

P.O. Box 2140 855 Confederation Street Sarnia, Ontario N7T 7L6 Tel: (519) 337-8201 Fax: (519) 344-6094

September 30, 2013

Ms. Kirsten Walli Board Secretary Ontario Energy Board P.O. Box 2319 2300 Yonge Street, 27<sup>th</sup> Floor Toronto, ON M4P 1E4

#### **RE: Conservation and Demand Management 2012 Annual Report**

Dear Ms. Walli

Please find attached Bluewater Power Distribution Corporation's 2012 Conservation and Demand Management Annual Report.

Two hard copies will follow.

Sincerely,

David Macher y

David Mackay Conservation and Demand Management Coordinator Bluewater Power Distribution Corporation Email: <u>dmackay@bluewaterpower.com</u> Phone: 519-337-8201 Ext 2221



# Bluewater Power Distribution Corporation

**Conservation and Demand Management** 

# 2012 Annual Report

Submitted to:

# **Ontario Energy Board**

September 30, 2013

EX	<i>(ECUTIV</i>	E SUMMARY	1
B	ACKGRO	UND	
1	CON	SERVATION FRAMEWORK	5
	1.1	CURRENT FRAMEWORK	5
	1.2	FUTURE FRAMEWORK	5
2	BOA	RD-APPROVED CDM PROGRAMS	7
	2.1	INTRODUCTION	7
	2.2	TOU PRICING	7
	2.2.1	BACKGROUND	7
	2.2.2	2. TOU PROGRAM DESCRIPTION	8
	2.3	BLUEWATER POWER'S APPLICATION WITH THE OEB	9
3.	OPA	-CONTRACTED PROVINCE-WIDE CDM PROGRAMS	
	3.1	INTRODUCTION	
	3.2	PROGRAM DESCRIPTIONS	
	3.2.1	RESIDENTIAL PROGRAMS	
	3.2.2	2 COMMERCIAL AND INSTITUTIONAL PROGRAM	21
	3.2.3	B INDUSTRIAL PROGRAM	26
	3.2.4	LOW INCOME INITIATIVE (HOME ASSISTANCE PROGRAM) (Schedule E-1)	
	3.2.5	5 PRE-2011 PROGRAMS	
4	2012	LDC CDM RESULTS	32
	4.1	Participation and Savings	
	4.2	EVALUATION	
	4.3	Spending	
	4.4	Additional Comments	42
5	COM	IBINED CDM REPORTING ELEMENTS	43
_	5.1	Progress Towards CDM Targets	

#### TABLE OF CONTENTS

5.2	VARIANCE FROM STRATEGY	43
5.3	Outlook to 2014 and Strategy Modifications	
6.0	CONCLUSION	
APPEN	DIX A: INITIATIVE DESCRIPTIONS	
APPEN	DIX B: PRE-2011 PROGRAMS	59

### **Executive Summary**

This annual report is submitted by Bluewater Power Distribution Corporation ("Bluewater Power") in accordance with the filing requirements set out in the CDM Code (Board File No. EB-2010-0215), specifically Appendix C Annual Report Template, as a progress report and modification to Bluewater Power's Strategy. Accordingly, this report outlines Bluewater Power's CDM activities for the period of January 1, 2012 to December 31, 2012. It includes net peak demand and net energy savings achieved in 2011 and 2012, discussion of the current/future CDM framework, CDM program activities, successes and challenges, as well as forecasted savings to the end of 2014.

Bluewater Power did not apply for any Board-Approved CDM Programs during 2012; however, as noted in the CDM guidelines, released April 26, 2012, the Ontario Energy Board (OEB) has deemed Time-of-Use (TOU) pricing a Province-wide Board-Approved CDM Program. The Ontario Power Authority (OPA) is to provide measurement and verification on TOU. At the time of this report the OPA has not released any verified results of TOU savings to Bluewater Power.

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

In 2012, Bluewater Power concentrated its efforts on the delivery of Business Programs and initiatives that would provide the greatest opportunity for energy savings such as Retrofit (ERII) and Direct Install Lighting. In 2012, Bluewater Power also entered the market with the delivery of the Home Assistance Program.

