# **Essex Powerlines Corporation**

# Conservation and Demand Management 2012 Annual Report

Submitted to:

**Ontario Energy Board** 

Submitted on September 30, 2013

# **TABLE OF CONTENTS**

E	KECUTIV	/E SUMMARY	1
В	ACKGRO	DUND	1
1	CON	ISERVATION FRAMEWORK	2
	1.1	CURRENT FRAMEWORK	2
	1.2	FUTURE FRAMEWORK	2
2	ВОА	RD-APPROVED CDM PROGRAMS	3
	2.1	INTRODUCTION	3
	2.2	TOU PRICING	3
	1.2.	1 BACKGROUND	3
	2.3	ESSEX POWERLINES CORPORATION'S APPLICATION WITH THE OEB	4
3	OPA	-CONTRACTED PROVINCE-WIDE CDM PROGRAMS	5
	3.1	Introduction	5
	3.2	PROGRAM DESCRIPTIONS	9
	3.2	1 RESIDENTIAL PROGRAMS	9
	3.2.	2 COMMERCIAL AND INSTITUTIONAL PROGRAM	15
	3.2.	3 INDUSTRIAL PROGRAM	19
	3.2.4	4 LOW INCOME INITIATIVE (HOME ASSISTANCE PROGRAM) (Schedule E-1)	23
	PRE	-2011 PROGRAMS	23
4	201	2 LDC CDM RESULTS	24
	4.1	Participation and Savings	24
	4.2	Spending	27
	4.3	EVALUATION	30
5	CON	//BINED CDM REPORTING ELEMENTS	40
	5.1	PROGRESS TOWARDS CDM TARGETS	40
	5.2	CDM Strategy Modifications	41
6.	о с	ONCLUSION	42

APPENDIX A: INITIATIVE DESCRIPTIONS	43
RESIDENTIAL PROGRAM	43
APPLIANCE RETIREMENT INITIATIVE (Exhibit D)	43
APPLIANCE EXCHANGE INITIATIVE (Exhibit E)	43
HVAC INCENTIVES INITIATIVE (Exhibit B)	44
CONSERVATION INSTANT COUPON INITIATIVE (Exhibit A)	45
BI-ANNUAL RETAILER EVENT INITIATIVE (Exhibit C)	45
RETAILER CO-OP	46
NEW CONSTRUCTION PROGRAM (Schedule B-2)	47
RESIDENTIAL DEMAND RESPONSE PROGRAM (Schedule B-3)	47
C&I PROGRAM	48
INDUSTRIAL PROGRAM	52
APPENDIX B: PRE-2011 PROGRAMS	57

ii

# **Executive Summary**

This report will outline the successes and challenges that Essex Powerlines Corporation ("EPLC") has experienced over the course of 2012, the second year of the 2011-2014 Ontario Power Authority ("OPA") Contracted suite of programs. As exhibited in Figure 1 below, EPLC is well positioned to meet its mandated 2014 Conservation and Demand Management ("CDM") targets.

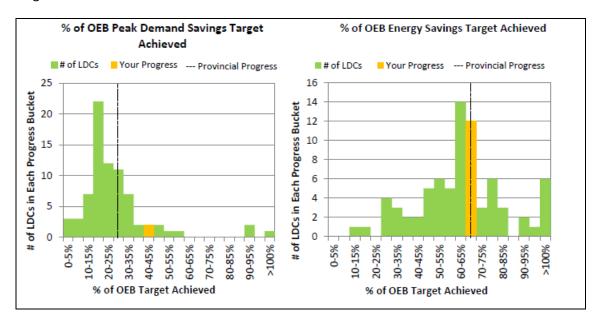


Figure 1 - OPA Reported LDC Rankings

Despite certain challenges in program delivery, 2012 proved to be another successful year in providing the OPA suite of programs and initiatives to EPLC customers. Since inception, Essex Powerlines Corporation has achieved 4.93 MW of net incremental peak demand savings and 4.34 GWh of net incremental energy savings. A summary of the achievements towards the CDM targets is shown in Table 1.

Looking forward, EPLC strives to continue bringing "best in class" and cost effective programs to our customers.

Richard Dimmel, CMA

**General Manager** 

Table 1: Essex Powerlines Corporation	Initiative and Program Level Savings by Year (Scenario 1	1)

Initiative Unit		Incremental Activity (new program activity occurring within the specified reporting period)  2011 2012 2013 2014		Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)  2011 2012 2013 2014		Net Incremental Energy Savings (kWh)  (new energy savings from activity within the specified reporting period)  2011 2012 2013 2014			Program-to-Date Verif (excluded) 2014 Net Annual Peak Demand Savings (kW)	ied Progress to Target les DR) 2011-2014 Net Cumulative Energy Savings (kWh) 2014				
Consumer Program														
Appliance Retirement	Appliances	118	40		7	2			48,406	16,070			9	241,633
Appliance Exchange	Appliances	29	17		3	2			3,231	4,153			3	23,584
HVAC Incentives	Equipment	1,016	743		264	153			463,694	249,324			417	2,602,748
Conservation Instant Coupon Booklet	Items	3,256	202		8	2			121,822	9,143			9	514,715
Bi-Annual Retailer Event	Items	5,691	6,937		11	10			192,162	175,123			21	1,294,015
Retailer Co-op	Items	0	0		0	0			0	0			0	0
Residential Demand Response (switch/pstat)	Devices	85	0		48	0			0	0			0	0
Residential Demand Response (IHD)	Devices	0	0		0				0	Ů			Ů	, and the second
Residential New Construction	Homes	0	0		0	0			0	0			0	0
Consumer Program Total	rionies				340	169			829,315	453,813			459	4,676,694
					340	103			025,515	455,015			433	4,070,054
Business Program Retrofit	Projects	10	27		56	295			337,744	1,594,397			343	6,111,172
Direct Install Lighting	Projects	40	7		52	7			139,935	23,662			43	578,708
Building Commissioning	Buildings	0	0		0	0			139,933	0			0	0
New Construction	Buildings	0	0		0	0			0	0			0	0
	Audits	0	1		0	5			0	25,176			5	75,529
Energy Audit Small Commercial Demand Response	Devices	0	0		0	0			0	0			0	75,329
Small Commercial Demand Response (IHD)	Devices	0	0		0	U			0	0			0	0
Demand Response 3	Facilities	3	3		188	189			7,344	2,742			0	10,086
	racilities	3	3		296	495			485,023	1,645,977			391	6,775,495
Business Program Total					290	433			483,023	1,043,377			391	0,773,493
Industrial Program Process & System Upgrades	Projects	0	0		0	0			0	0			0	0
Monitoring & Targeting	Projects		0		0	0			0	0			0	0
Energy Manager	Projects		0		0	0			0	0			0	0
Retrofit	Projects	4	0		93				688,860				93	2,755,441
Demand Response 3	Facilities	4	4		1,749	1,811			102,648	43,656			0	146,305
Industrial Program Total	l'acilities	4	-	1	1,841	1,811			791,509	43,656			93	2,901,745
Home Assistance Program					1,041	1,011			731,303	43,030			33	2,301,743
Home Assistance Program	Homes	0	149	Т	0	6			0	88,006			6	264,017
Home Assistance Program Total	rionies		143		0	6			0	88,006			6	264,017
					-				•	00,000			U	204,017
Pre-2011 Programs completed in 2011	In				40				FC 04F	1 0			40	224.064
Electricity Retrofit Incentive Program	Projects	7	0		10	0			56,015	0			10	224,061
High Performance New Construction	Projects	0	0		0	1			1,239	716			1	7,102
Toronto Comprehensive	Projects	0	0		0	0			0	0			0	0
Multifamily Energy Efficiency Rebates	Projects	0	0		0	0			0	0			0	0
LDC Custom Programs	Projects	0	0		0	0			0	0			0	0
Pre-2011 Programs completed in 2011 Tot	al				10	1			57,254	716			11	231,163
Other										T.				
Program Enabled Savings	Projects	0	0		0	0			0	0			0	0
Time-of-Use Savings	Homes													
Other Total					0				0			0	0	
Adjustments to Previous Year's Verified Results						-39				-54,023			-39	-216,093
Energy Efficiency Total				503	482			2,053,107	2,185,769			959	14,692,723	
Demand Response Total (Scenario 1)					1,984	2,000			109,992	46,398			0	156,391
OPA-Contracted LDC Portfolio Total (inc. A	Adjustments)				2,487	2,443			2,163,100	2,178,144			920	14,633,021
Activity & savings for Demand Response resources for					e the summer n				<del></del>	<u></u>	Full O	EB Target:	7,190	21,540,000
quarter represent the savings from all active facilities or devices contracted since January 1, 2011.					t will be left blar esults will be up		•		% of Full	OEB Target Achieved	d to Date (So	cenario 1):	12.8%	67.9%

# **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 Ontario Energy Board (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 Essex Powerlines Corporation to require Essex Powerlines Corporation, as a condition of its license, to achieve 21.54 GWh of energy savings and 7.19 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, Essex Powerlines Corporation submitted its CDM Strategy on November 1, 2010 which provided a high level of description of how Essex Powerlines Corporation intended to achieve its CDM targets.

