed changes
  for the DR3 program. No program improvements were made in 2013. However, it was accepted that prior participants
  who renew their DR3 contract within the 2011-2014 term will contribute to LDC targets.
- As of 2013, aggregators are able to enter into contracts beyond 2014. This has allowed them to offer a more competitive contract price (five years) than the previously limited one- to two-year contracts. However on March 31, 2014 the Minister of Energy issued a directive entitled "Continuance of the IESO's Demand Response Program under IESO management" which restricts the IESO from granting any more contract schedules to aggregators, as the program is being transitioned from the OPA to the IESO. This decision will prevent the DR3 program from continuing to grow until the IESO is ready to assign DR3 capacity through a new auction process.
- Metering and settlement requirements are complicated and can reduce customer compensation amounts, and present
  a barrier to some customers.
- Compensation amounts have been reduced from the previous version of this program and subsequently there has been a corresponding decrease in renewal rates.

## 3.2.4 LOW INCOME INITIATIVE (HOME ASSISTANCE PROGRAM) (Schedule E-1)

#### **Initiative Activities/Progress:**

To ensure the program was successful this year we started off the year with two different Customer Service Training sessions to remind Collus PowerStream staff about the HAP program and make sure all questions on the program were answered and they were ready to take calls.

A marketing plan was put in place and the following tactics were executed:

- Printing of collateral pieces to use as handouts.
- Bill insert to all 17,000 residential and business customers during the month of March/April.
- Information made available to customers in our office lobby.
- Cross promotion of HAP was encouraged with the Customer Service Representatives when dealing with a high bill complaint from a customer or if a customer was eligible for LEAP/had previously participated in LEAP.

• A meeting was held in June with several real estate agents from the community to promote the HAP program, a presentation was given on this program and collateral given out.

In 2014 we worked hard to get social housing units within our communities to participate. This required a lot of outreach with the social housing providers and many phone calls/meetings. We were able to get Simcoe County Social Housing on board and completed a large number of installs in their buildings.

We had monthly meetings with our Service Provider (Green Communities) and their Delivery Agent (the Environment Network). Mid-month meetings were also held directly with the Environment Network to ensure we were keeping in close contact and that the program was moving along.

The Environment Network promoted the program in a number of ways, including:

- Articles in monthly e-newsletter
- Information posted on delivery agents website
- Inclusion of promotional materials in food baskets from local food bank and Salvation Army
- Promotion of program to local senior's groups and Church groups

#### **Additional Comments:**

- The process for enrolling in social housing was complicated and time consuming. This was addressed in late 2012 and showed benefits since 2013.
- The financial scope, complexity, and customer privacy requirements of this initiative are challenging for LDCs and most have contracted this program out. This initiative may benefit from an IESO contracted centralized delivery agent.

## 3.2.5 PRE-2011 PROGRAMS

Savings were realized towards LDC's 2011-2014 target through pre-2011 programs. The targeted customer types, objectives, descriptions, and activities of these programs are detailed in Appendix B

# 2014 Collus PowerStream CDM Results

# 4.1 Participation and Savings

4

				tal Activity				Demand Saving			et Incremental Er			Program-to-Date Veri (exclude	fied Progress to Targe fes DR)
Initiative	Unit	(new prog		curring within ti ug period)	he specified	(new peak	demand saving specified repo	p from activity orting period)	within the	(new energy so		ty within the sp lod)	ecfiled reporting	2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energ Sevines (kWh)
		2011*	2012*	2013*	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014	2014
onsumer Program															
ppllence Retirement	Appliances	128	97	45	65	8	5	3	4	52,747	38,949	19,139	27,975	20	393,785
opliance Exchange	Appliances	11	2	21	18	1	0	4	4	1,671	542	7,758	6,650	9	30,029
VACIncentives	Equipment	99	112	151	217	46	27	32	45	87,511	48,132	57,436	83,687	149	692,999
onservation Instant Coupon Booklet	bems	1,456	88	994	3,344	3	1	1	7	53,469	3,996	22,026	89,894	12	359,810
Annual Retailer Event	Items	2,721	3,032	2,700	13,788	5	4	3	23	83,982	76,536	49,096	351,226	35	1,014,953
taller Co-op	items	0	0	0	0	0	0	0	0	0	0	0	0	0	0
esidential Demand Response	Devices	0	0	268	620	0	0	142	279	0	0	0	0	279	0
esidential Demand Response (IHD)	Devices	0	0	259	612	0	0	0	0	0	0	0	0	0	0
esidential New Construction	Homes	0	0	0	0	0	0	0	0	0	0	0	0	0	0
onsumer Program Total						63	37	186	362	279,380	168,155	155,456	559,433	504	2,491,577
udness Program															
strofit	Projects	4	15	29	28	16	170	146	83	116,644	692,251	828,080	552,595	402	4,689,236
rect Install Lighting	Projects	37	42	113	244	61	45	108	277	161,529	173,197	399,272	992,786	462	2,875,106
uliding Commissioning	Buildings	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ew Construction	Buildings	0	0	0	0	0	0	0	0	0	0	0	0	0	0
nergy Audit	Audits	0	1	0	3	0	0	0	40	0	0	0	195,821	40	195,821
mall Commercial Demand Response	Devices	0	0	0	0	0	0	0	0	0	0	0	0	0	0
mall Commercial Demand Response (IHD)	Devices	0	0	0	0	0	0	0	0	0	0	0	0	0	0
emand Response 3	Fedities	1	1	1	1	37	37	38	35	1,451	542	505	0	35	2,498
usiness Program Total						114	252	292	436	279,625	865,990	1,227,807	1,741,202	940	7,762,660
and the bosons							202			Erojeas	*******	4,42,7000	231-12,202		1,100,000
ocess & System Upgrades	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
onitoring & Targeting	Projects	0	0	0	0	0	0	0	0	0	ő	0	0	0	0
nergy Manager	Projects	0	0	0	0	0	0	0	0	0	ő	0	0	0	0
stroft	Projects	1	0	0	0	3	0	0	0	20.487	0	0	0	3	81.948
emand Response 3	Fedities	0	0	0	0	0	0	0	0	0	0	0	0	0	0.,540
ndustrial Program Total	recities	-				3		0	0	20.487	0	0	0	3	81,948
idustriai Program Total						-			_	20,107		_		-	04,010
ome Assistance Program	Homes	0	19	32	112	0	1	2	15	0	14,523	19,295	71.822	17	153,798
ome Assistance Program Total	1101100					0	1	2	15	0	14,523	19,295	71.822	17	153,798
													14,040		
ome Assistance Program	Homes	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Frect Install Lighting	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aboriginal Program Total	Projects	-				0	0	0	0	0	0	0	0	0	0
Boriginal Program Local									0	0		0	U	0	0
re-2011 Programs completed in 2011															
ectricity Retrofit Incentive Program	Projects	2	0	0	0	3	0	0	0	15,807	0	0	0	3	63,228
igh Performance New Construction	Projects	2	0	0	0	44	0	0	0	225,075	313	0	0	44	901,238
oronto Comprehensive	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
fultifemily Energy Efficiency Rebates	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OC Custom Programs	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
re-2011 Programs completed in 2011 Tot	al					47	0	0	0	240,882	313	0	0	47	964,466
ther															
ogram Enabled Savings	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ne-of-Use Savings	Homes	0	0	0	n/e	0	0	0	129	0	0	0	0	129	0
C Pflots	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ther Total					-	0	0	0	129	0	0	0	0	129	0
											-86,828	0	0	-14	-347,311
Sustments to 2011 Verified Results							-14	0	0		-00,025	-	-		
Sustments to 2012 Verified Results								39	65			291,605	379,817	104	2,014,265
Justments to 2013 Verified Results									38				230,045	38	460,166
nergy Efficiency Total						188	254	299	627	818,923	1,048,439	1,402,053	2,372,456	1,326	11,451,951
emand Response Total (Scenario 1)						37	37	180	315	1,451	542	505	0	315	2,498
djustments to Previous Years' Verified R	esults Total					0	-14	39	103	0	-86,828	291,605	609,862	127	2,127,120
PA-Contracted LDC Portfolio Total (inc. A	djustments)					226	277	518	1,044	820,374	962,153	1,694,162	2,982,317	1,768	13,581,569
tivity and savings for Demand Response resources t	ty and savings for Demand Response resources for each year represent the savings from all active facilities or devices *includes adjust					ents after Final Repor	ts were issued						Full OEB Target:	3,140	14,970,000
ntracted since January 1, 2011 (reported cumulative	nlyj.							sand response reso	one bases				ete (Scenario 1):	56.3%	90.7%