Bluewater Power achieved 2.8 MW of net incremental peak demand savings and 4.0 GWh of net incremental energy savings in 2012. A summary of the achievements towards the CDM targets is shown below:

OPA-Contracted Province-Wide CDM Programs FINAL 2012 Results											
LDC: Bluewater Power Distribution Corporation											
FINAL 2012 Progress to Targets	2012 Incremental	Program-to-Date Progress to Target (Scenario 1)	Scenario 1: % of Target Achieved	Scenario 2: % of Target Achieved							
Net Annual Peak Demand Savings (MW)	2.8	2.0 18.6%		36.2%							
Net Energy Savings (GWh)	4.0	32.8	61.0%	61.2%							

Scenario 1 = Assumes that demand resource resources have a persistence of 1 year

Scenario 2 = Assumes that demand response resources remain in your territory until 2014

The OPA report for 2012 final results show that Bluewater Power is on-track to achieve its Net Energy Savings target, with approximately 61% of the target achieved with approximately 2 years remaining in

the program. We forecast that we will reach our target for Net Energy Savings, although we have concern that our success to date has harvested the "low hanging fruit". We are conscious that residential programs are near saturation and we caution the OPA, the OEB and the Minister of Energy that those programs are in need of revamping. Our expectation of meeting our Net Energy Savings target is based on the premise that residential programs offered through the OPA will continue to evolve to meet changing needs in the market.

We have not assumed any Tier 2 or 3 CDM programs in our forecast. We believe that the OEB process for receiving approval requires streamlining in order to be more effective in the development of responsive CDM Programs, however we are monitoring the development of alternative programs in the industry.

Bluewater Power's experience with Peak Demand Savings is disappointing in a similar manner to most LDCs in Ontario, although relative to other LDCs we have performed well. Our challenge will be to make gains on the 8.7 MW shortfall in savings to reach the 2014 peak demand reduction target. Bluewater Power has formulated a plan that will place it in the best possible position to achieve the electricity energy savings 2014 target. Having said that, there are two significant challenges that LDCs in Ontario face in meeting their demand reduction targets:

- (1) We understand that approximately 20% of each LDC's Peak Demand Savings were based on Time-of-Use Pricing. We have not been provided results yet from the OPA but we note that, if there are shortfalls experienced province-wide, then that would not reflect under-performance but would rather reflect difference in assumptions in the forecast for this program. For example, if the forecast assumed a greater differential in price between on-peak and off-peak electricity than has been experienced in the market, then performance may suffer through no fault in delivery of the program.
- (2) At the time of setting targets, the province-wide target was allocated pro-rata to LDCs in Ontario. The assumption was that all LDCs were expected to participate to the same extent regardless of local market conditions; however, not all LDCs were given the same tools to achieve savings. The most obvious example is the Demand Response program, which provides lesser incentives to customers of LDCs located in "discount zones". Bluewater Power is located in a discount zone, so either we need to be given the same tools or our target should be adjusted accordingly.

Despite these challenges, Bluewater Power remains optimistic that our plan will give us the best opportunity to meet our demand reduction targets. That optimism is based on the fact that our experience has shown that it takes time to create a relationship with large customers. We have laid the foundation of those relationships over the past 2 years and we have reasonable expectations that we will see applications resulting from those efforts.

With respect to targeted efforts, the plan set out in this report includes a renewed focus on the following programs:

 HVAC: we are actively promoting these programs to both residential and commercial customers. We have seen results with these programs in the past and we believe the recent decline does not reflect market saturation, but the need for reinforced education of our channel partners.

- (2) Municipalities: our municipal shareholders are major power consumers and we have engaged these entities at both the management and operational levels.
- (3) ERII: The main route for large customer applications has been ERII and we have worked closely with industry. Although it takes time to develop a relationship, the stability of CDM based on the Ministry of Energy's commitment to "Conservation First" has provided the boost necessary to ensure success.
- (4) Bluewater Power has partnered with other Southwestern Ontario LDCs and has been working with the Ontario Power Authority ("OPA") and the Electrical Distribution Association ("EDA") to improve program effectiveness. We believe there is potential to work together with greater effectiveness.

## 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 Bluewater Power to require Bluewater Power, as a condition of its license, to achieve 53.7 GWh of energy savings and 10.7 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, Bluewater Power submitted its CDM Strategy on November 1, 2010, which provided a high level of description of how Bluewater Power 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 completed by Bluewater Power and has been prepared in accordance with the Code requirements and covers the period from January 1, 2012 to December 31, 2012.