The Code also requires a distributor to file annual reports with the Board. This is the second Annual Report by Essex Powerlines Corporation and has been prepared in accordance with the Code requirement and covers the period from January 1, 2012 to December 31, 2012.

Essex Powerlines Corporation submitted its 2011 Annual Report on September 28, 2012 which summarized the CDM activities, successes and challenges experienced by Essex Powerlines Corporation 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 OPA, and the absence of some programs negatively impacted the final 2011 results for the LDCs. This issue was also highlighted in Volumes I & II of the Environmental Commissioner's Report on Ontario's Annual Energy Conservation Progress.

On December 21, 2012, the Minister of Energy directed the Ontario Power Authority (OPA) to fund CDM programs which meet the definition and criteria for OPA-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.

#### 1 Conservation Framework

#### 1.1 Current Framework

Ontario's current CDM framework is a key step towards creating a culture of conservation in the Province. The Government's 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, support the provincial integrated supply plan, as well as address local distribution and transmission supply constraints. The current framework was intended to enable customers to benefit from a suite of both Board-Approved and OPA Province-Wide programs and be a portfolio that would meet both broad and specific customer needs.

The state of Board-Approved programs and the current suite of Province-Wide OPA 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, taking considerable cost and effort, which has resulted in limited benefits to customers and CDM savings.

Moving forward, the future CDM framework should address the challenges of the current framework and build on its strengths. Currently overbuild governance and excessive legal requirements results in a slow, bureaucratic process, with a burdensome administrative process. There is a misalignment of control and risk where LDCs have the accountability to achieve their respective CDM targets as a condition of distribution license, but the authority for design and funding are controlled substantially by the OPA.

The Ministerial Directive provides stability of the conservation programs and associated compensation for the participants; however the subsequent savings would not be attributed to any LDC target and in effect would be 'lost' due to misalignment of the current CDM framework and LDC Targets. In addition, the establishment of defined administrative funding for 2015 is required to avoid a "stop and start" process.

#### 1.2 Future Framework

LDCs are supportive of government's renewed commitment for conservation and demand management in Ontario. LDCs are committed to working with the government and other stakeholders to develop the next framework for CDM in the Province.

Long-term commitment for CDM funding and a confirmation of the role of the LDC are needed. This will allow LDCs to maintain current program infrastructure including LDC staff and third party contracts through 2015.

Providing clarity and continuity into the next framework is critical for all customers. To ensure a seamless and smooth transition that maintains and builds upon CDM momentum beyond 2014, a new CDM framework should be in place well before the expiry of the current one. Work involving key parties including LDCs, government, customer groups and OEB should start in 2013 to allow for a new framework to be in place by early 2014. The remainder of 2014 would be utilized for program development and design, economic analysis, procurement and launching of new CDM program initiatives.

Essex Powerlines Corporation 2012 CDM Annual Report

## 2 Board-Approved CDM Programs

#### 2.1 Introduction

In its Decision and Order dated November 12 2010 (EB-2010-0215 & EB-2010-0216), the OEB ordered that, (to meet its mandatory CDM targets), "Each licensed electricity distributor must, as a condition of its license, deliver Board-Approved CDM Programs, OPA-Contracted Province-Wide CDM Programs, or a combination of the two".

At this time, the implementation of Time-of-Use ("TOU") Pricing is the only Board-Approved Conservation and Demand Management ("CDM") program that is being offered in LDC's service area.

#### 2.2 TOU Pricing

#### 1.2.1 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 a Directive dated March 31, 2010 by the Minister of Energy and Infrastructure, the OEB is of the view that any evaluations of savings from TOU pricing should be conducted by the OPA for the province, and then allocated to distributors. Essex Powerlines Corporation will report these results upon receipt from the OPA.

At the time of preparation of this report the OPA had retained the Brattle Group as the evaluation contractor and will be working with an expert panel convened to provide advice on methodology, data collection, models, etc. The initial evaluations were conducted with 5 LDCs — Hydro One, THESL, Ottawa Hydro, Thunder Bay and Newmarket.

As of September 30, 2013, the OPA has not released any verified results of TOU savings to Essex Powerlines Corporation. Therefore Essex Powerlines Corporation is not able to provide any verified savings related to LDC's TOU program at this time.

#### 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:

RPP	TOU	Rates (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	

**Delivery:** The OEB set the rates; LDCs install and maintain the smart meters; LDCs convert customers to TOU billing.

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

Essex Powerlines Corporation began transitioning its RPP customers to TOU billing in October, 2011. At December 31<sup>st</sup>, 2012, all applicable ELPC RPP customers are on TOU billing.

# 2.3 Essex Powerlines Corporation's Application with the OEB

Essex Powerlines Corporation does not currently have an application with the OEB. It is EPLC's position that it will apply for Board-Approved CDM Programs where there have been demonstrably successful efforts by other LDCs, and the risks of implementation are better understood and mitigated.

# 3 OPA-Contracted Province-Wide CDM Programs

### 3.1 Introduction

Effective March 15, 2011, Essex Powerlines Corporation entered into an agreement with the OPA to deliver CDM programs extending from January 1, 2011 to December 31, 2014, which are listed below. Program details are included in Appendix A. In addition, results include projects started pre 2011 which were completed in 2011:

**Table 2 - OPA Contracted Province Wide CDM Programs** 

Initiative	Schedule	Date schedule posted	Customer Class	LDC In-Market Date
Residential Program				
Appliance Retirement	Schedule B-1, Exhibit D	Jan 26,2011	All residential rate classes	January 2011
Appliance Exchange	Schedule B-1, Exhibit E	Jan 26, 2011	All residential rate classes	March 2011
HVAC Incentives	Schedule B-1, Exhibit B	Jan 26, 2011	All residential rate classes	February 2011
Conservation Instant Coupon Booklet	Schedule B-1, Exhibit A	Jan 26, 2011	All residential rate classes	February 2011
Bi-Annual Retailer Event	Schedule B-1, Exhibit C	Jan 26, 2011	All residential rate classes	March 2011
Retailer Co-op	n/a	n/a	All residential rate classes	N/A
Residential Demand Response	Schedule B-3	Aug 22, 2011	All general service classes	Peaksaver Extension – March 2011 to August 2011  Peaksaver Plus – Targeting late 2012
New Construction Program	Schedule B-2	Jan 26, 2011	All residential rate classes	February 2011
Commercial & Institutional Program				
Efficiency: Equipment Replacement	Schedule C-2	Jan 26, 2011	All general service classes	March 2011
Direct Install Lighting	Schedule C-3	Jan 26, 2011	General Service < 50 kW	July 2011
Existing Building Commissioning Incentive	Schedule C-6	Feb 2011	All general service classes	February 2011
New Construction and Major Renovation Initiative	Schedule C-4	Feb 2011	All general service classes	June 2011
Energy Audit	Schedule C-1	Jan 26, 2011	All general service classes	February 2011

Commercial Demand Response (part of the Residential program schedule)	Schedule B-3	Jan 26, 2011	All general service classes	
Demand Response 3 (part of	Schedule D-6	May 31,	General Service 50 kW &	January 2011
the Industrial program		2011	above	
schedule)				