Initiative	Unit		(new program activity occurring within the specified (new				esults due to V mental Peak Der emand savings fr	mand Savings (k om activity with			cremental Energ	rity within the s		Program-to-Date Verif (excluded)	fied Progress to Target des DR) 2011-2014 Net
		2011*	reporting pe				pecified reporting				reporting pe		2014	Demand Savings (kW)	Cumulative Energy Savings (kWh)
		2011*	2012*	2013*	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014	2014
Consumer Program		_								_					
Appliance Retirement	Appliances	0	0	0	-	0	0	0		0	0	0	-	0	0
Appliance Exchange	Appliances	0	0	0		0	0	0		0	0	0		0	0
HVAC Incentives	Equipment	-48	1	13	_	-14	0	3		-26,608	144	5,810	-	-11	-94,380
Conservation Instant Coupon Booklet	Items	23	0	3		0	0	0		788	0	67	$\perp$	0	3,285
Bi-Annual Retailer Event	Items	234	0	0		0	0	0		6,240	0	0	$\perp$	0	24,958
Retailer Co-op	Items	0	0	0	$\perp$	0	0	0		0	0	0	$\perp$	0	0
Residential Demand Response	Devices	0	0	0	$\perp$	0	0	0		0	0	0	$\perp$	0	0
Residential Demand Response (IHD)	Devices	0	0	0	$\perp$	0	0	0	$\perp$	0	0	0	$\perp$	0	0
Residential New Construction	Homes	0	0	0		0	0	0		0	0	0	$\perp$	0	0
Consumer Program Total						-14	0	3		-19,581	144	5,877		-11	-66,137
Business Program															
Retrofit	Projects	0	6	4		0	98	33		0	646,699	219,087		131	2,378,271
Direct Install Lighting	Projects	0	2	0		0	2	0		0	6,723	0		2	20,170
Building Commissioning	Buildings	0	0	0		0	0	0		0	0	0		0	0
New Construction	Buildings	0	0	0		0	0	0		0	0	0	$\Box$	0	0
Energy Audit	Audits	0	1	0		0	4	0		0	17,855	0		4	53,565
Small Commercial Demand Response	Devices	0	0	0	$\Box$	0	0	0		0	0	0	$\top$	0	0
Small Commercial Demand Response (IHD)	Devices	0	0	0		0	0	0		0	0	0	$\top$	0	0
Demand Response 3	Facilities	0	0	0		0	0	0		0	0	0	$\top$	0	0
Business Program Total						0	104	33		0	671,278	219,087	+	136	2,452,006
Industrial Program									_						-,:,:
Process & System Upgrades	Projects	0	0	0		0	0	0		0	0	0	$\overline{}$	0	0
Monitoring & Targeting	Projects	0	0	0		0	0	0		0	0	0	+	0	0
	Projects	0	0	0		0	0	0		0	0	0	+	0	0
Energy Manager Retrofit	Projects	0	0	0		0	0	0		0	0	0	+	0	0
	Facilities	0	0	0		0	0	0		0	0	0	+	0	0
Demand Response 3	recilities		_ •				0	0				0	+-	0	0
Industrial Program Total						0		0	$\perp$	0	0	0		0	
Home Assistance Program					_			_					_	_	
Home Assistance Program	Homes	0	0	2		0	0	2		0	0	5,158	+	2	10,239
Home Assistance Program Total						0	0	2		0	0	5,158	$\perp$	2	10,239
Aboriginal Program															
Home Assistance Program	Homes	0	0	0		0	0	0		0	0	0		0	0
Direct Install Lighting	Projects	0	0	0		0	0	0		0	0	0		0	0
Aboriginal Program Total						0	0	0		0	0	0		0	0
Pre-2011 Programs completed in 2011															
Electricity Retrofit Incentive Program	Projects	0	0	0		0	0	0		0	0	0	T	0	0
High Performance New Construction	Projects	0	0	0		0	0	0		-67,247	0	0		0	-268,989
Toronto Comprehensive	Projects	0	0	0		0	0	0		0	0	0		0	0
Multifamily Energy Efficiency Rebates	Projects	-	0	0		0	0	0		0	0	0		0	0
	Projects	0	0	0		0	0	0		0	0	0		0	0
LDC Custom Programs	riojects	-			4	_				_		_	+		_
Pre-2011 Programs completed in 2011 Total						0	0	0		-67,247	0	0	$\perp$	0	-268,989
Other Other															
Program Enabled Savings	Projects	0	0	0		0	0	0		0	0	0		0	0
Time-of-Use Savings	Homes	0	0	0		0	0	0		0	0	0		0	0
LDC Pilots	Projects	0	0	0		0	0	0		0	0	0		0	0
Other Total						0	0	0		0	0	0		0	0
Adjustments to 2011 Verified Results						-14				-86,828			T	-14	-347,311
Adjustments to 2012 Verified Results						-24	104			-90,020	671,422			104	2,014,265
Adjustments to 2012 Verified Results  Adjustments to 2013 Verified Results							204	38			972,422	230.122		38	460.166
Aujustinents to ford venilled results															,
Total Adjustments to Previous Years' Verified Results						-14	104	38		-86,828	671,422	230,122		127	2,127,120

**Table 4: Summarized Program Results** 

#	Initiative	Activity Unit	Upt	ake/ Partic	ipation Uni	its
Consu	mer Programs		2011	2012	2013	2014
1	Appliance Retirement	Appliances	128	97	45	65
2	Appliance Exchange	Appliances	11	2	21	18
3	HVAC Incentives	Equipment	99	112	151	217
4	Conservation Instant Coupon Booklet	Items	1,456	88	994	3,344
5	Bi-Annual Retailer Event	Coupons	2,721	3,032	2,700	13,788
6	Retailer Co-op	Items	0	0	0	0
7	Residential Demand Response (switch / Programmable Thermostat)	Devices	0	0	268	620
8	Residential Demand Response (IHD)	Devices	0	0	259	612
9	New Construction Program	Houses	0	0	0	0
Busin	ess Programs					
10	Efficiency: Equipment Replacement – Retrofit	Projects	4	15	29	28
11	Direct Installed Lighting	Projects	37	42	113	244
12	Existing Building Commissioning Incentive	Buildings	0	0	0	0
13	New Construction and Major Renovation Incentive	Buildings	0	0	0	0
14	Energy Audit	Audits	0	1	0	3
15	Commercial Demand Response (part of the Residential program schedule)	Devices	0	0	0	0
16	Demand Response 3 (part of the Industrial program schedule)	Facilities	1	1	1	1
Indust	trial Programs					
17	Process & System Upgrades	Projects	0	0	0	0
18	Monitoring & Targeting	Projects	0	0	0	0
19	Energy Manager	Managers	0	0	0	0
20	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	Projects	1	0	0	0
21	Demand Response 3	Facilities	0	0	0	0
Home	Assistance Program					

22	Home Assistance Program	Homes	0	19	32	112
Pre-2	D11 Programs					
23	Electricity Retrofit Incentive Program	Projects	2	0	0	0
24	High Performance New Construction	Projects	2	0	0	0
25	Toronto Comprehensive	Projects	0	0	0	0
26	Multifamily Energy Efficiency Rebates	Projects	0	0	0	0
27	Data Centre Incentive Program	Projects	0	0	0	0
28	EnWin Green Suites	Projects	0	0	0	0

**Table 5: 2014 Verified Results** 

		Realizat	ion Rate	Gross S	Savings	Net-to-G	ross Ratio	Net Sa	vings	Contributio	n to Targets
#	Initiative	Peak Demand Savings	Energy Savings	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Peak Demand Savings	Energy Savings	Incremental Peak Demand Savings (kW)	Incrementa I Energy Savings (kWh)	Program-to-Date: Net Annual Peak Demand Savings in 2014 (kW)	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh)
Cons	sumer Programs										
1	Appliance Retirement	n/a	n/a	9	59,390	42%	44%	4	27,975	20	393,785
2	Appliance Exchange	100%	100%	7	12,634	53%	53%	4	6,650	9	30,029
3	HVAC Incentives	100%	100%	94	176,099	51%	51%	45	83,687	149	692,999
4	Conservation Instant Coupon Booklet	100%	100%	4	52,058	194%	202%	7	89,894	12	359,810
5	Bi-Annual Retailer Event	100%	100%	13	200,770	174%	175%	23	351,226	35	1,014,953
6	Retailer Co-op	n/a	n/a	0	0	n/a	n/a	0	0	0	0
7	Residential Demand Response*	n/a	n/a	279	0	n/a	n/a	279	0	279	0
8	Residential New Construction	n/a	n/a	0	0	n/a	n/a	0	0	0	0
Busi	ness Programs										
9	Efficiency: Equipment Replacement	78%	103%	109	722,342	71%	72%	83	552,595	402	4,689,236
10	Direct Install Lighting	78%	83%	293	1,051,825	94%	94%	277	992,786	462	2,875,106
11	Existing Building Commissioning Incentive	n/a	n/a	0	0	n/a	n/a	0	0	0	0
12	New Construction and Major Renovation Incentive	n/a	n/a	0	0	n/a	n/a	0	0	0	0
13	Energy Audit	96%	100%	59	291,834	68%	67%	40	195,821	40	195,821
14	Commercial Demand Response (part of the Residential program schedule)	n/a	n/a	0	0	n/a	n/a	0	0	0	0

15	Demand Response 3* (business)	n/a	n/a	35	0	n/a	n/a	35	0	35	2,498
Indu	strial Programs										
16	Process & System Upgrades	n/a	n/a	0	0	n/a	n/a	0	0	0	0
17	Monitoring & Targeting	n/a	n/a	0	0	n/a	n/a	0	0	0	0
18	Energy Manager	n/a	n/a	0	0	n/a	n/a	0	0	0	0
19	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	0%	0%	0	0	0%	0%	0	0	3	81,948
20	Demand Response 3* (Industrial)	n/a	n/a	0	0	n/a	n/a	0	0	0	0
Hom	e Assistance Program										
21	Home Assistance Program	30%	82%	15	71,822	100%	100%	15	71,822	17	153,798
Pre-	2011 Programs completed in 2011										
22	Electricity Retrofit Incentive Program	n/a	n/a	0	0	n/a	n/a	0	0	3	63,228
23	High Performance New Construction	100%	100%	0	0	50%	50%	0	0	44	901,238
24	Toronto Comprehensive	n/a	n/a	0	0	n/a	n/a	0	0	0	0
25	Multifamily Energy Efficiency Rebates	n/a	n/a	0	0	n/a	n/a	0	0	0	0
26	Data Centre Incentive Program	n/a	n/a	0	0	n/a	n/a	0	0	0	0
Othe	er										
27	Time-of-Use Savings	n/a	n/a	129	0	n/a	n/a	129	0	129	0
Adju	stment										
	Adjustments to previous year's verified results	n/a	n/a	141	817,513	n/a	n/a	103	609,862	127	2,127,120