Bluewater Power submitted its 2011 Annual Report on September 28, 2012 which summarized the CDM activities, successes and challenges experienced by Bluewater Power 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. Until clarification is provided, the focus of the LDCs remains on the achievement of CDM targets by December 31, 2014. This report has been prepared assuming no change to either timelines or funding, although both matters may be the subject of clarification in the near future.

## **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, supports the provincial integrated supply plan, as well as addresses 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 a finite set of 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 overbuilt governance and excessive legal requirements results in a slow and 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 continuality 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.

## 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 has been deemed as a Board-Approved Conservation and Demand Management ("CDM") program that is being offered in Bluewater Power's service area.

## 2.2 TOU Pricing

#### 2.2.1 BACKGROUND

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

In accordance with 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. Bluewater Power 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. An overview of preliminary results from these 5 LDCs was provided on September 11 2013. While there was significant evidence of load shifting across all participating LDCs, moving from on peak to off peak time periods, there was very little evidence that TOU pricing resulted in any energy conservation or reduction in energy use (i.e., not statistically significant).

As of September 30, 2013, the OPA has not released any verified results of TOU savings to Bluewater Power. Therefore Bluewater Power is not able to provide any verified savings related to Bluewater Power's TOU program at this time. We note that any shortfall in achieving targets does not reflect a deficiency in the design or delivery of the program. However, the forecast savings may have been based on a set of assumptions, including the differential between on-peak and off-peak pricing, that differs from the circumstances experienced in the market. In reporting on the results, the OPA ought to reflect upon the reasons behind any shortfall experienced. We would submit that any shortfall should not reflect upon an individual LDCs effort to achieve it targets, unless there is evidence that the results for a particular LDC was substantially inferior to its peers. Bluewater Power has fully deployed Smart Meters in its territory and implemented TOU pricing in the first quarter of 2012 so we expect our results to be consistent with the entire province.

#### 2.2.2 TOU PROGRAM DESCRIPTION

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

#### Initiative Frequency: Year-Round

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

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

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

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:

Bluewater Power began transitioning its RPP customers to TOU billing on March 26, 2012. As of December 31<sup>st</sup>, 2012, 32,399 RPP customers were on TOU billing which represents 100% of our residential and general service less than 50 kW customers.

## 2.3 Bluewater Power's Application with the OEB

There were no LDC programs approved by the OEB in 2012. There are no applications by Bluewater Power currently pending with the OEB for CDM programs.

## 3 OPA-Contracted Province-Wide CDM Programs

## 3.1 Introduction

Effective March 25<sup>th</sup>, 2011, Bluewater Power 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:

Initiative	Schedule	Date schedule posted	Customer Class		
Residential Program					
Appliance Retirement	Schedule B-1, Exhibit D	Jan 26,2011	All residential rate classes		
Appliance Exchange	Schedule B-1, Exhibit E	Jan 26, 2011	All residential rate classes		
HVAC Incentives	Schedule B-1, Exhibit B	Jan 26, 2011	All residential rate classes		
Conservation Instant Coupon Booklet	Schedule B-1, Exhibit A	Jan 26, 2011	All residential rate classes		
Bi-Annual Retailer Event	Schedule B-1, Exhibit C	Jan 26, 2011	All residential rate classes		
Retailer Co-op	n/a	n/a	All residential rate classes		
Residential Demand Response	Schedule B-3	Aug 22, 2011	All general service classes		
New Construction Program	Schedule B-2	Jan 26, 2011	All residential rate classes		
Commercial & Institutional Program					
Efficiency: Equipment Replacement	Schedule C-2	Jan 26, 2011	All general service classes		
Direct Install Lighting	Schedule C-3	Jan 26, 2011	General Service < 50 kW		
Existing Building Commissioning Incentive	Schedule C-6	Feb 2011	All general service classes		
New Construction and Major Renovation Initiative	Schedule C-4	Feb 2011	All general service classes		
Energy Audit	Schedule C-1	Jan 26, 2011	All general service classes		
Commercial Demand Response (part of the Residential program schedule)	Schedule B-3	Jan 26, 2011	All general service classes		
Demand Response 3 (part of the Industrial program schedule)	Schedule D-6	May 31, 2011	General Service 50 kW & above		

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

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

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

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.			
<b>Commercial &amp; Institutional</b>	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 the saveONenergy program suite. The change management process allows for modifications to the Master Service Agreement and initiative Schedules. The program enhancements give LDCs additional tools and greater flexibility to deliver programs in a way that meets the needs of customers and further drives participation in the Initiatives.