Industrial Program				
Process & System Upgrades	Schedule D-1	May 31, 2011	General Service 50 kW & above	November 2011
Monitoring & Targeting	Schedule D-2	May 31, 2011	General Service 50 kW & above	November 2011
Energy Manager	Schedule D-3	May 31, 2011	General Service 50 kW & above	August 2011
Key Account Manager ("KAM")	Schedule D-4	May 31,2011	General Service 50 kW & above	August 2011
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	Schedule C-2	May 31, 2011	General Service 50 kW & above	March 2011
Demand Response 3	Schedule D-6	May 31, 2011	General Service 50 kW & above	January 2011
Home Assistance Program				
Home Assistance Program	Schedule E-1	May 9, 2011	All residential rate classes	February 2012

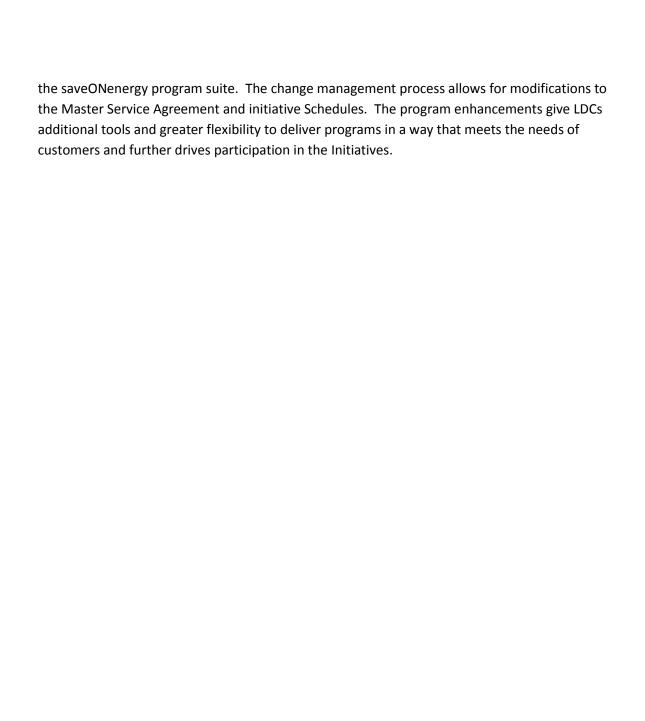
In addition, results were realized towards LDC's 2011-2014 target through the following pre-2011 programs:

Pre-2011 Programs				
Electricity Retrofit Incentive	n/a	n/a	All general service classes	n/a
Program				
High Performance New	n/a	n/a	All general service classes	n/a
Construction				
Toronto Comprehensive	n/a	n/a	All general service classes	n/a
Multifamily Energy Efficiency Rebates	n/a	n/a	All general service classes	n/a
Data Centre Incentive Program	n/a	n/a	All general service classes	n/a
EnWin Green Suites	n/a	n/a	All general service classes	n/a

As per the table below, several program initiatives are no longer available to customer or have not been launched in 2012.

Initiative Not in Market in 2012	Objective	Status
Residential Program		
Midstream Electronics	The objective of this initative is to encourage retailers to promote and sell high efficency televisions, and for distributors to distribute high efficiency set top boxes.	Never launched and removed from Schedule in Q2, 2013.
Midstream Pool Equipment	The objective of this initiative is to encourage pool installers to sell and install efficient pool pump equipment in residential in-ground pools.	Never launched and removed from Schedule in Q2, 2013.
Aboriginal Conservation Program	First Nations programs are delivered by the OPA and results are attributed to LDCs for reporting.	Launched in 2013 by OPA.
Home Energy Audit Tool	This is a provincial online audit tool to engage customers in conservation and help drive customer participation to CDM programs.	Never launched and removed from Schedule in Q2, 2013.
Commercial & Institutional Program		
Direct Service Space Cooling	The objective of this initiative is to offer free servicing of air conditioning systems and refrigeration units for the purpose of achieving energy savings and demand reduction.	Not launched to market in 2011/2012. As per the OPA there no plans to launch this Initiative in 2013.
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 includes program change management provision in Article 3. Collaboration between the OPA and the Local Distribution Companies (LDCs) commenced in 2011, and continued in 2012, as the change management process was implemented to enhance



Essex Powerlines Corporation 2012 CDM Annual Report

3.2 Program Descriptions

Full OPA-Contracted Province-Wide CDM Program descriptions are available from the OPA. The targeted customer types, objectives, and individual descriptions for each Program Initiative are detailed in

Appendix A.

3.2.1 RESIDENTIAL PROGRAMS

Description: Provides residential customers with programs and tools to help them understand and

manage the amount of energy they use throughout their entire 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 inclusion of LED technology into the Biannual Retailers events in 2012 and the annual coupons in

2013, as well as some LDC custom coded coupons, has had a positive effect on consumer engagement. The revamped PeaksaverPLUS 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 to help manage their energy

consumption.

The Residential Program Portfolio is predominately a carryover of Initiatives from previous programs. It is

mostly driven by retailers and contractors who many not have fully delivered what was anticipated. Three new initiatives were never launched and subsequently removed from 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. Provincial wide advertising has

provided limited value due to inconsistency and non-specific messaging, particularly in Southwestern

Ontario.

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 identified, developed and offered to customers. In the future, EPLC would be pleased to develop a full complement of comprehensive programs and initiatives for the Residential customer

segment.

3.2.1.1 Appliance Retirement Initiative (Exhibit D)

**Initiative Activities/Progress:** EPLC provided local marketing and customer support for this Initiative.

**Additional Comments:** 

Essex Powerlines Corporation 2012 CDM Annual Report

- With the increase in appliance age to 20 years in 2013, many LDCs increased marketing and outreach throughout 2012 in an effort to increase uptake and achieve savings.
- Due to the duration of the program, and the revised eligibility requirements to a minimum of 20 years old, this Initiative appears to have reached market saturation and has been under consideration for removal from the Portfolio.
- Rather than strictly remove this Initiative from the schedules, the OPA and LDCs could review what
  opportunities there are to include other measures such as stoves, dishwashers, washers and dryers.
  The framework of this Initiative may be a suitable foundation for a more holistic residential appliance
  retirement program. As such, the Residential portfolio could be straightened through program
  evolution rather than weakened through diminished program offerings.
- As results are very responsive to province wide advertising OPA provincial marketing should continue to play a key role.
- The OPA and LDCs can continue working to establish partnerships with Independent retailers and municipalities.

#### 3.2.1.2 Appliance Exchange Initiative (Exhibit E)

Initiative Activities/Progress: EPLC provided local marketing and customer support for this initiative.

#### **Additional Comments:**

- This Initiative, eligible measures and incentive amounts are influenced by the retail partner with no direct 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. The Fall events have not had retailer participation, therefore savings budgeted by the LDCs have not materialized.
- Evaluation, Measurement, and Verification (EMV) results indicated that the value of savings for retired room AC has dropped resulting in the retail participant not accepting window a/c's during the Spring 2013 event.
- Notification 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 ARCA for
  appliance removal.

Essex Powerlines Corporation 2012 CDM Annual Report

• The initiative appears to require more promotion from retailers and LDCs.

#### 3.2.1.3 HVAC Incentives Initiative (Exhibit B)

Initiative Activities/Progress: EPLC provided local marketing and customer support for this initiative.

#### **Additional Comments:**

- Incentive levels appear to be insufficient to prompt Participants to upgrade HVAC equipment prior to
  end of useful life. It is hoped that the introduction of an Air Miles incentive in 2013 may help with
  this.
- 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 CAC sales to eligible units.
- Channel partners require timeliness of the Rebate process to maintain a positive relationship between consumers, contractors, the OPA, and the participating LDC. Due to a contracting delay no applications were processed from approximately the end of October 2012 to February 2013.
- LDC HVAC reports have been delayed and are not as complete and accurate as are required by LDCs to make adjustments to their marketing strategies.
- In an effort to build capacity, mandatory training has been instituted for all participating HVAC contractors. This could present too much of a barrier for participation for some contractors as the application process already presents a restriction to contractor sales. It has been noted that there are approximately 4500-5000 HVAC contractors in the Province, however only 1500 are participating in program.
- There are cases where non-participating contractors are offering their own incentives (by discounting their installations to match value of the OPA incentive) to make the sale. As this occurs outside of the Initiative, these installations should be attributed to the appropriate LDC.