**Table 6: Summarized 2014 Program Results** 

	Gross S	avings	Net Sa	vings	Contributio	n to Targets
Program	Incremental Peak Demand Savings (MW)	Incremental Energy Savings (GWh)	Incremental Peak Demand Savings (MW)	Incremental Energy Savings (GWh)	Program-to-Date: Net Annual Peak Demand Savings (MW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (GWh)
Consumer Program Total	406	500,952	362	559,433	504	2,491,577
Business Program Total	497	2,066,001	436	1,741,202	940	7,762,660
Industrial Program Total	0	0	0	0	3	81,948
Home Assistance Program Total	15	71,822	15	71,822	17	153,798
Pre-2011 Programs completed in 2011 Total	0	0	0	0	47	964,466
Other – Time of Use	129	0	129	0	129	0
Adjustments to Previous Year's Verified Results	141	817,513	103	609,862	127	2,127,120
Total IESO Contracted Province-Wide CDM Programs *please make sure you complete the total line	1,188	3,456,288	1,045	2,982,319	1,767	13,581,569

# 4.2 Evaluation, Measurement and Verification ("EM&V") Findings

The following table provides a summary of the 2014 EM&V findings for the evaluated saveONenergy program initiatives. These key evaluation findings are derived from the 2014 evaluations of the saveONenergy programs and issued by the IESO.

**Table 7: Evaluation Findings** 

#	Initiative	IESO Province-Wide Key Evaluation Findings
Cons	sumer Programs	
1	Appliance Retirement	<ul> <li>Participation increased slightly to 22,563 (7.7%) in 2014 compared with 20,952 in 2013.</li> <li>Since 2011 overall Initiative participation has decreased nearly 60%.</li> <li>The greatest decrease was seen in the number of refrigerators collected year-over-year</li> <li>Of appliances collected, refrigerators and freezers remain the most dominate measures accounting for 90%. However, window AC units and dehumidifiers saw a marked increase of 29.6% and 27% respectively in 2014.</li> <li>Net to gross ratio (NTG) increased slightly to 47% compared to 43% as reported for 2013 and 2012 program years.</li> </ul>
2	Appliance Exchange	<ul> <li>Participation in 2014 increased by 6.5% to 5,685 appliances from 5,337 compared to 2013</li> <li>Per-unit savings has increased by 36.6% as ENERGY STAR criteria increases and more participants purchase ENERGY STAR replacements appliances. This resulted in a 6.5% increase in Net Energy &amp; Demand savings.</li> <li>Net to Gross ratio (NTG) remained unchanged from 2013 at 52.6%</li> </ul>
3	HVAC Incentives	<ul> <li>In 2014 net savings increased by 20% from 2013 and overall participation increased by 17% to 113,002 compared to 2013</li> <li>The ECM measure has remained the dominant source of savings since 2011</li> <li>Per unit furnace savings increased 12.7% due to a shift in the number of participants who use their furnace fan continuously both before and after the retrofit.</li> <li>Per unit energy and demand savings assumptions for central air conditioners decreased by 56% due to reduced run hours</li> <li>Net to Gross ratio (NTG) remained unchanged from 2013 at 48%</li> </ul>

#	Initiative	IESO Province-Wide Key Evaluation Findings
4	Conservation Instant Coupon Booklet	<ul> <li>Customers redeemed more than five times as many annual coupons in 2014 as in 2013. In total, approximately 500, 000 Annual Coupons were redeemed in 2014 with 110,000 being LDC Coded Coupons.</li> <li>There was a further reduction in savings for lighting measures from changes in the baseline due to the phase out of 72W and 100W incandescent bulbs.</li> <li>Despite the significant per unit savings reductions for lighting measures, the Net Annual Savings from Annual Coupons in 2014 was more than six times that in 2013. This is primarily because of higher participation and the inclusion of LED coupons and full year availability of all coupons.</li> <li>Measured NTG ratios grew significantly in 2014. The NTG ratio is 53% higher in 2014 than in 2013 due to the inclusion of participant spillover, i.e., purchase of additional coupon initiative measures and general energy efficient measures without the use of a coupon but influenced by the coupon program.</li> </ul>
5	Bi-Annual Retailer Event	<ul> <li>Over 2.5 million coupons were redeemed in 2014 compared with 2013 redemptions</li> <li>The Bi-Annual Coupon Event saw a substantial increase in the number of coupons redeemed during the Spring and Fall Events in 2014 compared to 2013. The increase can be linked to a substantial increase in LED purchases with event coupons accounting for 84% of all Bi-Annual Coupons redeemed.</li> <li>Reductions in per unit savings were overshadowed by the increase in coupon redemptions. Overall savings increased by approximately 85% in 2014 compared with 2013 Demand and Energy Savings.</li> <li>Similar to the Annual Coupon Event measured NTG ratios rose by 53% compared to 2013 NTG ratios. The rise is due to the inclusion of participant spillover, i.e., purchase of additional coupon initiative and general energy efficient measures without the use of a coupon but influenced by the Bi-Annual Coupon event.</li> </ul>
7	Residential Demand Response	<ul> <li>There were an additional 55,000 CAC load control devices enrolled in the program in 2014 relative to 2013, which increased the capacity of the residential segment of the program from 129 MW in 2013 to 143 MW in 2014.</li> <li>Ex-ante impacts on a per device basis were lower than 2013 average.</li> <li>There were no energy savings in 2014 because there were no systemwide events were called.</li> <li>Load impact estimates for the average small and medium business and for electric water heaters among residential customers remain consistent with prior year's analysis</li> <li>IHD's yielded no statistically significant energy savings.</li> </ul>

#	Initiative	IESO Province-Wide Key Evaluation Findings
8	Residential New Construction	<ul> <li>The most significant growth in the initiative has been participation in the prescriptive track. MW savings in the prescriptive track increased from zero summer peak MW savings in 2011 to 352 summer peak kW savings in 2014.</li> <li>The custom track saw participation for the first time in 2014. One custom project of 55 homes contributed 37 kW demand savings and 0.5 GWh of energy savings.</li> <li>New deemed savings for performance track homes were developed and implemented, resulting more consistent realization rates for 2014.</li> <li>ENERGY STAR New Homes was introduced as an eligible measure within the performance track in 2014. As a result, these ENERGY STAR New Homes provided 1% of peak kW savings and 4% of kWh savings.</li> </ul>
Busi	ness Programs	
9	Efficiency: Equipment Replacement	<ul> <li>The number of prescriptive projects increased slightly (1.2%) in 2014 to a total of 4,812. However, total net verified savings and peak demand savings dropped significantly (19% and 30% respectively). This is due to a 19% drop in per-project net verified savings, which can be attributed to lower track level realization rate and net-to-gross ratio and is related to smaller average project sizes.</li> <li>The quantity of engineered projects increased 22% to a total of 3,906 in 2014, combined with a net verified savings per project increase of 17% the track saw a dramatic 47% increase in net energy savings.</li> <li>Lower demand realization rates across the program as a whole were tied to equipment differences between reported and calculated values. For lighting projects the difference was most often seen in baseline and retrofit lamp wattages and ballast factors. Non-lighting tracks exhibited lower demand realization rates due to the following factors:         <ul> <li>Variations in load profiles where the evaluation team found equipment that operated fewer hours or at a lower capacity than expected from the project documentation.</li> <li>Inconsistencies in equipment nameplate data (typically efficiency or capacity) between project documentation and equipment installed on-site.</li> <li>Weather dependent control systems leading to shifts in how often the equipment operated.</li> </ul> </li></ul>

#	Initiative	IESO Province-Wide Key Evaluation Findings
10	Direct Install Lighting	<ul> <li>23,784 projects were completed in 2014 (34% increase from 2013)</li> <li>The category of 'Other' business type projects increased 71% when compared to 2013. Agribusinesses make up 74% of the 'Other' business type category. While growth in the number of projects is good, agribusinesses projects, in particular, have a realization rate of only 58.5%. This is primarily due to the verified annual operating hours being approximately 45% less than the assumed annual operating hours.</li> <li>In 2014 LED measures provide the most net savings of any other SBL measure making up 59% of net energy savings in 2014. Their long effective useful life and retention of a larger amount of savings after the baseline adjustment allow LED measures to also contribute substantially more lifetime savings than CFLs and linear fluorescents.</li> <li>Overall energy and demand realization rates decreased by 1.8 and 3.1 %, respectively, from 2013.         <ul> <li>Sampled rural projects have lower energy realization rather than urban projects (63.8% compared to 83.5%) across the 2011 – 2014 sample</li> <li>Sampled rural projects have even lower demand realization rather than urban projects (49.7% compared to 74.1%) across the 2011 – 2014 sample</li> </ul> </li> <li>The annual proportion of net energy savings from rural projects has increased from 30% in 2011 to 41% in 2014</li> </ul>
11	Existing Building Commissioning Incentive	<ul> <li>5 projects completed the Hand-off stage in 2014.</li> <li>Energy realization rate was estimated at 116% and demand realization rate at 202%.</li> <li>About 31 participants are still in the scoping stage or implementation stage.</li> </ul>
12	New Construction and Major Renovation Incentive	<ul> <li>Savings have increased every year of the initiative with an increased participation of 50% from 2013</li> <li>In 2014, most savings came from the custom track providing 71% of demand savings.</li> <li>Participation from HVAC measures occurred for the first time in 2014 (providing 14% of summer peak kW savings and 5% of kWh savings).</li> <li>The measures with the greatest impact on low realization rates for prescriptive measures were high volume low speed (HVLS) fans and variable frequency drives (VFDs).</li> <li>Province-wide realization rates declined slightly for 2014, as a result of the wider variety of measures being implemented.</li> <li>Key drivers for participation are: initial project cost, followed by electricity costs and expected energy savings are the key drivers to participation.</li> </ul>