## 3.2 **Program Descriptions**

Full OPA-Contracted Province-Wide CDM Program descriptions are available from the OPA and additional information on the initiatives can be found on the saveONenergy website at <a href="https://saveonenergy.ca">https://saveonenergy.ca</a>. The targeted customer types, objectives, and individual descriptions for each Program Initiative are detailed in Appendix A.

#### 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 load control device included in the revamped PeaksaverPLUS program is the main Residential Initiative driving demand savings for LDCs.

The Residential Program Portfolio is predominately a carryover of Initiatives from previous programs. It is mostly driven by advertising and promotion by the LDC and working with our channel partners. We have seen retailers and contractors who have not fully delivered on these programs to the extent 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.

Work to revitalize and increase the effectiveness and breadth of the initiatives through the Residential Program needs to be a high priority. We believe this has been recognized by the Ministry of Energy's "Conservation First" review and the OPA needs to fully engage with LDCs in an effort to deliver better offerings to the residential market. There are opportunities within the Residential marketplace that need to be identified, developed and offered to customers. A revised home energy audit program would create opportunities not currently being realized, 'point of purchase' rebates on energy efficient appliances should be considered, as well as enhanced customer education programs.

Existing programs have reached market saturation and the OPA must consider whether the programs should be discontinued or substantially revamped. Those issues are discussed further in the remaining pages of this report. Finally, we note that increased control by the LDCs such as 100% attributable coupons for LDCs and/or LDC hosted exchange events may present an opportunity for improved savings.

Bluewater Power 2012 CDM Annual Report

#### 3.2.1.1 Appliance Retirement Initiative (Exhibit D)

**Initiative Activities/Progress:** Bluewater Power utilized a variety of methods to market its residential conservation programs. Print advertising, radio advertising, bill inserts, direct mail pieces and e-blasts were all employed to message potential appliance retirement participants on what had previously been a very effective conservation initiative. Bluewater Power also cross promoted the appliance retirement initiative at multiple community and retail events. Customer feedback remains positive.

However, the same trend of declining participation that was occurring province wide was also observed in Bluewater Power service territory. The number of participants dropped from 679 to 408 with an energy savings drop from 288,762 kWh to 160,470 kWh. Peak demand savings dropped from 41 kW to 24 kW.

#### Additional Comments:

- 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 strengthened 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:** While Bluewater Power's activity level was down, the net incremental energy savings increased. This was due to the exchange of dehumidifiers rather than window air conditioners which provide a greater per unit savings. Bluewater Power participated directly with the Sarnia Canadian Tire location and used the opportunity to cross promote the complete suite of Residential initiatives. Additionally, Bluewater Power ran radio advertising leading up to the event and provided in store staff for two days working alongside retail staff. However, in 2012 there was only one exchange

event with one retail participant and was held on the Father's Day weekend. Bluewater Power expressed our opinion that this was not the best weekend to hold an exchange event.

#### 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.

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

**Initiative Activities/Progress:** Bluewater Power used bill inserts as the primary method of advertising; however, as part of a wider Residential Program offering, Bluewater Power utilized a full colour two page customer information newsletter in the August edition of Sarnia-Lambton this week. This newspaper is distributed free of charge to over 40,000 area households. This newsletter contained information on Fall Coupon event, Fridge and Freezer pickup in addition to the Heating and Cooling Incentive. This method of advertising was very cost effective. Bluewater Power also used every opportunity at a community or retail event to cross promote the Heating and Cooling Incentive.

- 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. We believe that contractors should be engaged locally and Bluewater Power has made efforts recently; we believe local training has advantages over training driven centrally by the OPA and the Heating, Refrigeration and Air Conditioning Institute of Canada (HRAI).
- 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:** Bluewater Power experienced a dramatic drop on participant activity mainly due to the coupons being unavailable to customers year round. However, this was consistent with the province's results. In the past coupons were mailed to customers; however, in 2012 based on evaluators analysis of the 2011 program, coupons were only available for download from a computer. Combined with the shorter duration of the instant point of sale incentives, forecasted energy savings did not materialize. Bluewater Power relies on wider coupon availability in order to promote at the Spring Home Show held in in April of each year.