#### 3.2.1.4 Conservation Instant Coupon Initiative (Exhibit A)

Initiative Activities/Progress: EPLC provided local marketing and customer support for this initiative.

#### **Additional Comments:**

• This Initiative was ineffective for most of 2012 as the Instant coupons (annual) were not available to consumers until September 2012. As such, savings budgeted by LDCs did not materialize.

Essex Powerlines Corporation 2012 CDM Annual Report

- 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. This also resulted in the
  delayed launch of the Initiative in 2012.
- Coupon booklets were not printed and mailed out in 2012. As such, Coupons were not widely available to consumers without the ability to download and print them.
- Without Provincial coupon distribution, and delay in Initiative launch, consumers may not have been aware of the online coupons. This Initiative could benefit from provincial marketing as a substitute to distribution.
- LDCs should be able to custom code all coupons to provide 100% allocation and push specific coupons based on localized needs.
- 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.

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

Initiative Activities/Progress: EPLC provided local marketing and customer support for this initiative.

#### **Additional Comments:**

- This Initiative is strongly influenced by the retail participants and has no direct involvement from the LDCs.
- The Product list has changed very little 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 Residential Working Group in Q4 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 staff tend not to be knowledgeable regarding the products or promotion.

Essex Powerlines Corporation 2012 CDM Annual Report

 LDCs should be able to custom code all coupons to provide 100% allocation and push specific coupons based on localized needs.

• Communications regarding retailer participation continues to be delayed. Improved communications will aid in appropriate resource allocation and marketing of the Initiative.

• 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.

#### 3.2.1.6 *Retailer Co-op*

**Initiative Activities/Progress:** EPLC did not participate in this initiative due to lack of interest from retailers.

#### Additional Comments:

- This is strictly a retailer Initiative with no direct benefit to the 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.
- Retailer driven

#### 3.2.1.7 New Construction Program (Schedule B-2)

Initiative Activities/Progress: EPLC provided local marketing and customer support for this initiative.

#### **Additional Comments:**

 This Initiative provides incentives to home builders for incorporating energy efficiency into their buildings. To support this, LDCs need to provide education to the consumers regarding the importance of choosing the energy efficient builder upgrade options without an immediate benefit to the consumer.

Following limited participation in 2011, the application process was revisited in 2012 to streamline
administration in response to builder feedback. Participation levels are expected to grow but there
will be a lag to when results materialize as homes pre-approved could take a year or more to be
completed.

• Administrative requirements, in particular individual home modeling, must align with perceived stakeholder payback. As per the Electricity Distributors Association ("EDA") Working Groups, changes

Essex Powerlines Corporation 2012 CDM Annual Report

are being processed through change management for 2012. However, the lengthy change management process has resulted in continued non-participation from builders.

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

Initiative Activities/Progress: EPLC provided local marketing and customer support for this initiative.

#### **Additional Comments:**

- The schedule for Peaksaver Plus was posted in August 2011, but this did not provide adequate time for product procurement for 2011, and part of 2012. The product procurement process uncovered that the In Home Display units that communicate with installed smart meter technology were still in development and not ready for market deployment. Consequently, LDCs could not be in market with the Peaksaver Plus program until 2012, or later which has resulted in delayed savings.
- Smart Meters installed by most LDCs do not have the capability to communicate directly to an In Home Display. When proposing technical Initiatives that rely on existing LDC hardware or technology there should be an extensive consultative process.
- 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.
- The variable funding associated with installing a load controllable thermostat is not sufficient unless it
  is combined with an In Home Display (IHD) which might not be possible all the time and when IHD is
  optional.
- This is the main Initiative within the Residential portfolio that drives savings for LDCs.
- Given the different LDCs smart meter environments, and needs, each LDC is positioning the Initiative slightly different. As such, greater program flexibility is required to address unique LDC needs.
- Provincial wide marketing needs to be sensitive to the variations of the Initiative and provide solid, consistent messaging.
- There currently is not an avenue for participants without the ability to provide demand response capabilities to obtain an IHD and gain energy saving benefits.

#### 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, to replace energy-wasting equipment or to pursue new construction that exceeds our 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 2011 and 2012 the Commercial and Institutional (C&I) Working Group has strived 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 OPA support personnel.

Despite these challenges the C&I Working Group, working in cooperation with the OPA, 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 means to accelerate certain program changes.

Looking ahead there is minimal opportunity to make valuable changes to the current program suite and have these changes reflected in LDC 2014 results. LDCs and the OPA 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.

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

**Initiative Activities/Progress:** EPLC provided local marketing and customer support for this initiative.

#### **Additional Comments:**

• It appears that the marketplace largely understands the programs now and a large proportion of LDC savings are attributed to ERII.

Essex Powerlines Corporation 2012 CDM Annual Report

- The centralized process review used for 2012 project payment has been streamlined by the OPA and payments for projects were greatly improved faster and more consistent compared to 2011.
- Capability building programs from Industrial programs have had very positive contributions to ERII program.
- This Initiative is limited by the state of the economy and the ability of commercial/institutional facility to complete capital upgrades.
- A number of customer facing issues in CRM (the OPA centralized application system) have been resolved; however key LDC administrative back office processing issues continue to be a challenge.
- 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, 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 world. 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.
- Expanding the capacity of the engineered applications can offer customers an opportunity to
  maximize savings and incentives. Recognizing this, Toronto Hydro and London Hydro worked
  together to develop and provide the OPA with compressed air engineered worksheets for inclusion in
  the Initiative in Q3, 2012. To date, these have not been accepted and provided to LDCs for use.
- An identified deficiency in the various renditions of the equipment replacement is the "hard stop" of the program as of a specific date. Without a streamlined transition into a new program, many customers become frustrated and refused to participate. LDCs struggle to repair customer and channel partner relationships and gain momentum in the market place once again.
- While the Ministerial Directive provides continuality of the conservation programs for the participant, unclear direction on LDC administrative funding could result in many LDCs 'ramping down' programs in 2015. The establishment of defined administrative funding for 2015 is required to avoid a "stop and start" process.

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

Initiative Activities/Progress: EPLC provided local marketing and customer support for this initiative.

#### **Additional Comments:**

- Successful execution of the previous rendition of this Initiative has resulted in diminished 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.
- Electrical contractor's margins have been reduced due to no labour rate increase, increase cost of
  materials, greater distances between retrofits, more door knocking required before a successful sale
  and no funding for lifts. This has led to a reduction in vendor channel participation in some regions.
- Ambiguity with regard to eligibility resulted in large lists of customers rejected following installation due to preserved ineligibility. Due to this, some LDCs were forced to carry considerable financial burden while this was worked through.
- The eligibility requirements have now been revamped and expanded however there has been limited communication and documentation of this to the marketplace.
- Currently 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.

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

Initiative Activities/Progress: EPLC provided local marketing and customer support for this initiative.

#### 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 a too significant of a 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: EPLC provided local marketing and customer support for this initiative.

#### **Additional Comments**

- There is typically a long sales cycle for these projects, and then a long project development cycle. As the program did not launch until mid-2011 and had limited participation, results did not appear in 2011. Minimum results are expected to appear in 2012. The majority of the results are expected in 2013-2014, with a reduced benefit to cumulative energy savings targets.
- With the Ministerial Directive facilities with a completion date near the end of 2014 currently have some security that they will be compensated for choosing efficient measures.
- Participants estimated completion dates tend to be inaccurate and are usually 6 months longer. This
  could result in diminished savings towards target when facilities are not substantially completed by
  December 31, 2014.
- The custom application process requires considerable customer support and skilled LDC staff. As
  there has been no defined administrative funding beyond 2014, many LDCs are unsure how these
  project applications will be finalized.
- The effort required to participate through the custom stream exceeds the value of the incentive for many customers.
- This Initiative has a very low Net-to-Gross ratio, which results in half the proposed target savings being 'lost'.

#### 3.2.2.5 Energy Audit Initiative

Initiative Activities/Progress: EPLC provided local marketing and customer support for this initiative.

• Customer uptake was limited in 2011, however improved throughout 2012 especially with the new audit component for one system (i.e. compressed air).