	Initiative	IESO Province-Wide Key Evaluation Findings
13	Energy Audit	<ul> <li>The number of audits carried out in 2014 decreased by 20% when compared to 2013.</li> <li>The average per audit net energy savings attributable to the Audit Funding Initiative was estimated to be 65 MWh and 13 kW of summer peak demands savings.</li> <li>Time series analysis quantified additional savings from measures implemented after initial program year. It was found that an additional 7.2%, 5.0% and 0.1% can be added to all previously reported projects in 2011, 2012 and 2013 projects, respectively.</li> </ul>
Indu	strial Programs	
16	Process & System Upgrades	<ul> <li>10 PSUI Capital Incentive projects implemented in 2014, compared to 5 in2013.</li> <li>4 projects are Behind the Meter Generation (BMG) projects.</li> <li>The remaining projects were energy efficiency improvements in pumping, cooling, compressed air systems and industrial processes.</li> <li>Each project received its own Net to Gross (NTG) value. NTG ratios ranged from 62% to 100% for the 10 projects</li> <li>Realization rates remained high in 2014, ranging from 90 to over 100%.</li> </ul>
17	Monitoring & Targeting	<ul> <li>5 projects were completed in 2014, compared to 3 in 2013.</li> <li>Low realization rates (36% for energy savings and 59% for demand savings) are attributed to reported savings based on total potential savings rather than non-incentivized realized savings, while the verified savings only include non-incentivized savings).</li> </ul>
18	Energy Manager	<ul> <li>379 Energy Manager projects were completed in 2014 compared to 306 in 2013</li> <li>Energy Managers are important drivers of non incented savings projects.</li> <li>In 2014, the Energy Mangers initiative has contributed to 35% of energy savings for Industrial Programs</li> </ul>
20	Demand Response 3	<ul> <li>The largest 25 contributors account for 60% of the contractual demand reduction – that is, less than 4% of contributors account for the majority of the load reductions.</li> <li>A multi-year analysis indicates 2012 was the best year for program performance. After 2012, a single large contributor left the program, resulting in a decrease in overall performance in 2013 and 2014. This highlights the risk having a highly concentrated program with a few large contributors representing a large share of the program capacity.</li> <li>There were no events called in 2014 and the contracted capacity was similar to 2013.</li> </ul>

#	Initiative	IESO Province-Wide Key Evaluation Findings
21	Home Assistance Program	<ul> <li>Participation decreased by 5 % to 25,424 participants compared with 2013 (26,756). The decrease was due to six LDCs not participating in the Home Assistance Program in 2014.</li> <li>Realization rates for demand doubled in 2014 to 56% compared with 2013 (26%). However, energy realization rates decreased by 10% to 77% compared with 2013 results.</li> <li>Realization rate for demand savings increased due to the adoption of the new FAST Tool which incorporated updated kW savings for weatherization measures in particular insulation measures.</li> </ul>

# 4.3 Spending

Table 8 and Table 9 summarize the total spending by initiative that Collus PowerStream has incurred in 2014 and cumulatively since 2011. It is detailed by the Program Administration Budget (PAB), Participant Based Funding (PBF), Participant Incentives (PI) and Capability Building Funding (CBF).

Table 8: 2014 Spending

Initiative	PAB	PBF	PI	CBF	TOTAL		
Consumer Program							
Appliance Retirement	\$7,906.81	-	-	-	\$7,906.81		
Appliance Exchange	\$3,600.90	-	-	-	\$3,600.90		
HVAC Incentives	\$7,906.81	-	-	-	\$7,906.81		
Conservation Instant Coupon Booklet	\$5,753.85	-	-	-	\$5,753.85		
Bi-Annual Retailer Event	-	-	-	-	-		
Retailer Co-op	-	-	-	-	-		
Residential Demand Response	\$95,199.08	\$144,850.00	-	-	\$240,049.08		
New Construction Program	\$3,600.90	-	-	-	\$3,600.90		
Business Program				,			
Efficiency: Equipment Replacement	\$60,573.97	-	\$60,743.30	-	\$121,317.27		
Direct Installed Lighting	\$55,582.30	\$63,045.00	\$300,366.55	-	\$418,993.85		
Existing Building Commissioning Incentive	\$1,899.52	-	-	-	\$1,899.52		
New Construction and Major Renovation Initiative	\$1,899.52	-	-	-	\$1,899.52		
Energy Audit	\$1,899.52	-	-	-	\$1,899.52		
Small Commercial Demand Response (part of the Residential program schedule)	-	-	-	-	-		
Demand Response 3 (part of the Industrial program schedule)	-	-	-	-	-		
Industrial Program							
Process & System Upgrades	-	-	-	-	-		
<ul><li>a) preliminary engineering study</li></ul>	-	-	-	-	-		
b) detailed engineering study	-	-	-	-	-		
c) program incentive	-	-	-	-	-		
Monitoring & Targeting	-	-	-	-	-		
Energy Manager		-	-	-	-		
Key Account Manager	-	-	-	-			
Efficiency Equipment Replacement Incentive (part of the C&I program schedule)	-	-	-	-	-		
Demand Response 3	\$9,659.61	-	-	-	\$9,659.61		
Home Assistance Program			<u> </u>				
Home Assistance Program	\$31,189.74	\$25,868.00	\$53,646.53	-	\$110,704.27		
TOTAL SPENDING	\$286,672.53	\$233,763.00	\$414,756.38	-	\$935,191.91		

**Table 9: 2011 - 2014 Spending** 

Initiative	PAB	PBF	PI	CBF	TOTAL			
Consumer Program								
Appliance Retirement	\$16,903.14	-	-	-	\$16,903.14			
Appliance Exchange	\$9,697.37	-	-	-	\$9,697.37			
HVAC Incentives	\$17,036.19	-	-	-	\$17,036.19			
Annual Coupons	\$16,040.38	-	-	-	\$16,040.38			
Bi-Annual Retailer Event	\$2,516.61	-	-	-	\$2,516.61			
Retailer Co-op	-	-	-	-	-			
Residential Demand Response	\$157,880.63	\$246,328.90	-	-	\$404,209.53			
New Construction Program	\$102,436.72	-	-	-	\$102,436.72			
Business Program								
Equipment Replacement	\$109,974.43	-	\$377,249.47	-	\$487,233.90			
Direct Installed Lighting	\$107,910.57	\$112,373.40	\$493,155.80	-	\$713,439.77			
Existing Building Commissioning Incentive	\$11,326.36	-	-	-	\$11,326.36			
New Construction and Major Renovation Initiative	\$12,026.36	-	-	-	\$12,026.36			
Energy Audit	\$12,026.36	-	-	-	\$12,026.36			
Small Commercial Demand			-					
Response	-	-		-	-			
Demand Response	-	-	-	-	-			
Industrial Program								
Process & System Upgrades	-	-	-	-	-			
a) preliminary engineering study	-	-	-	-	-			
b) detailed engineering study	-	-	-	-	-			
c) program incentive	-	-	-	-	-			
Monitoring & Targeting	-	-	-	-	-			
Energy Manager	\$2,034.92	-	-	-	\$2,034.92			
Key Account Manager ("KAM")	-	-	-	-				
Equipment Replacement Incentive	-	-	-	-				
Demand Response 3	\$28,387.37	_	_	_	\$28,387.37			
Home Assistance Program	7-2/201101			<u> </u>	7-27227121			
Home Assistance Program	\$47,875.82	\$36,225.80	\$59,120.73	_	\$143,222.35			
Pre 2011 Programs	, ,= ====	, , , , , , , , , , , , , , , , , , , ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,			
Electricity Retrofit Incentive								
Program	-	-	-	-	-			
High Performance New								
Construction	_	-	_		_			
Toronto Comprehensive	-	-	-	-	-			
Multifamily Energy Efficiency	_	-	-	-	-			
Rebates  Data Centre Incentive Program	-	_	-	-	_			

Initiatives Not In Market					
Midstream Electronics	-				-
Midstream Pool Equipment	-				-
Demand Service Space Cooling	-				-
Demand Response 1	-				-
Home Energy Audit Tool	-				-
<b>Total CDM Program Spending</b>	\$654,073.23	\$394,928.10	\$929,562.00	-	\$1,978,527.33

# 4.4 Additional Comments

Over the 2014 year the Roving Energy Manager's contract was renewed. This was seen as a major accomplishment and benefit to maintain this resource for the CHEC LDCs. The ability of the REM to work in a number of territories, develop and maintain relationships and to support the appropriate reporting has resulted in customers moving forward with projects to the benefit of the LDCs.

The COUPON program saw renewed pick up in 2014 which has added to the overall target achievement. While this increased activity in COUPONS is welcomed it is recognized that this level of activity earlier in the program would have greatly increased the cumulative kWh achieved. The customer uptake when offered the opportunity for savings on energy conservation measures illustrates the awareness which has been generated in this sector. Moving forward the more diverse programs will be required in the residential sector to maintain the interest and savings.

Applications for the RETROFIT program remained strong over 2014. This sector and the supporting consultants and contractors appear to have incorporated the retrofit program into many of their activities. The ability to maintain a working relationship with customers offering a consistent program has assisted to maintain a profile for the program and interest in the sector.