- 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.
- 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:** Bluewater Power provided two full time staff for events at Lowe's and Canadian Tire in April of 2012 and two full time staff to Lowe's, Home Depot and Canadian Tire in October of 2012. The two staff members would work "in-store" on a weekend to promote not only energy efficient product from the retailer but also would use the opportunity to cross promote the OPA suite of residential CDM offerings. Bluewater Power would provide radio advertising leading up to the event and also provided a radio personality "live on remote" during a four hour period. Given the success at the Lowe's event, the OPA and Bluewater Power developed a case study which was presented during an OPA marketing event in July 2012 and shared with all LDCs.

As a result of Bluewater Power's efforts during these events, Bluewater Power saw an increase in participation.

- 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.

- 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: Bluewater Power did not participate in this initiative.

#### Additional Comments:

- This is 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.

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

**Initiative Activities/Progress:** Bluewater Power enlisted the support of our affiliate to aggressively target local builders in 2012 to determine barriers to participation and to develop solutions to overcome the lack of interest. They were able to complete three applications in 2012 but low incentive levels and onerous participation agreements and application processes impede increased participation. Additionally the CRM poses further complications resulting in applications and payments now in 2013 processed outside of ICON so the administrative requirements of the LDC do not align with the energy savings. With the three applications, Bluewater Power obtained zero (0) demand savings and only 362 kwh energy savings.

Lastly, in the Sarnia area there are a limited number of housing starts. The low growth rate for this building sector combined with low incentive amounts make it difficult to generate interest with this initiative. The builder market is highly competitive and, with limited growth in our territory, builders have been unwilling to invest the time required to explore the benefits of this program. At first glance, however, the program incentives have not been sufficient to attract their attention.

- 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 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:** While Bluewater Power remains in market with our existing inventory of load control devices, we are not in market with peaksaverPLUS.

While not in market with peaksaverPLUS, Bluewater Power has remained actively engaged with both Sensus, our metering vendor, and In Home Display (IHD) vendors in order to determine the optimal solution for our customers. Bluewater Power finds peaksaverPLUS a very time consuming program to promote and made even more difficult when the technical infrastructure required to ensure that all options could be under consideration at the same time was not in place. In fact through all of 2012 several IHD options were not compatible for LDCs with Sensus meters. Understandably, LDCs wishing to get into market early in order to capitalize on energy savings especially demand savings were left with very few alternatives. Bluewater Power's goal is to ensure that we can provide our peaksaverPLUS participants the optimal solution with added value for the long term. On a recent OPA webinar, evaluators informed LDCs that throughout their 2012 sampling, IHD impact analysis produced very small energy savings. The OPA has indicated that the sample did not include summer months and therefore the evaluation of IHD results was deemed inconclusive.

Additionally, Bluewater Power faces some concern over the incremental cost associated with a meter recently installed under TOU and replacing this meter with one with "zigbee under glass". As mentioned previously with the Residential New Construction program we face issue with small growth and have serious reservations with respect to replaced meters becoming stranded assets. The small growth of our customer base, along with an existing inventory of non-zigbee meters make it difficult to re-use replaced meters. It is difficult to justify additional metering costs having just implemented a multi-million dollar smart metering infrastructure program. This situation is not unique to Bluewater Power and the OPA needs to consider whether it is appropriate to use OPA funds to replace meters in order to move the

peaksaverPLUs program to a more optimal solution; absent direction from the OPA, Bluewater Power is reluctant to take that step so we continue to explore opportunities that may be less than optimal.

In that regard, we recognize there are alternative solutions to replacing the meter such as optical readers; however the hurdle for Bluewater Power is the limited battery life of the device, and the manual effort required by customers to update TOU pricing twice per year. As previously noted, Bluewater Power would like a longer term solution in order to maximize the results of this program, and we continue to monitor the technology and research the optimal solution for both Bluewater Power and its customers.

- 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 at all times 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 energyefficiency 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 the existing codes and standards are offered. 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.