- The energy audit Initiative is considered an 'enabling' Initiative and 'feeds into' other saveONenergy Initiatives. There are no savings attributed to LDC targets from an audit.
- 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 OPA may be beneficial.
- Participants are limited to one energy audit which restricts enabling and direction to the other Initiatives. This Initiative should be evaluated for additional customer participation when presented with a new scope of work.

#### 3.2.3 INDUSTRIAL PROGRAM

**Description:** 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 wells 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:** To provide incentives to both existing and new industrial customers to motivate the installation of energy efficient measures and to promote participation in demand management.

#### 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.

Due to the size, scope and long lead time of these Initiatives and associated projects, the 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 any LDC target.

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. Looking ahead there is minimal opportunity to make valuable changes to the current program suite and have these changes reflected in LDC 2014 results.

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

Initiative Activities/Progress: EPLC provided local marketing and customer support for this initiative.

#### **Additional Comments:**

- Approximately 100 engineering study applications have been submitted. This is a strong indication
  that there is the potential for large projects with corresponding energy savings. Most of these studies
  have been initiated through the Energy Manager and 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 then a long project development cycle. As such, limited results are expected to be generated in 2012. The majority of the results are expected in 2013-2014, 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 a new agreement for 'small' projects which is a simplified with less onerous conditions for the customer.
- To partially address this, changes were made to the ERII Initiative which allowed smaller projects to be directed to the Commercial stream.
- A business case was submitted by the Industrial Working Group in July 2012 which would change the limit for a small project from 350 MWh to 1 million dollars in incentives. This would allow more projects to be streamlined with simplified documentation and increase participant uptake, while still protecting the ratepayer. To date this change has not been implemented. (OR the micro project contract was finalized through change management in XX 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. Currently the OPA is reviewing waste heat projects only and all other co-generation projects are on hold awaiting a decision from the Ministry of Energy on whether PSUI will fund these types of projects.

#### 3.2.3.2 Monitoring & Targeting Initiative (Schedule D-2)

Essex Powerlines Corporation 2012 CDM Annual Report

Initiative Activities/Progress: EPLC provided local marketing and customer support for this initiative.

#### **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, a limited number of applications have been received to date.
- The savings target required for this Initiative can present a significant challenge for smaller customers.
- Through the change management process in 2013, changes are being 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: EPLC provided local marketing and customer support for this initiative.

#### **Additional Comments:**

- The Energy Managers have proven to be a popular and useful resource for larger customers. There are approximately 70 Embedded Energy Managers (EEMs) and 25 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 an 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 7 month to have a resource in place.
- New energy managers required training, time to familiarize with facilities and staff and require time
  to establish "credibility". Energy Managers started filling their pipeline with projects but few projects
  were implemented in 2012.
- Delays with processing EEM payments causing LDCs to delay payments to Participants beyond contract requirements.

- There have been a number of studies identified by Energy Managers and they have been able to build capacity and deliver energy saving projects within their respective large commercial/industrial facilities.
- Requirement that 30% of target must come from Non-incented projects is identified as an issue for
  most EEMs/REMs, although final targets not due to 2013. Working group has proposed to remove
  this requirement for REM's only as they are not resident full time at a customer facility to find the
  non-incented savings.
- This is an important Initiative which should continue beyond 2014.

#### 3.2.3.4 Key Account Manager (Schedule D-4)

Initiative Activities/Progress: EPLC provided local marketing and customer support for this initiative.

#### **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 LDCs may be struggling with.
- It is believed that the migration of the KAMs into REM roles may be more effective for achieving results.

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

Initiative Activities/Progress: EPLC provided local marketing and customer support for this initiative.

#### **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 verify savings.

- The Industrial Working Group had a discussion with the OPA and representatives of the Ministry on proposed changes for the DR3 program. No program improvements were made in 2012 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 (5 year) than the previously limited 1 to 2 year contracts.
- 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 rendition 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: EPLC provided local marketing and customer support for this initiative.

#### **Additional Comments:**

- Awareness of the program amongst social agencies took time to develop. Benefits started to become
  evident in late 2012.
- Centralized payment processes were not developed in 2011. The payment process was established in 2012.
- The process for enrolling in social housing was complicated and time consuming. This was addressed in late 2012 and is showing benefits in 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 OPA
  contracted centralized delivery agent.

#### **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

09/30/2013 23

Essex Powerlines Corporation 2012 CDM Annual Report

# 4 2012 LDC CDM Results

# 4.1 Participation and Savings

Table 2 below outlines customer uptake participation by Initiative undertaken as per EPLC's 2012 Final Annual Report supplied by the OPA August 31, 2012.

Table 3 - Participation and savings summary

Initiative	Activity Unit	Uptake/Participation
Consumer Program		
Appliance Retirement	Appliances	40
Appliance Exchange	Appliances	17
HVAC Incentives	Equipment	743
Conservation Instant Coupon Booklet	Coupons	202
Bi-Annual Retailer Event	Coupons	6937
Retailer Co-op	Items	0
Residential Demand Response (switch/pstat)	Devices	0
Residential Demand Response (IHD)	Devices	0
Residential New Construction	Houses	0
Business Program		
Retrofit	Projects	27
Direct Install Lighting	Projects	7
Existing Building Commissioning	Buildings	0
New Construction	Buildings	0
Energy Audit	Audits	1
Small Commercial Demand Response	Devices	0
Small Commercial Demand Response (IHD)	Devices	0

Demand Response 3	Facilities	3
Industrial Program		
Process & Systems Upgrade	Projects	0
Monitoring & Targeting	Projects	0
Energy Manager	Managers	0
Key Account Manager	Managers	1
Retrofit	Projects	Part of Business Program
Demand Response 3	Facilities	3
Home Assistance Program		
Home Assistance Program	Units	149
Pre-2011 Programs Completed in 2012		
Electricity Retrofit Incentive Program	Projects	0
High Performance New Construction	Projects	0
Toronto Comprehensive	Projects	0
Multifamily Energy Efficiency Rebates	Projects	0
Data Centre Incentive Program	Projects	0
EnWin Green Suites	Projects	0

**Table 4: Summarized Program Results** 

	Net Savings		Contribution to Targets		
Program	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Program-to-Date: Net Annual Peak Demand Savings (kW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh)	
Consumer Program Total	169	453,813	459	4,676,694	
Business Program Total	495	1,645,977	391	6,775,495	
Industrial Program Total	1,811	43,656	93	2,901,745	
Home Assistance Program Total	6	88,006	6	264,017	
Pre-2011 Programs completed in 2012 Total	1	716	11	231,163	
Total OPA Contracted Province-Wide CDM Programs	2,482	2,232,168	960	14,849,114	

# 4.2 Spending

Table 5: 2012 Spending

Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
Consumer Program					
Appliance Retirement	\$15,533.49	\$0.00	\$0.00	\$0.00	\$15,533.49
Appliance Exchange	\$15,533.49	\$0.00	\$0.00	\$0.00	\$15,533.49
HVAC Incentives	\$15,533.49	\$0.00	\$0.00	\$0.00	\$15,533.49
Conservation Instant Coupon Booklet	\$15,533.49	\$0.00	\$0.00	\$0.00	\$15,533.49
Bi-Annual Retailer Event	\$15,533.49	\$0.00	\$0.00	\$0.00	\$15,533.49
Retailer Co-op	\$15,533.49	\$0.00	\$0.00	\$0.00	\$15,533.49
Residential Demand Response	\$15,533.49	\$0.00	\$0.00	\$0.00	\$15,533.49
New Construction Program	\$15,533.49	\$0.00	\$0.00	\$0.00	\$15,533.49
Business Program					
Efficiency: Equipment Replacement	\$19,113.78	\$0.00	\$212,902.55	\$0.00	\$232,016.33
Direct Installed Lighting	\$19,113.78	\$1,925.00	\$6,765.25	\$0.00	\$27,804.03
Existing Building Commissioning Incentive	\$19,113.78	\$0.00	\$0.00	\$0.00	\$19,113.78
New Construction and Major Renovation Initiative	\$19,113.78	\$0.00	\$0.00	\$0.00	\$19,113.78
Energy Audit	\$19,113.78	\$0.00	\$0.00	\$0.00	\$19,113.78
Small Commercial Demand Response (part of the Residential program schedule)	n/a	n/a	n/a	n/a	n/a
Demand Response 3 (part of the Industrial program schedule)	n/a	n/a	n/a	n/a	n/a
Industrial Program		<u> </u>			
Process & System Upgrades					
a) preliminary engineering study	\$1,929.00	\$0.00	\$0.00	\$0.00	\$1,929.00