The SMALL BUSINESS LIGHTING program has experienced strong success in 2014 partly due to the addition of LED lights. In 2014 Collus PowerStream surpassed the total enrollment of 1,000 customers in the small business lighting the program.

# **5 Combined CDM Reporting Elements**

# **5.1 Progress Towards CDM Targets**

Table 10: Net Peak Demand Savings at the End User Level (MW)

Implementation Period		Ann	ual (MW)	
implementation Period	2011	2013	2014	
2011 – Verified by IESO	0.2	0.2	0.2	0.2
2012 – Verified by IESO	0.0	0.3	0.2	0.2
2013 – Verified by IESO			0.5	0.3
2014		0.1	0.1	1.0
Verifi	ed Net Annual Pea	ak Demand Sa	vings in 2014:	1.8
Collus PowerStr	eam Corp. 2014 A	nnual CDM Ca	pacity Target:	3.1
Verified Portion	of Peak Demand S	avings Target	Achieved (%):	56.3%

Table 11: Net Energy Savings at the End-User Level (GWh)

Implementation Period		Annual	Cumulative (GWh)			
implementation Period	2011	2012	2013	2014	2011-2014	
2011 – Verified by IESO	0.8	0.8	0.8	0.7	3.2	
2012 – Verified by IESO	-0.1	1.0	0.9	0.9	2.8	
2013 – Verified by IESO	0.0	0.3	1.7	1.7	3.7	
2014	0.0	0.4	0.61	3.0	4.0	
Verif	ied Net Cum	ulative Energ	gy Savings 2	011-2014:	13.6	
Collus PowerStream Co	rp. 2011-201	L4 Cumulativ	e CDM Ener	gy Target:	15.0	
Verified Port	ion of Cumu	lative Energy	Target Ach	ieved (%):	90.7%	

# **5.1.1 Summary of Target Achievement**

Our final results of 56.3% for our peak demand target are very close to what we projected it would be in the 2013 Annual Report (53%). While our final energy savings came in at 90.7%, higher than we had forecasted (77.8%). Part of the reason our demand savings increased was because we did not account for TOU savings when we prepared our last strategy document in the 2013 Annual Report. However, there were also many successes within the saveONenergy programs.

The business programs continue to be the main driver towards target achievement. In 2014, our Small Business Lighting program reached participation levels that we have not seen since the early years of the Power Savings Blitz program. There were 244 small businesses that participated in 2014, which is more than participated between 2011-2013. One of the main drivers for the increased number of participants in the SBL program has been the introduction of LED measures. However, additionally, Collus PowerStream put together several new marketing campaigns which renewed interest in the program. The RETROFIT program continued with much success for Collus PowerStream in 2014 with 28 completed applications. Additionally, we received and completed three AUDIT FUNDING projects which had not been forecast.

This was the first full year that the peaksaverPLUS program had been offered to Collus PowerStream customers. When the program was launched in 2013, it received a large amount of interest from customers and we doubled the forecasted enrolment. We thought the program would continue on an upward trend in 2014 and although we installed more customers than the previous year, we did not reach our targeted amount.

Collus PowerStream received a large amount of demand and energy savings from the COUPON programs (both annual COUPONS and the bi-annual retailer event). In 2014 Collus PowerStream received credit 17,232 COUPONS, which is over 13,000 more than the previous year. There was a renewed interest in the Fridge & Freezer Pickup program with 20 more participants in 2014 over 2013. The HVAC program continued to be a top performer for Collus PowerStream with more participants than ever, taking part in the program.

# 5.2 Variance from Strategy

Throughout the 2011-2014 framework Collus PowerStream strived to achieve 100% of the reduction targets as set by the OEB, however, despite our best efforts we were unable to achieve this. In the 2012 Annual Report Collus PowerStream first indicated our concerns over reaching these targets and submitted a revised strategy showing that we would not meet the forecasted targets.

The following year in the 2013 Annual Report another revised strategy was submitted which forecast that Collus PowerStream would achieve 53% of the peak demand target and 77.8% of the energy target. During the final year of the framework a strong push was put on the CDM programs in order to achieve the maximum amount of savings and as a result we ended up achieving 56.3% of our peak demand target and 90.7% of our energy target, both higher than forecast the previous year.

We can attribute the increase in energy savings to the excellent performance of the COUPON program; which can largely be attributed to the introduction of the LED lighting COUPON. Although we did not achieve the expected target for peaksaverPLUS enrollments in 2014 and the exante for this program dropped substantially, our peak

demand savings still ended up being higher than forecasted because we did not account for savings from TOU in our 2013 forecast.

Over the past four years Collus PowerStream has worked hard to build a culture of conservation within the communities it serves. There is a high level of awareness in our communities about the saveONenergy programs and those customers who have participated are very satisfied with the programs. However, it was evident by 2012 that Collus PowerStream would fall short on achieving the targets. There are several contributing factors:

- Collus PowerStream has a very limited large commercial and institutional customer base with which to promote conservation projects, making it difficult to achieve higher savings.
- On March 31st, 2014 the Minister of Energy issued a directive entitled "Continuance of the OPA's
  Demand Response Program under IESO management" which effectively halted new customer enrollments in
  the DR3 program until the IESO has a program in market. This relaunch did not take place in 2014, which
  impacted the ability for new customers to enroll in the DR3 initiative and had an impact on LDCs achieving
  demands savings from this program and therefore, reduced the amount of savings they could achieve towards
  that target.
- When the original strategy was developed the net-to-gross ratio used was higher than what the IESO evaluation now shows.
- When the original strategy was developed TOU savings were expected to be significantly higher than what was actually released in the final IESO results.
- Initial program implementation took longer than anticipated, including the vendor procurement process (i.e. time spent developing RFP's, selecting vendors and negotiating contracts) which caused delays in programs getting into market and therefore in customer participation.
- Collus PowerStream experienced a slower than forecasted uptake in programs by residential and business customers.

With those challenges in mind and despite continuing improvements to existing programs Collus PowerStream was unable to meet their 2011-2014 targets with the available slate of IESO Programs. Every effort was made to work with the existing portfolio of programs to ensure the maximum contribution to target was achieved. Collus PowerStream is looking forward to building on the strengths and key successes of the 2011-2014 programs to meet the needs of their business and residential consumers.

	Annual Mil	estone - Co	ntribution t	o 2014 Targ	et																	
COLLUS POWER STREAM		2011 Original Strategy Projection				11 Results	2012 Revised Strategy Projection		Actual 2	012 Results		Revised Projection	Actual 2013 Results		2014 Revised Strategy Projection		Actual 2014 Results		Revised Total Projected Reduction		Contribution	on to Target
Category - Consumer	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh		
Provincial Programs																						
Appliance Retirement	9	199,375	8	216,921	7	117,864	5	118,474	0	60,000	7	53,794	10	50,000	8	34,625	30	439,189	28	423,814		
Instant Discounts (Rebates)	4	380,940	8	549,805	2	172,871	5	241,593	0	60,000	4	142,245	0	30,000	30	441,120	17	963,643	47	1,374,763		
HVAC Discounts (Rebates)	27	169,456	46	350,043	28	129,732	27	144,397	30	120,000	31	114,872	60	100,000	45	83,687	164	709,312	149	692,999		
Demand Response	143	1,081,228	0	0	0	0	0	0	60	50,000	142	0	200	0	137	0	342	0	279	0		
Midstream Incentives	0	4,147	0	0	0	0	0	0	0	0	0	0			0	0	0	0	0	0		
New Construction	3	29,169	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Low Income	0	0	0	0	0	0	1	43,570	0	30,000	2	38,406	0	70,000	15	71,822	3	151,976	18	153,798		
Provincial Consumer Total	186	1,864,315	62	1,116,769	37	420,467	38	548,034	90	320,000	186	349,317	270	250,000	235	631,254	556	2,264,120	521	2,645,374		
OEB Approved Programs																						
General Consumer		0	0	0	0	0	0	0			0	0		0	0	0	0	0	0	0		
Low Income		0	0	0	0	0	0	0			0	0		0	0	0	0	0	0	0		
OEB Approved Programs Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Consumer Program Total	186	1,864,315	62	1,116,769	37	420,467	38	548,034	90	320,000	186	349,317	270	250,000	235	631,254	556	2,264,120	521	2,645,374		
	Annual Mil	estone - Co	ntribution t	o 2014 Targ	et																	
	2011 (	Original	Actual 2011 Results		2012 Revised		Actual 2012 Results		2013 R	Revised		10.0	2014 R	evised		445 "	Revised Total Projected Reduction		Contribution to Targe			
	Strategy	Projection	Actual 20	11 Results	Strategy	Projection	Actual 2	012 Results	Strategy	Strategy Projection		Actual 2013 Results		Strategy Projection Actual 2014 Resu		14 Results						
Category - Commercial & Institutional	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh		
Provincial Programs																						
Existing Building Retrofits – Medium and																						
Large Buildings	207	2,108,736	16	466,577	200	1,400,000	162	2,030,783	130	1,130,000	141	1,639,281	230	1,010,000	123	748,416	549	5,146,641	442	4,885,057		
Existing Building Retrofits – Small Buildings	87	1,844,314	32	564,184	33	629,189	45	519,591	70	440,000	106	798,545	250	770,000	277	992,786	433	2,652,320	460	2,875,106		
Small Commercial Demand Response	0	0	0	0	0	0	0	0			0	0			0	0	0	0	0	0		
Demand Response 1 & 3	0	0	37	1,451	39	1,223	0	542	0	0	1	505	0	0	-3	0	38	2,498	35	2,498		
Provincial Commercial & Inst. Total	294	3,953,050	85	1,032,212	272	2,030,412	207	2,550,916	200	1,570,000	248	2,438,331	480	1,780,000	397	1,741,202	1,020	7,801,459	937	7,762,661		
OEB Approved Programs																						
Retrofits																	0	0	0	0		
New Construction																	0	0	0	0		
OEB Approved Programs Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Commercial & Inst. Total	294	3,953,050	85	1,032,212	272	2,030,412	207	2,550,916	200	1,570,000	248	2,438,331	480	1,780,000	397	1,741,202	1,020	7,801,459	937	7,762,661		