Bluewater Power 2012 CDM Annual Report

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

**Initiative Activities/Progress:** Retrofit continues to be a very strong provider of energy savings for Bluewater Power. In 2012, Bluewater Power approved 50 projects compared to 22 projects in 2011. Demand savings went from 57 kW to 294 kW and energy savings increased to over 1.4 million kWh in 2012. Prescriptive lighting projects continue to be the primary driver although Bluewater Power is striving to push for projects which provide deeper energy savings such as compressed air and variable speed drives.

We believe that these programs represent our best opportunity to achieve our Peak Demand Targets. These programs also demonstrate very clearly that it takes time to develop a relationship with large and industrial customers. We commend the Ministry of Energy for its commitment to conservation to be delivered through LDCs in Ontario.

- It appears that the marketplace largely understands the programs now and a large proportion of LDC savings are attributed to ERII.
- 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. 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 refuse 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:** Bluewater Power's affiliate worked diligently with channel partners; wholesalers and contractors to increase participation levels from 2011 to 2012. Demand savings increased from 92 kW to 246 kW and energy savings rose from 238,084 kWh to 886,133 kWh. Bluewater Power works co-operatively and cross promotes ERII alongside DIL to ensure all commercial customers are streamed accordingly. However, the success in 2012 and prior years is making it increasingly difficult to capture eligible customers as the program may be nearing market saturation.

- Successful execution of the previous rendition of this Initiative (pre-2011) 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, 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:** Bluewater Power provided local marketing and customer support for this initiative but there has been little interest expressed and no customer uptake in 2012.

#### 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 recomissioning 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:** Bluewater Power promoted this initiative locally and met with potential participants to provide information. Bluewater Power finalized an agreement with Enbridge in August 2012 for program delivery. While no projects were completed in 2012, we now have a few applications nearing implementation. Of critical importance is capturing the potential project prior to issuance of a building permit. This has proven to be our greatest challenge thus far; unfortunately Bluewater Power is not notified of a new construction project until the project is nearing completion and seeking connection to our distribution system and our ability to influence design decision making is lost. This could be a result of the program not being marketed to the correct channel partners such as engineering and

architect firms. Bluewater Power will be investing significant effort to reach these decision makers before the final design has been produced. We are also working with our municipal partners because it is critical that we engage this segment of the market <u>before</u> the building permit is issued.

#### 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 six 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:** In 2012 Bluewater Power promoted the Audit Funding initiative as a lead in to the suite of OPA Commercial and Institutional programs. Four audit applications were approved in 2012. Potential participants expect Bluewater Power to recommend specific auditors. The skill set and expertise required to deliver valuable energy related recommendations is difficult to source in Sarnia. Most credible engineering firms with staff that are energy specific tend to come from outside Bluewater Power's service territory. We have observed that since these firms are located outside of Sarnia, Bluewater Power participants experience lengthy delays in reporting.

- 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 by the OPA 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. For 2013, a change to the threshold for small capital projects and a new small capital project agreement are expected to improve the number of projects and savings achieved within PSUI. Likewise, a decision to proceed with natural gas load displacement generation projects will also increase uptake

although results may not be counted towards LDC targets due to in-service dates beyond 2014. Looking ahead there is minimal opportunity to make additional 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:** Bluewater Power submitted its first PSUI application in 2012 through the Capital Incentives stream. The application incentive amount was for \$125,000 with an estimated annual energy savings of 625 MWh. A Detailed Engineering Study was also completed which was a collaborative effort between their Embedded Energy Manager and the Bluewater Power Key Account Manager. The Process and Systems Upgrades Initiative has become an important area of focus for Bluewater Power in 2013 and with the assistance of our Key Account Manager it is an initiative that will receive a great deal of attention moving forward.

- 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.
- 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. Most industrial projects to-date have been submitted as ERII projects due to less onerous contract and M&V requirements.
- A business case was submitted by the Industrial Working Group in July 2012 which would change the upper limit for a small project from 700 MWh to \$1,000,000 in incentives. This would allow more projects to be eligible for the new small capital project agreement and increase participant uptake, while still protecting the ratepayer. The small capital project agreement was finalized through change management in August 2013.
- While there is considerable customer interest in on-site Load Displacement (Co-Generation) projects, in 2012 the OPA was accepting waste heat/waste fuel projects only. Natural gas generation projects

were on hold awaiting a decision on whether PSUI will fund these types of projects. In June 2013, a decision was made to allow natural gas load displacement generation projects to proceed under PSUI. It is expected that a number of projects will proceed although results may not be counted towards LDC targets due to in-service dates beyond 2014.