TOTAL Province-wide CDM PROGRAMS	\$246,862.77	\$3,385.00	\$219,667.80	\$0.00	\$468,455.56
EnWin Green Suites	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Data Centre Incentive Program	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Multifamily Energy Efficiency Rebates	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Toronto Comprehensive	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
High Performance New Construction	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Electricity Retrofit Incentive Program	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Pre 2011 Programs					
Home Assistance Program	\$13,522.95	\$1,460	\$0.00	\$0.00	\$13,522.94
Home Assistance Program					
Demand Response 3	\$1,929.00	\$0.00	\$0.00	\$0.00	\$1,929.00
Incentive (part of the C&I program schedule)	n/a	\$0.00	\$0.00	\$0.00	\$0.00
Efficiency: Equipment Replacement	,	40.00	40.00	40.00	40.00
Key Account Manager ("KAM")	\$1,929.00	\$0.00	\$0.00	\$0.00	\$1,929.00
Energy Manager	\$1,929.00	\$0.00	\$0.00	\$0.00	\$1,929.00
Monitoring & Targeting	\$1,929.00	\$0.00	\$0.00	\$0.00	\$1,929.00
c) program incentive	\$1,929.00	\$0.00	\$0.00	\$0.00	\$1,929.00
b) detailed engineering study	\$1,929.00	\$0.00	\$0.00	\$0.00	\$1,929.00

Table 3a describes and details the allocation of funds, both cumulatively and in the one year period applicable to BPI's Annual Report, on each of the OPA-Contracted Province-Wide CDM Programs that over the course of 2011 were Not In Market.

Table 5a: Allocation of PAB funding for Programs Not In Market

#	Initiative	Program Administration Budget (PAB)				
Initi	Initiatives Not In Market					
1	Midstream Electronics	\$0.00				
2	Midstream Pool Equipment	\$0.00				
3	Demand Service Space Cooling	\$0.00				
4	Demand Response 1 (Commercial)	\$0.00				
5	Demand Response 1 (Industrial)	\$0.00				
6	Home Energy Audit Tool	\$0.00				
	TOTAL Province-wide CDM PROGRAMS Not In Market	\$0.00				

Essex Powerlines Corporation 2012 CDM Annual Report

# 4.3 **Evaluation** Evaluation results from the Verified Annual 2012 CDM Report for Essex Powerlines Corporation are provided in the following pages.

# **METHODOLOGY**

All results are at the end-user level (not including transmission and distribution losses)

	EQUATIONS				
Prescriptive Measures and Projects	Gross Savings = Activity * Per Unit Assumption  Net Savings = Gross Savings * Net-to-Gross Ratio  All savings are annualized (i.e. the savings are the same regardless of time of year a project was completed or measure installed)				
Engineered and	Gross Savings = Reported Savings * Realization Rate  Net Savings = Gross Savings * Net-to-Gross Ratio  All savings are annualized (i.e. the savings are the same regardless of time of year a project was completed or measure installed)				
Demand Response	Peak Demand: Gross Savings = Net Savings = contracted MW at contributor level * Provincial contracted to ex ante ratio  Energy: Gross Savings = Net Savings = provincial ex post energy savings * LDC proportion of total provincial contracted MW  All savings are annualized (i.e. the savings are the same regardless of the time of year a participant began offering DR)				
Adjustments to Previous Year's Verified Results	All errors and omissions from the prior year's Final Annual Results report will be adjusted within this report. Any errors and omissions with regards to projects counts, data lag, and calculations etc., will be made within this report. Considers the cumulative effect of energy savings.				

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings	
<b>Consumer Program</b>	1			
Appliance Retirement	Includes both retail and home pickup stream; Retail stream allocated based on average of 2008 & 2009 residential throughput; Home pickup stream directly attributed by postal code or customer selection	Savings are considered to begin in the year the appliance is picked up.	Peak demand and energy savings are determined using the verified measure level p	
Appliance Exchange	When postal code information is provided by customer, results are directly attributed to the LDC. When postal code is not available, results allocated based on average of 2008 & 2009 residential throughput	Savings are considered to begin in the year that the exchange event occurred	unit assumption multiplied by the uptake in the market (gross) taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.	
HVAC Incentives	Results directly attributed to LDC based on customer postal code	Savings are considered to begin in the year that the installation occurred		

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Conservation Instant Coupon Booklet	LDC-coded coupons directly attributed to LDC; Otherwise results are allocated based on average of 2008 & 2009 residential throughput	Savings are considered to begin in the year in which the coupon was redeemed.	Peak demand and energy savings are determined using the verified measure level per unit assumption multiplied by the uptake in the
Bi-Annual Retailer Event	Results are allocated based on average of 2008 & 2009 residential throughput	Savings are considered to begin in the year in which the event occurs.	market (gross) taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.
Retailer Co-op	When postal code information is provided by the customer, results are directly attributed. If postal code information is not available, results are allocated based on average of 2008 & 2009 residential throughput.	Savings are considered to begin in the year	Peak demand and energy savings are determined using the verified measure level per unit assumption multiplied by the uptake in the market (gross) taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.
Residential Demand Response	Results are directly attributed to LDC based on data provided to OPA through project completion reports and continuing participant lists	Savings are considered to begin in the year the device was installed and/or when a	Peak demand savings are based on an ex ante estimate assuming a 1 in 10 weather year and represents the "insurance value" of the initiative. Energy savings are based on an ex post estimate which reflects the savings that occurred as a result of activations in the year and accounts for any "snapback" in energy consumption experienced after the event. Savings are assumed to persist for only 1 year, reflecting that savings will only occur if the resource is activated.

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Residential New Construction	Results are directly attributed to LDC based on LDC identified in application in the saveONenergy CRM system; Initiative was not evaluated in 2011, reported results are presented with forecast assumptions as per the business case.	Savings are considered to begin in the year of the project completion date.	Peak demand and energy savings are determined using the verified measure level per unit assumption multiplied by the uptake in the market (gross) taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.
Business Program			
Efficiency: Equipment Replacement	Results are directly attributed to LDC based on LDC identified at the facility level in the saveONenergy CRM; Projects in the Application Status: "Post-Stage Submission" are included (excluding "Payment denied by LDC"); Please see "Reference Tables" tab for Building type to Sector mapping	Savings are considered to begin in the year of the actual project completion date on the iCON CRM system.	Peak demand and energy savings are determined by the total savings for a given project as reported in the iCON CRM system (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net). Both realization rate and net-to-gross ratios can differ for energy and demand savings and depend on the mix of projects within an LDC territory (i.e. lighting or non-lighting project, engineered/custom/prescriptive track).
	<b>Additional Note:</b> project counts were derived bonly including projects with an "Actual Project C"Building Address 1" field from the Post Stage R	Completion Date" in 2012 and pulling both the	"Application Name" field followed by the