	Annual Mi	lestone - Co	ontribution 1	to 2014 Targ	et															
		Original Projection	Actual 20	11 Results		2012 Revised rategy Projection		2012 Results		Revised Projection	Actual 2013 Results		2014 Revised Strategy Projection		Actual 2014 Results		Revised Total Projected Reduction		Contribution	on to Target
Category - Industrial	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh
Program Name																				
Industrial Accelerator	31	760,452			0	0	0	0			0	0			0	0	0	0	0	0
Industrial Equipment Replacemen	24	524,476	3	81,948	8	150,000	0	0			0	0			0	0	3	81,948	3	81,948
Demand Response 1	0	0					0	0			0	0			0	0	0	0	0	0
Demand Response 3	0	·					0	0			0	0			0	0	0	0	0	0
Provincial Industrial Total	55	1,284,928	3	81,948	8	150,000	0	0	0	0	0	0	0	0	0	0	3	81,948	3	81,948
OEB Approved Programs																				
Į.	0	0	0	0	0	0	0	0	0	0			0	0			0	0	0	0
E	0	0	0	0	0	0	0	0	0	0			0	0			0	0	0	0
OEB Approved Programs Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Industrial Total	55	1,284,928	3	81,948	8	150,000	0	0	0	0	0	0	0	0	0	0	3	81,948	3	81,948
	2011	Original		44 D II	2012	2012 Revised			2013 Revised Actual 2013 Results			2014 Revised Actual 2014 Result			445 !!	Revised Total		Contribution to Target		
	Strategy	Projection	Actual 20	11 Results	Strategy Projection		Actual 2012 Results		Strategy	Projection	Actual 20	13 Results	Strategy	Projection	Actual 20	114 Results	Projecte	d Reduction	Continuution to Target	
CDM Strategy Total	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh
Program Total	535	7,102,293	150	2,230,929	317	2,600,879	245	3,098,950	290	1,890,000	434	2,787,648	750	2,030,000	632	2,372,456	1,579	10,147,527	1,461	10,489,983
2010 Contribution			47	963,527	6	29,450	0	939							0	0	47	964,466	47	964,466
Time of Use Savings															129	0			129	0
Adjustments to Verified Final Results							-14	-347,311			39	2,014,265			103	460,166	25	1,666,954	128	2,127,120
Adjusted Total	535	7,102,293	197	3,194,456	323	2,630,329	231	2,752,578	290	1,890,000	473	4,801,913	750	2,030,000	864	2,832,622	1,651	12,778,947	1,765	13,581,569
															Target to	Achieve	3,140	14,970,000		
	2011	Original			2012	Revised			2013 F	Revised			2014 F	Revised			Revis	ed Total		
	Strategy Projection Actual 2011 Results		Strategy	Projection	Actual 2	2012 Results	Strategy	Projection	Actual 20	13 Results	Strategy	Projection	Actual 20	114 Results	Projecte	d Reduction	Contribution	on to Target		
Percentage of Target	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh
	17.0%	47.4%	6.3%	21.3%	10.3%	17.6%	7.4%	18.4%	9.2%	12.6%	15.1%	32.1%	23.9%	13.6%	27.5%	18.9%	53%	85.4%	56.2%	90.7%
	Note: Tota	l Projection i	s formed of	2011, 2012 8	2013 Actua	als added with	2014 Revis	sed Strategy Proj	ection											

## 5.3 Outlook to 2015-2020

Collus PowerStream submitted a joint plan with PowerStream for the 2015-2020 Conservation First Framework. The new framework will be available to Collus PowerStream customers as of July 1, 2015. Additionally, Collus PowerStream has contracted the delivery of CDM services to PowerStream for the duration of the Conservation First Framework. This will provide Collus PowerStream and our customers with additional access to resources (such as marketing, program development and implementation, analytics and reporting).

# 6 Conclusion

Over the course of 2014, Collus PowerStream has achieved an incremental 1.0 MW in peak demand savings and 3.0 GWh in energy savings, which represents 31.8% and 20% of Collus PowerStream 2014 target, respectively.

The overall results achieved in 2011-2014 are 1.8 MW in peak demand savings and 13.6 GWh in energy savings, which represents 56.3% and 90.7% of Collus PowerStream 2014 target, respectively. These results are representative of a considerable effort expended by Collus PowerStream, in cooperation with other LDCs, customers, channel partners and stakeholders to overcome many operational and structural issues that limited program effectiveness across all market sectors. This achievement is a success and the relationships built within the 2011-2014 CDM program term will aid results in future CDM programs.

Going forward with the Conservation First Framework, Collus PowerStream will continue to view energy conservation as a priority and will continue to have a strong focus on the saveONenergy programs.

Future reports on Conservation First will be provided by LDCs to the IESO who will report annually to the OEB.

Appendix A: Initiative Descriptions

Residential Program

APPLIANCE RETIREMENT INITIATIVE (Exhibit D)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

Objectives: Achieve energy and demand savings by permanently decommissioning certain older, inefficient

refrigeration appliances.

Description: This is an energy efficiency Initiative that offers individuals and businesses free pick-up and decommissioning of old large refrigerators and freezers. Window air conditioners and portable dehumidifiers will

also be picked up if a refrigerator or a freezer is being collected.

Targeted End Uses: Large refrigerators, large freezers, window air conditioners and portable dehumidifiers.

Delivery: IESO centrally contracts for the province-wide marketing, call centre, appliance pick-up and decommissioning process. LDC's provides local marketing and coordination with municipal pick-up where

available.

Additional detail is available:

Schedule B-1, Exhibit D. Available on IESO's extranet;

saveONenergy website https://saveonenergy.ca/Consumer/Programs/Appliance-Retirement.aspx.

In Market Date: March 13, 2011

APPLIANCE EXCHANGE INITIATIVE (Exhibit E)

Target Customer Type(s): Residential Customers

**Initiative Frequency:** Spring and Fall

Objective: The objective of this initiative is to remove and permanently decommission older, inefficient window

air conditioners and portable dehumidifiers that are in Ontario.

Description: This initiative involves appliance exchange events. Exchange events are held at local retail locations and customers are encouraged to bring in their old room air conditioners (AC) and dehumidifiers in exchange for

coupons/discounts towards the purchase of new energy efficient equipment. Window ACs were discontinued from

the program in 2013.

Targeted End Uses: Window air conditioners and portable dehumidifiers

Delivery: IESO contracts with participating retailers for collection of eligible units. LDCs provide local marketing.

Additional detail is available:

Collus PowerStream Corp. 2014 CDM Annual Report

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Schedule B-1, Exhibit C. Available on IESO's extranet;

• saveONenergy website <a href="https://saveonenergy.ca/Consumer.aspx">https://saveonenergy.ca/Consumer.aspx</a>.

In Market Date: March 13, 2011

HVAC INCENTIVES INITIATIVE (Exhibit B)

**Target Customer Type(s):** Residential Customers

Initiative Frequency: Year round

**Objective:** The objective of this initiative is to encourage the replacement of existing heating systems with high efficiency furnaces equipped with electronically commutated motors (ECM), and to replace existing central air conditioners with ENERGY STAR qualified systems and products.

**Description:** This is an energy efficiency initiative that provides rebates for the replacement of old heating or cooling systems with high efficiency furnaces (equipped with ECM) and ENERGY STAR® qualified central air conditioners by approved Heating, Refrigeration, and Air Conditioning Institute (HRAI) qualified contractors.

Targeted End Uses: Central air conditioners and furnaces

**Delivery:** IESO contracts centrally for delivery of the program. LDCs provide local marketing and encourage local contractors to participate in the initiative.

Additional detail is available:

Schedule B-1, Exhibit B. Available on IESO's extranet;

saveONenergy website https://saveonenergy.ca/Consumer.aspx.

In Market Date: March 13, 2011

CONSERVATION INSTANT COUPON INITIATIVE (Exhibit A)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

**Objective:** The objective of this initiative is to encourage households to purchase energy efficient products by offering discounts.

**Description:** This initiative provides customers with year round coupons. The coupons offer instant rebates towards the purchase of a variety of low cost, easy to install energy efficient measures and can be redeemed at participating retailers. Booklets were directly mailed to customers and were also available at point-of-purchase. Downloadable coupons were also available at www.saveoneenergy.ca.

**Targeted End Uses:** ENERGY STAR® qualified Standard Compact Flourescent Lights ("CFLs"),ENERGY STAR® qualified Light Fixtures lighting control products, weather-stripping, hot water pipe wrap, electric water heater blanket, heavy duty plug-in Timers, Advanced power bars, clothesline, baseboard programmable thermostats.

**Delivery**: The IESO develops the electronic version of the coupons and posts them online for download. Three LDC specific coupons were made available for local marketing and utilization by LDCs. The IESO enters into agreements with retailers to honour the coupons.

Additional detail is available:

- Schedule B-1, Exhibit A. Available on IESO's extranet;
- saveONenergy website <a href="https://saveonenergy.ca/Consumer.aspx">https://saveonenergy.ca/Consumer.aspx</a>.