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

**Initiative Activities/Progress:** Bluewater Power promoted this initiative exclusively to our Large User group within our service territory. In 2012 there was no uptake of 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: In 2012, Bluewater Power submitted an application which was subsequently approved for an Embedded Energy Manager (EEM) at a customer site. A candidate was selected in November 2012. Finding the EEM was a challenge with both financial and geographic constraints. Ultimately, the customer opted to hire a recent engineering graduate with little energy specific experience. However, the new EEM was very keen to identify and implement undertake energy management projects. The EEM worked very closely with Bluewater Power and the KAM to submit a Detailed Engineering Study application before the close of 2012. Bluewater Power anticipates that the EEM/KAM association will lead to further applications for OPA funding and incentives.

As of 2012, Bluewater Power was not able to employ a Roving Energy Manager (REM) due to the lack of sufficient customer base; however discussions are ongoing with neighbouring LDCs to hire a shared REM.

- 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 seven months to have a resource in place.
- New energy managers require 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.
- 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 REMs, although final targets not due to 2013. The Industrial Working Group has proposed to remove this requirement for REM's only as they are not full time employees at a customer facility to find the non-incented savings.
- A decision on extending funding for EM's is required in 2013 for this important Initiative, which should continue beyond 2014, failing which these expert resources will be lost in favour of full-time employment elsewhere.

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

**Initiative Activities/Progress:** Bluewater Power obtained a new Key Account Manager in February 2012. This KAM was a shared resource with Horizon Utilities in Hamilton. Mr. Jim Hickey has proven to be an invaluable resource when dealing with our large use customers. Mr. Hickey has a wealth of knowledge in industrial processes and has the ability to communicate to the participant the OPA's Commercial and Institutional offerings in addition to the Industrial suite of initiatives. Mr. Hickey immediately engaged our large customers to educate their internal experts and staff with hands-on experience on available incentives and to gain an understanding on their operations. These efforts continue, but Mr. Hickey has also expanded his scope to include water and waste water facilities and works very closely with Bluewater Power's municipal clients as well as the local College. The KAM has been instrumental in steering customers to wards the Process and Systems Upgrade Initiative and will continue to do so in 2013.

#### 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.
- A decision on extending funding for KAM's is required in 2013 for this important Initiative, which should continue beyond 2014, failing which these expert resources will be lost in favour of full-time employment elsewhere.

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

**Initiative Activities/Progress:** Bluewater Power provides local marketing and support for this initiative which is a critical component of reaching our demand targets. Bluewater Power is hampered by a reduction in rates paid to our participants as our service territory is now considered a discount zone for payments. The Bluewater Power KAM continues to message our large and medium use customers on the merit of DR3 if we feel their operational process would be a candidate to enter into a contractual obligation with an aggregator. Bluewater Power works very closely with the Aggregator. In 2012, Bluewater Power had a slight increase on demand savings for industrial programs but saw a decline on the Commercial and Institutional DR3 participation and demand savings.

We take this opportunity to highlight that when LDCs were allocated their share of the provincial CDM targets, it was done on a pro-rate basis. At implementation, however, not all LDCs were given the same tools to achieve their targets. The lower incentives available to Bluewater Power, and other LDCs, in discount zones is the best example. At some point in the process, this issue needs to be addressed in either ensuring that all LDCs have the same tools or setting revised targets based on the availability of those tools.

- 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.
- 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 if limited to 1 or 2 year contracts.

- Metering and settlement requirements are expensive and complicated and can reduce customer compensation amounts, and present a barrier to smaller customers.
- Compensation amounts for new contracts and renewals have been reduced from the initial launch of this program (premium zones and 200 hour option have been discontinued) and subsequently there has been a corresponding decrease in renewal revenue.