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Direct Installed Lighting	Results are directly attributed to LDC based on the LDC specified on the work order	Savings are considered to begin in the year of the actual project completion date.	Peak demand and energy savings are determined using the verified measure level per unit assumptions multiplied by the uptake of each measure accounting for the realization rate for both peak demand and energy to reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings take into account net-to-gross factors such as free-ridership and spillover for both peak demand and energy savings at the program level (net).
Existing Building Commissioning Incentive	Results are directly attributed to LDC based on LDC identified in the application; Initiative was not evaluated, no completed projects in 2011 or 2012.	Savings are considered to begin in the year of the actual project completion date.	Peak demand and energy savings are determined by the total savings for a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and
New Construction and Major Renovation Incentive	Results are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year of the actual project completion date.	reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).
Energy Audit	Projects are directly attributed to LDC based on LDC identified in the application	Savings are considered to begin in the year of the audit date.	Peak demand and energy savings are determined by the total savings resulting from an audit as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Commercial Demand Response (part of the Residential program schedule)	Results are directly attributed to LDC based on data provided to OPA through project completion reports and continuing participant lists	Savings are considered to begin in the year the device was installed and/or when a customer signed a <i>Peaksaver</i> PLUS™ participant agreement.	Peak demand savings are based on an ex ante estimate assuming a 1 in 10 weather year and represents the "insurance value" of the initiative. Energy savings are based on an ex post estimate which reflects the savings that occurred as a result of activations in the year. Savings are assumed to persist for only 1 year, reflecting that savings will only occur if the resource is activated.
Demand Response 3 (part of the Industrial program schedule)	Results are attributed to LDCs based on the total contracted megawatts at the contributor level as of December 31st, applying the provincial ex ante to contracted ratio (ex-ante estimate/contracted megawatts); Ex post energy savings are attributed to the LDC based on their proportion of the total contracted megawatts at the contributor level.	Savings are considered to begin in the year in which the contributor signed up to participate in demand response.	Peak demand savings are ex ante estimates based on the load reduction capability that can be expected for the purposes of planning. The ex-ante estimates factor in both scheduled non-performances (i.e. maintenance) and historical performance. Energy savings are based on an ex post estimate which reflects the savings that actually occurred as a results of activations in the year. Savings are assumed to persist for 1 year, reflecting that savings will not occur if the resource is not activated and additional costs are incurred to activate the resource.
Industrial Program			
Process & System Upgrades	Results are directly attributed to LDC based on LDC identified in application in the saveONenergy CRM system; Initiative was not evaluated, no completed projects in 2011 or 2012.	Savings are considered to begin in the year in which the incentive project was completed.	Peak demand and energy savings are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Monitoring & Targeting	Results are directly attributed to LDC based on LDC identified in the application; Initiative was not evaluated, no completed projects in 2011 or 2012.	Savings are considered to begin in the year in which the incentive project was completed.	Peak demand and energy savings are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).
	Results are directly attributed to LDC based on LDC identified in the application; No completed projects in 2011 or 2012.	Savings are considered to begin in the year in which the project was completed by the energy manager. If no date is specified the savings will begin the year of the Quarterly Report submitted by the energy manager.	Peak demand and energy savings are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	Results are directly attributed to LDC based on LDC identified at the facility level in the saveONenergy CRM; Projects in the Application Status: "Post-Stage Submission" are included (excluding "Payment denied by LDC"); Please see "Reference Tables" tab for Building type to Sector mapping	Savings are considered to begin in the year of the actual project completion date on the iCON CRM system.	Peak demand and energy savings are determined by the total savings for a given project as reported in the iCON CRM system (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net). Both realization rate and net-to-gross ratios can differ for energy and demand savings and depend on the mix of projects within an LDC territory (i.e. lighting or non-lighting project, engineered/custom/prescriptive track).
Demand Response 3	Results are attributed to LDCs based on the total contracted megawatts at the contributor level as of December 31st, applying the provincial ex ante to contracted ratio (ex-ante estimate/contracted megawatts); Ex post energy savings are attributed to the LDC based on their proportion of the total contracted megawatts at the contributor level.	Savings are considered to begin in the year in which the contributor signed up to participate in demand response.	Peak demand savings are ex ante estimates based on the load reduction capability that can be expected for the purposes of planning. The ex-ante estimates factor in both scheduled non-performances (i.e. maintenance) and historical performance. Energy savings are based on an ex post estimate which reflects the savings that actually occurred as a results of activations in the year. Savings are assumed to persist for 1 year, reflecting that savings will not occur if the resource is not activated and additional costs are incurred to activate the resource.
Home Assistance Pro	ogram		

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Home Assistance Program	Results are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year in which the measures were installed.	Peak demand and energy savings are determined using the measure level per unit assumption multiplied by the uptake of each measure (gross) taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.
Pre-2011 Programs of	ompleted in 2011		
Electricity Retrofit Incentive Program	Results are directly attributed to LDC based on LDC identified in the application; Initiative was not evaluated in 2011 or 2012, assumptions as per 2010 evaluation		Peak demand and energy savings are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and
High Performance New Construction	Results are directly attributed to LDC based on customer data provided to the OPA from Enbridge; Initiative was not evaluated in 2011 or 2012, assumptions as per 2010 evaluation	Savings are considered to begin in the year in	reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net). If energy savings are not available, an estimate is made based on the kWh to kW ratio in the provincial results
Toronto Comprehensive	Program run exclusively in Toronto Hydro- Electric System Limited service territory; Initiative was not evaluated in 2011 or 2012, assumptions as per 2010 evaluation	which a project was completed.	from the 2010 evaluated results (http://www.powerauthority.on.ca/evaluation-measurement-and-verification/evaluation-reports).

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
	Results are directly attributed to LDC based on LDC identified in the application; Initiative was not evaluated in 2011 or 2012, assumptions as per 2010 evaluation		Peak demand and energy savings are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and
Data Centre Incentive Program	Program run exclusively in PowerStream Inc. service territory; Initiative was not evaluated in 2011, assumptions as per 2009 evaluation	Savings are considered to begin in the year in which a project was completed.	reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net). If energy savings are not available, an estimate is made based on the kWh to kW ratio in the provincial results
EnWin Green Suites	Program run exclusively in ENWIN Utilities Ltd. service territory; Initiative was not evaluated in 2011 or 2012, assumptions as per 2010 evaluation		from the 2010 evaluated results (http://www.powerauthority.on.ca/evaluation-measurement-and-verification/evaluation-reports).

# **5 Combined CDM Reporting Elements**

### **5.1 Progress Towards CDM Targets**

Tables 6 and 7 below outline EPLC's progress towards CDM targets as per EPLC's 2012 Final Annual Report supplied by the OPA August 31, 2012.

Table 6: Net Peak Demand Savings at the End User Level (MW) - Scenario 1

Implementation Period	Annual (MW)				
implementation renou	2011	2012	2013	2014	
2011 - Verified	2.49	0.5	0.5	0.5	
2012 - Verified		2.4	0.4	0.4	
2013					
2014					
Verified	0.9				
	7.2				
Verified Portion of F	12.8%				

Table 7: Net Energy Savings at the End-User Level (GWh) – Scenario 1

Implementation Period	Annual (GWh)				Cumulative (GWh)
	2011	2012	2013	2014	2011-2014
2011 - Verified	2.2	2.1	2.1	2.0	8.3
2012 - Verified		2.2	2.1	2.1	6.4
2013					
2014					
Verif	14.6				
EPLC 2011-2014 Cumulative CDM Energy Target:					21.5
Verified Portion of Cumulative Energy Target Achieved (%):					67.9%

09/30/2013 40

Essex Powerlines Corporation 2012 CDM Annual Report

Table 8: Net Peak Demand Savings at the End User Level (MW) – Scenario 2

Implementation Period	Annual (MW)				
implementation Period	2011	2012	2013	2014	
2011 - Verified	2.49	0.5	0.5	0.5	
2012 - Verified		2.4	0.4	0.4	
2013					
2014					
Verified	0.9				
	7.2				
Verified Portion of F	40.6%				
EPLC Str	40.0%				
Variance				0.6%	

Table 9: Net Energy Savings at the End-User Level (GWh) – Scenario 2

Implementation Period	Annual (GWh)				Cumulative (GWh)
	2011	2012	2013	2014	2011-2014
2011 - Verified	2.2	2.1	2.1	2.0	8.3
2012 - Verified		2.2	2.1	2.1	6.4
2013					
2014					
Verif	14.6				
EPLC 2011-2014 Cumulative CDM Energy Target:					21.5
Verified Portion of Cumulative Energy Target Achieved (%):					68.4%
EPLC, Milestone submitted for 2011-2012					40.0%
Variance					28.4%

## 5.2 CDM Strategy Modifications

EPLC does not recommend making any substantive changes from its original CDM strategy submission as a result of acceptable performance of CDM program delivery and uptake to date. Tables 6 and 7 above reflect only a 2 year persistence of DR projects. EPLC has been active in advertising and customer outreach in this sector to ensure we meet out 2014 demand target; which is predicted to be the tougher of the two targets to meet. When scenarios considering the full effects of DR are used, EPLC is meeting and outpacing the majority of LDCs in Ontario.