In Market Date: March 13, 2011

BI-ANNUAL RETAILER EVENT INITIATIVE (Exhibit C)

Target Customer Type(s): Residential Customers

**Initiative Frequency:** Bi-annual events

**Objective:** The objective of this initiative is to provide instant point of purchase discounts to individuals at participating retailers for a variety of energy efficient products.

**Description:** Twice a year (Spring and Fall), participating retailers host month-long rebate events. During the months of April and October, customers are encouraged to visit participating retailers where they can find coupons redeemable for instant rebates towards a variety of low cost, easy to install energy efficient measures.

Targeted End Uses: As per the Conservation Instant Coupon Initiative

**Delivery:** The IESO enters into arrangements with participating retailers to promote the discounted products, and to post and honour related coupons. LDCs also refer retailers to the IESO and market this initiative locally.

Additional detail is available:

- Schedule B-1, Exhibit C. Available on IESO's extranet;
- saveONenergy website <a href="https://saveonenergy.ca/Consumer.aspx">https://saveonenergy.ca/Consumer.aspx</a>.

In Market Date: March 13, 2011

RETAILER CO-OP

Target Customer Type(s): Residential Customers

Initiative Frequency: Year Round

**Objective:** Hold promotional events to encourage customers to purchase energy efficiency measures (and go above-and-beyond the traditional Bi-Annual Coupon Events).

**Description:** The Retailer Co-op Initiative provides LDCs with the opportunity to work with retailers in their service area by holding special events at retail locations. These events are typically special promotions that encourage customers to purchase energy efficiency measures (and go above-and-beyond the traditional Bi-Annual Coupon Events).

Targeted End Uses: As per the Conservation Instant Coupon Initiative

**Delivery:** Retailers apply to the IESO for co-op funding to run special promotions that promote energy efficiency to customers in their stores. LDCs can refer retailers to the IESO. The IESO provides each LDC with a list of retailers who have qualified for Co-Op Funding as well as details of the proposed special events.

In Market Date: March 13, 2011

NEW CONSTRUCTION PROGRAM (Schedule B-2)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

**Objective:** The objective of this initiative is to provide incentives to participants for the purpose of promoting the construction of energy efficient residential homes in the Province of Ontario.

**Description:** This is an energy efficiency initiative that provides incentives to homebuilders for constructing new homes that are efficient, smart, and integrated (applicable to new single family dwellings). Incentives are provided in two key categories as follows:

- o Incentives for homebuilders who install electricity efficiency measures as determined by a prescriptive list or via a custom option.
- o Incentives for homebuilders who meet or exceed aggressive efficiency standards using the EnerGuide performance rating system.

**Targeted End Uses:** All off switch, ECM motors, ENERGY STAR® qualified central a/c, lighting control products, lighting fixtures, EnerGuide 83 whole home, EnerGuide 85 whole homes

**Delivery:** Local engagement of builders will be the responsibility of the LDC and will be supported by IESO air coverage driving builders to their LDC for additional information.

Additional detail is available:

- Schedule B-1, Exhibit C. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Consumer.aspx.

In Market Date: March 13, 2011

RESIDENTIAL DEMAND RESPONSE PROGRAM (Schedule B-3)

Target Customer Type(s): Residential and Small Commercial Customers

Initiative Frequency: Year round

**Objective:** The objectives of this initiative are to enhance the reliability of the IESO-controlled grid by accessing and aggregating specified residential and small commercial end uses for the purpose of load reduction, increasing consumer awareness of the importance of reducing summer demand and providing consumers their current electricity consumption and associated costs.

**Description:** In *peaksaver* PLUS<sup>®</sup> participants are eligible to receive a free programmable thermostat or switch, including installation. Participants also receive access to price and real-time consumption information on an In Home Display (IHD).

Targeted End Uses: central air conditioning, electric hot water heaters and pool pumps

**Delivery**: LDC's recruit customers and procure technology

Additional detail is available:

- Schedule B-1, Exhibit C. Available on IESO's extranet;
- saveONenergy website <a href="https://saveonenergy.ca/Consumer.aspx">https://saveonenergy.ca/Consumer.aspx</a>.

In Market Date: August 29, 2013

## **C&I Program**

EFFICIENCY: EQUIPMENT REPLACEMENT INCENTIVE (ERII) (Schedule C-2)

Target Customer Type(s): Commercial, Institutional, Agricultural and Industrial Customers

Initiative Frequency: Year round

**Objective**: The objective of this Initiative is to offer incentives to non-residential distribution customers to achieve reductions in electricity demand and consumption by upgrading to more energy efficient equipment for lighting, space cooling, ventilation and other measures.

**Description:** The Equipment Replacement Incentive Initiative (ERII) offers financial incentives to customers for the upgrade of existing equipment to energy efficient equipment. Upgrade projects can be classified into either: 1) prescriptive projects where prescribed measures replace associated required base case equipment; 2) engineered projects where energy and demand savings and incentives are calculated for associated measures; or 3) custom projects for other energy efficiency upgrades.

Targeted End Uses: lighting, space cooling, ventilation and other measures

**Delivery**: LDC delivered.

Additional detail is available:

- Schedule C-2. Available on IESO's extranet;
- saveONenergy website <a href="https://saveonenergy.ca/Business/Program-Overviews/Retrofit-for-Commercial.aspx">https://saveonenergy.ca/Business/Program-Overviews/Retrofit-for-Commercial.aspx</a>.

In Market Date: March 13, 2011

**Lessons Learned:** 

DIRECT INSTALL INITIATIVE (DIL) (Schedule C-3)

Target Customer Type(s): Small Commercial, Institutional, Agricultural facilities and multi-family buildings

Initiative Frequency: Year round

**Objective**: The objective of this Initiative is to offer a free installation of eligible lighting and water heating measures of up to \$1,500 to eligible owners and tenants of small commercial, institutional and agricultural facilities and multi-family buildings, for the purpose of achieving electricity and peak demand savings.

**Description:** The Direct Installed Lighting Initiative targets customers in the General Service <50kW account category. This Initiative offers turnkey lighting and electric hot water heater measures with a value up to \$1,500 at no cost to qualifying small businesses. In addition, standard prescriptive incentives are available for eligible equipment beyond the initial \$1,500 limit.

Target End Uses: Lighting and electric water heating measures

**Delivery**: Participants can enroll directly with the LDC, or would be contacted by the LDC/LDC-designated representative.

Additional detail is available:

Schedule C-3. Available on IESO's extranet;

• saveONenergy website <a href="https://saveonenergy.ca/Business.aspx">https://saveonenergy.ca/Business.aspx</a>.

In Market Date: March 13, 2011

EXISTING BUILDING COMMISSIONING INCENTIVE INITIATIVE (Schedule C-6)

Target Customer Type(s): Commercial, Institutional, and Agricultural Customers

Initiative Frequency: Year round

**Objective:** The objective of this initiative is to offer incentives for optimizing (but not replacing) existing chilled water systems for space cooling in non-residential facilities for the purpose of achieving implementation phase energy savings, implementation phase demand savings, or both.

**Description:** This Initiative offers Participants incentives for the following:

- scoping study phase
- investigation phase
- implementation phase
- hand off/completion phase

Targeted End Uses: Chilled water systems for space cooling

**Delivery:** LDC delivered.

Additional detail is available:

• Schedule C-6. Available on IESO's extranet;

saveONenergy website <a href="https://saveonenergy.ca/Business/Program-Overviews/Existing-Building-Commissioning.aspx">https://saveonenergy.ca/Business/Program-Overviews/Existing-Building-Commissioning.aspx</a>.

In Market Date: March 13, 2011

NEW CONSTRUCTION AND MAJOR RENOVATION INITIATIVE (HPNC) (Schedule C-4)

Target Customer Type(s): Commercial, Institutional, Agricultural and Industrial Customers

**Initiative Frequency:** Year round

**Objective:** The objective of this initiative is to encourage builders/major renovators of commercial, institutional, and industrial buildings (including multi-family buildings and agricultural facilities) to reduce electricity demand and/or consumption by designing and building new buildings with more energy-efficient equipment and systems for lighting, space cooling, ventilation and other Measures.

**Description**: The New Construction initiative provides incentives for new buildings to exceed existing codes and standards for energy efficiency. The initiative uses both a prescriptive and custom approach.

**Targeted End Uses**: New building construction, building modeling, lighting, space cooling, ventilation and other Measures

**Delivery**: LDC delivers to customers and design decision makers.

Additional detail is available:

- Schedule C-4. Available on IESO's extranet;
- saveONenergy website <a href="https://saveonenergy.ca/Business/Program-Overviews/New-Construction.aspx">https://saveonenergy.ca/Business/Program-Overviews/New-Construction.aspx</a>.

In Market Date: March 13, 2011

ENERGY AUDIT INITIATIVE (Schedule C-1)

Target Customer Type(s): Commercial, Institutional, Agricultural and Industrial Customers

**Initiative Frequency:** Year round

**Objective:** The objective of this initiative is to offer incentives to owners and lessees of commercial, institutional, multi-family buildings and agricultural facilities for the purpose of undertaking assessments to identify all possible opportunities to reduce electricity demand and consumption within their buildings or premises.

**Description:** This initiative provides participants incentives for the completion of energy audits of electricity consuming equipment located in the facility. Energy audits include development of energy baselines, use assessments and performance monitoring and reporting.

Targeted End Uses: Various

**Delivery:** LDC delivered.

Additional detail is available:

• Schedule C-1. Available on IESO's extranet;

saveONenergy website <a href="https://saveonenergy.ca/Business/Program-Overviews/Audit-Funding.aspx.">https://saveonenergy.ca/Business/Program-Overviews/Audit-Funding.aspx.</a>

In Market Date: March 13, 2011

## **Industrial Program**

PROCESS & SYSTEMS UPGRADES INITIATIVE (PSUI) (Schedule D-1)

Target Customer Type(s): Industrial, Commercial, Institutional and Agricultural Customers

Initiative Frequency: Year round

**Objectives:** The objectives of this initiative are to:

 Offer distribution customers capital incentives and enabling initiatives to assist with the implementation of large projects and project portfolios;

• Implement system optimization project in systems which are intrinsically complex and capital intensive; and

• Increase the capability of distribution customers to implement energy management and system optimization projects.

**Description:** PSUI is an energy management initiative that includes three initiatives: (preliminary engineering study, detailed engineering study, and project incentive Initiative). The incentives are available to large distribution connected customers with projects or portfolio projects that are expected to generate at least 350 MWh of annualized electricity savings or, in the case of Micro-Projects, 100 MWh of annualized electricity savings. The capital incentive for this Initiative is the lowest of:

a) \$200/MWh of annualized electricity savings

b) 70% of projects cost

c) A one year pay back

Targeted End Uses: Process and systems

**Delivery:** LDC delivered with Key Account Management support, in some cases.

Additional detail is available:

• Schedule D-1. Available on IESO's extranet;

• saveONenergy website <a href="https://saveonenergy.ca/Business.aspx">https://saveonenergy.ca/Business.aspx</a>.

In Market Date: March 13, 2011

MONITORING & TARGETING INITIATIVE (Schedule D-2)

Target Customer Type(s): Industrial, Commercial, Institutional and Agricultural Customers

**Initiative Frequency:** Year round

**Objective:** This initiative offers access to funding for the installation of Monitoring and Targeting ("M&T") systems in order to deliver a minimum savings target at the end of 24 months and sustained for the term of the M&T Agreement.

**Description:** This initiative offers customers funding for the installation of a M&T system to help them understand how their energy consumption might be reduced. A facility energy manager, who regularly oversees energy usage, will now be able to use historical energy consumption performance to analyze and set targets.

**Targeted End Uses:** Process and systems

**Delivery:** LDC delivered with Key Account Management support, in some cases.

Additional detail is available:

Schedule D-2. Available on IESO's extranet;

saveONenergy website <a href="https://saveonenergy.ca/Business.aspx">https://saveonenergy.ca/Business.aspx</a>.

In Market Date: March 13, 2011

ENERGY MANAGER INITIATIVE (Schedule D-3)

Target Customer Type(s): Industrial, Commercial, Institutional and Agricultural Customers

**Initiative Frequency:** Year round

Objective: The objective of this initiative is to provide customers and LDCs the opportunity to access funding for the engagement of energy managers in order to deliver a minimum annual savings target.

Description: This initiative provides customers the opportunity to access funding to engage an on-site, full time embedded energy manager, or an off-site roving energy manager who is engaged by the LDC. The role of the energy manager is to take control of the facility's energy use by monitoring performance, leading awareness programs, and identifying opportunities for energy consumption improvement, and spearheading projects. Participants are funded 80% of the embedded energy manager's salary up to \$100,000 plus 80% of the energy manager's actual reasonable expenses incurred up to \$8,000 per year. Each embedded energy manager has a target of 300 kW/year of energy savings from one or more facilities. LDCs receive funding of up to \$120,000 for a Roving Energy Manager plus \$8,000 for expenses.

Targeted End Uses: Process and systems

**Delivery:** LDC delivered with Key Account Management support, in some cases.

Additional detail is available:

Schedule D-3. Available on IESO's extranet;

saveONenergy website <a href="https://saveonenergy.ca/Business.aspx">https://saveonenergy.ca/Business.aspx</a>.

In Market Date: September, 2012

KEY ACCOUNT MANAGER (KAM) (Schedule D-4)

Target Customer Type(s): Industrial, Commercial, Institutional and Agricultural Customers

Initiative Frequency: Year round

**Objective**: This initiative offers LDCs the opportunity to access funding for the employment of a KAM in order to support them in fulfilling their obligations related to the PSUI.

**Description:** This initiative provides LDCs the opportunity to utilize a KAM to assist their customers. The KAM is considered to be a key element in assisting the consumer in overcoming traditional barriers related to energy management and help them achieve savings since the KAM can build relationships and become a significant resource of knowledge to the customer.

Targeted End Uses: Process and systems

**Delivery:** LDC delivered

Additional detail is available:

• ScheduleD-4. Available on IESO's extranet.

In Market Date: Not in market 2011-2014

DEMAND RESPONSE 3 (Schedule D-6)

Target Customer Type(s): Industrial, Commercial, Institutional and Agricultural Customers

**Initiative Frequency:** Year round

**Objective:** This initiative provides for Demand Response ("DR") payments to contracted participants to compensate them for reducing their electricity consumption by a pre-defined amount during a DR event.

**Description:** Demand Response 3 ("DR3") is a demand response initiative for commercial and industrial customers, of 50 kW or greater to reduce the amount of power being used during certain periods of the year. The DR3 Initiative is a contractual resource that is an economic alternative to procurement of new generation capacity. DR3 comes with specific contractual obligations requiring participants to reduce their use of electricity relative to a baseline when called upon. This Initiative makes payments for participants to be on standby and payments for the actual electricity reduction provided during a demand response event. Participants are scheduled to be on standby approximately 1,600 hours per calendar year for possible dispatch of up to 100 hours or 200 hours within that year depending on the contract.

Targeted End Uses: Commercial and Industrial Operations

**Delivery:** DR3 is delivered by Demand Response Providers ("DRPs"), under contract to the IESO. The IESO administers contracts with all DRPs and Direct Participants (who provide in excess of 5 MW of demand response capacity). IESO provides administration including settlement, measurement and verification, and dispatch. LDCs are responsible for local customer outreach and marketing efforts.

Additional detail is available:

• Schedule D-6. Available on IESO's extranet;

• saveONenergy website <a href="https://saveonenergy.ca/Business.aspx">https://saveonenergy.ca/Business.aspx</a>

In Market Date: January 2011

It is noted that while the schedule for this initiative was not posted until May 2011, the Aggregators reported that they were able to enroll customers as of January, 2011.

LOW INCOME INITIATIVE (HOME ASSISTANCE PROGRAM) (Schedule E-1)

Target Customer Type(s): Income Qualified Residential Customers

Initiative Frequency: Year Round

**Objective**: The objective of this initiative is to offer free installation of energy efficiency measures to income qualified households for the purpose of achieving electricity and peak demand savings.

**Description:** This is a turnkey initiative for income qualified customers. It offers residents the opportunity to take advantage of free installation of energy efficient measures that improve the comfort of their home, increase efficiency, and help them save money. All eligible customers receive a Basic and Extended Measures Audit, while customers with electric heat also receive a Weatherization Audit. The Initiative is designed to coordinate efforts with gas utilities.

Targeted End Uses: End use measures based on results of audit (i.e., CFL bulbs)

**Delivery:** LDC delivered.

Additional detail is available:

• Schedule E. Available on IESO's extranet.

In Market Date: April 23, 2012

**Appendix B:** Pre-2011 Programs

ELECTRICITY RETROFIT INCENTIVE PROGRAM

Target Customer Type(s): Commercial, Institutional, and Agricultural Customers

Initiative Frequency: Year Round

Objective: The objective of this initiative is to offer incentives to non-residential distribution customers to achieve reductions in electricity demand and consumption by upgrading to more energy efficient equipment for lighting,

space cooling, ventilation and other measures.

Description: The Equipment Replacement Incentive Program (ERIP) offered financial incentives to customers for the upgrade of existing equipment to energy efficient equipment. This program was available in 2010 and allowed customers up to 11 months following Pre-Approval to complete their projects. As a result, a number of projects Pre-Approved in 2010 were not completed and in-service until 2011. The electricity savings associated with these projects are attributed to 2011.

Targeted End Uses: Electricity savings measures

**Delivery**: LDC Delivered

HIGH PERFORMANCE NEW CONSTRUCTION

Target Customer Type(s): Commercial, Institutional, and Agricultural Customers

Initiative Frequency: Year round

Objective: The High Performance New Construction Initiative provided incentives for new buildings to exceed existing codes and standards for energy efficiency. The Initiative uses both a prescriptive and custom approach and was delivered by Enbridge Gas under contract with the IESO (and subcontracted to Union Gas), which ran until December 2010.

Description: The objective of this initiative is to encourage builders of commercial, institutional, and industrial buildings (including multi-family buildings and agricultural facilities) to reduce electricity demand and/or consumption by designing and building new buildings with more energy-efficient equipment and systems for lighting, space cooling, ventilation and other Measures.

Targeted End Uses: New building construction, building modeling, lighting, space cooling, ventilation and other measures

**Delivery**: Through Enbridge Gas (and subcontracted to Union Gas)

MULTIFAMILY ENERGY EFFICIENCY REBATES

Target Customer Type(s): Residential Multi-unit buildings

Initiative Frequency: Year round

Objective: Improve energy efficiency of Multi-unit building

**Description:** IESO's Multifamily Energy Efficiency Rebates (MEER) Initiative applies to multifamily buildings of six units or more, including rental buildings, condominiums, and assisted social housing. The IESO contracted with GreenSaver to deliver the MEER Initiative outside of the Toronto Hydro service territory. Activities delivered in Toronto were contracted with the City of Toronto.

Similar to ERII and ERIP, MEER provides financial incentives for prescriptive and custom measures, but also funds resident education. Unlike ERII, where incentives are paid by the LDC, all incentives through MEER are paid through the contracted partner (i.e. GreenSaver).

Targeted End Uses: Electricity saving measures

**Delivery**: IESO contracted with Greensaver