### 6.0 Conclusion

Over the course of 2012, Essex Powerlines Corporation has achieved 2.44 MW in peak demand savings and 2.18 GWh in energy savings, which represents 40.6% and 68.4% of Essex Powerlines Corporation 2014 target, respectively. These results are representative of a considerable effort expended by Essex Powerlines Corporation, 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 a subsequent CDM term.

Looking ahead there is limited opportunity to make valuable changes to the current program portfolios and have these changes reflected in LDC 2014 results. However, LDCs and the OPA can build on the strengths and key successes of the 2011-2014 programs to launch new programs which will meet the needs of the industry and consumers.

**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: OPA 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:

http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/current\_ electricity contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf and

SaveONenergy website https://saveonenergy.ca/Consumer/Programs/Appliance-

Retirement.aspx

In Market Date: January 2011

APPLIANCE EXCHANGE INITIATIVE (Exhibit E)

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

Initiative Frequency: Spring and Fall

09/30/2013 43 **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.

Targeted End Uses: Window air conditioners and portable dehumidifiers

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

Additional detail is available:

Schedule B-1, Exhibit C
 http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/current\_electricity\_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf\_and

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

In Market Date: March 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:** OPA 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
 <a href="http://www.powerauthority.on.ca/sites/default/files/new-files/industry-stakeholders/current-electricity">http://www.powerauthority.on.ca/sites/default/files/new-files/industry-stakeholders/current-electricity</a> contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf and

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

In Market Date: February 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 Fluorescent 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 OPA 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 OPA enters into agreements with retailers to honour the coupons.

Additional detail is available:

Schedule B-1, Exhibit A
 http://www.powerauthority.on.ca/sites/default/files/new files/industry stakeholders/current
 electricity contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf
 and

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

In Market Date: February 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 OPA enters into arrangements with participating retailers to promote the discounted products, and to post and honour related coupons. LDCs also refer retailers to the OPA and market this

initiative locally.

Additional detail is available:

• Schedule B-1, Exhibit C http://www.powerauthority.on.ca/sites/default/files/new files/industry stakeholders/current electricity contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf and

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

In Market Date: March 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

09/30/2013 46 **Delivery:** Retailers apply to the OPA for co-op funding to run special promotions that promote energy efficiency to customers in their stores. LDCs can refer retailers to the OPA. The OPA 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: n/a

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:

- Incentives for homebuilders who install electricity efficiency measures as determined by a prescriptive list or via a custom option.
- 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 OPA air coverage driving builders to their LDC for additional information.

Additional detail is available:

- Schedule B-1, Exhibit C
   http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/current
   electricity\_contracts/pdfs/Schedule%20B-2%20New%20Construction%20Program.pdf
   and
- SaveONenergy website <a href="https://saveonenergy.ca/Consumer.aspx">https://saveonenergy.ca/Consumer.aspx</a>

In Market Date: February 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 ™ 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
   <a href="http://www.powerauthority.on.ca/sites/default/files/new-files/industry-stakeholders/current-electricity-contracts/pdfs/SCHED\_2011\_ResDR\_B\_3\_110727%28MJB%29v15\_redacted.pdf">http://www.powerauthority.on.ca/sites/default/files/new-files/industry-stakeholders/current-electricity-contracts/pdfs/SCHED\_2011\_ResDR\_B\_3\_110727%28MJB%29v15\_redacted.pdf</a> and
- SaveONenergy website <a href="https://saveonenergy.ca/Consumer.aspx">https://saveonenergy.ca/Consumer.aspx</a>

In Market Date: Peaksaver extension – March 2011 to August 2011; Peaksaver Plus – targeting late 2012

### **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
 <a href="http://www.powerauthority.on.ca/sites/default/files/new-files/industry-stakeholders/current-electricity">http://www.powerauthority.on.ca/sites/default/files/new-files/industry-stakeholders/current-electricity</a> contracts/pdfs/Schedule%20C-2%20ERII%20Initiative.pdf and

• 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 2011

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 \$1,000 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 \$1,000 at no cost to qualifying small businesses. In addition, standard prescriptive incentives are available for eligible equipment beyond the initial \$1,000 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
 <a href="http://www.powerauthority.on.ca/sites/default/files/page/Schedule%20C-3%20Direct%20Install%20Initiative%20-%20redacted.pdf">http://www.powerauthority.on.ca/sites/default/files/page/Schedule%20C-3%20Direct%20Install%20Initiative%20-%20redacted.pdf</a> and

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

In Market Date: July 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
  <a href="http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/current\_electricity">http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/current\_electricity</a> contracts/pdfs/Schedule%20C-6%20Commissioning%20Initiative.pdfand
- 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: February 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
 <a href="http://www.powerauthority.on.ca/sites/default/files/page/ScheduleC-4">http://www.powerauthority.on.ca/sites/default/files/page/ScheduleC-4</a>
 4NewContructionInitiativeV2.pdf and

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: June 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:

Essex Powerlines Corporation 2012 CDM Annual Report

- Schedule C-1
   http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/current
   electricity\_contracts/pdfs/Schedule%20C-1%20Energy%20Audit%20Initiative.pdf and
- 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: February 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 costs

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

http://www.powerauthority.on.ca/sites/default/files/new files/industry stakeholders/current electricity contracts/pdfs/Schedule%20D-

1%20Process%20and%20Systems%20Upgrades%20Initiative.pdf and

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

In Market Date: November 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 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 Monitoring and Targeting 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
 http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/current\_e
 lectricity\_contracts/pdfs/Schedule%20D-2%20Monitoring%20and%20Targeting%20Initiative.pdf
 and

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

In Market Date: November 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
 http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/current
 electricity\_contracts/pdfs/Schedule%20D-3%20Energy%20Manager%20Initiative%202011 2014.pdf and

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

In Market Date: August 2011

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

Essex Powerlines Corporation 2012 CDM Annual Report

**Delivery:** LDC delivered

Additional detail is available:

ScheduleD-4

http://www.powerauthority.on.ca/sites/default/files/new files/industry stakeholders/projects programs/pdfs/PSUI%20Initiative%20Schedule%20D-4.Key%20Account%20Manager.20110322.pdf

In Market Date: August 2011

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 OPA. The OPA administers contracts with all DRPs and Direct Participants (who provide in excess of 5 MW of demand response capacity). OPA 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
   http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/current\_electricity\_contracts/pdfs/Schedule%20D-6%20Demand%20Response%203%202011-2014.pdf\_and
- SaveONenergy website <a href="https://saveonenergy.ca/Business.aspx">https://saveonenergy.ca/Business.aspx</a>

09/30/2013

55

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)

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. compact fluorescent light bulbs)

**Delivery:** LDC delivered.

Additional detail is available:

Schedule E
<a href="http://www.powerauthority.on.ca/sites/default/files/page/Low%20Income%20Schedule%20-%20redacted%20version.pdf">http://www.powerauthority.on.ca/sites/default/files/page/Low%20Income%20Schedule%20-%20redacted%20version.pdf</a>

In Market Date: February 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 OPA (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)

TORONTO COMPREHENSIVE INITIATIVE

Target Customer Type(s): Commercial and Institutional Customers

Initiative Frequency: Year round

Objective: n/a

**Description:** This Initiative is specific to Toronto Hydro's Service Area.

Targeted End Uses: Not Applicable to EPLC

Delivery: n/a

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:** OPA'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 OPA contracted with GreenSaver to deliver the MEER Initiative outside of the Toronto Hydro service territory. Activities delivered in Toronto were contracted with the City.

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**: OPA contracted with Greensaver

DATA CENTRE INCENTIVE PROGRAM

Target Customer Type(s): n/a

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Initiative Frequency: Year round

**Objective:** n/a

**Description:** This Initiative is specific to Powerstream's Service Area.

Targeted End Uses: n/a

**Delivery**: n/a

#### **ENWIN GREEN SUITES**

Target Customer Type(s): n/a

Initiative Frequency: Year round

Objective: n/a

**Description:** This Initiative is specific to EnWin's Service Area.

Targeted End Uses: n/a

**Delivery**: n/a