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

**Initiative Activities/Progress:** Bluewater Power entered the market late in 2012. Bluewater Power has outsourced the Low Income Initiative to Bluewater Power Services Corporation ("BPSC"), an affiliate of Bluewater Power. BPSC prepared their business plan and by summer of 2012 had begun a "soft" launch, speaking with social service agencies and social housing providers. Bluewater Power and BPSC representatives participated at a local social service agency's client BBQ and was able to converse one on one with potential participants. Initially BPSC rolled out the initiative by word of mouth references through family and friends and by the end of 2012 had completed 54 Low Income assessments resulting in 28,761 kWh. Efforts have ramped up considerably in 2013 but this initiative provides very low energy savings.

#### 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. To date the CRM is not functional for the payment process of this program and the alternative process is difficult and time-consuming.
- 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.

#### 3.2.5 PRE-2011 PROGRAMS

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

Bluewater Power 2012 CDM Annual Report

## 4 2012 LDC CDM Results

## 4.1 Participation and Savings

#### Table 1:

Initiative		Table 1: Bluewater Power Distribution Co Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)				Program-to-Date Verified Progress to Tar (excludes DR) 2014 Net Annual Peak Cumulative Ene	
		2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	Demand Savings (kW) 2014	Savings (kWh) 2014
Consumer Brown	-	2011	2012	2015	2024	2011	LUIL	2015	2024		2012	2015	2024	2024	2014
Appliance Retirement	Appliances	679	405	1	1	41	24			288.762	160.470	1		64	1.635.244
Appliance Exchange	Appliances	32	20			3	3			3.826	5.205			4	29.050
HVAC Incentives	Equipment	1,418	943			405	208			748,429	351.058			613	4,046,891
Conservation Instant Coupon Booklet	Items	3,267	200			7	1			121,767	9,033			9	514.169
Bi-Annual Retailer Event	Items	5,623	6.854			11	10			189.856	173.021			20	1.278.487
Retailer Co-op	Items	0	0			0	0			0	0			0	0
Residential Demand Response (switch/pstat)	Devices	32	0			18	0			46	0			0	46
Residential Demand Response (IHD)	Devices	0	0			0				0					
Residential New Construction	Homes	0	3			0	0			0	362			0	1.087
Consumer Program Total						486	245			1,352,686	699,149			710	7,504,974
Business Program										-,,		-			
Retrofit	Projects	22	50		1	57	294			325.703	1,431,943	1		350	5.574.416
Direct Install Lighting	Projects	87	345			92	246			238.084	886.133			327	3.576.639
Building Commissioning	Buildings	0	0			0	0			0	0			0	0
New Construction	Buildings	0	0			0	0			0	0			0	0
Energy Audit	Audits	0	0			0	0			0	0			0	0
Small Commercial Demand Response	Devices	0	0			0	0			0	0			0	0
Small Commercial Demand Response (IHD)	Devices	0	0			0	-			0	-			0	0
Demand Response 3	Facilities	2	1			402	72			15.695	1.050			0	16,745
Business Program Total						551	613			579,482	2,319,127			676	9,167,800
Industrial Program								<u> </u>							-pp
Process & System Upgrades	Projects	0	0		1	0	0			0	0	1		0	0
Monitoring & Targeting	Projects	0	0			0	0			0	0			0	0
Energy Manager	Projects	0	0			0	0			0	0			0	0
Retrofit	Projects	3				23				156,003				23	624,013
Demand Response 3	Facilities	1	2			1,686	1,798			98,938	43,320			0	142,258
Industrial Program Total						1,709	1,798			254,941	43,320			23	766,270
Home Assistance Program											· · ·				
Home Assistance Program	Homes	0	54			0	2			0	28,761			2	86,282
Home Assistance Program Total						0	2			0	28,761			2	86,282
Pre-2011 Programs completed in 2011							•	•							
Electricity Retrofit Incentive Program	Projects	29	0		1	432	0			3,122,745	0	1		432	12,490,981
High Performance New Construction	Projects	0	2			1	161			3,379	825,446			162	2,489,854
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 To		-		-		433	161			3,126,124	825,446			594	14,980,835
ne zorr rograns completed in zorr ro	cui									-,,		-			
Program Enabled Savings	Projects	0	0		1	0	0			0	0		1	0	0
Program Enabled Savings Time-of-Use Savings	Homes	- ·					· ·				•			v	v
	nomes						0				0			0	0
Other Total Adjustments to Previous Year's Verified Results							-21				74,191			-22	294,499
1						1.072				E 100 EE 2	,		-		,
Energy Efficiency Total						1,073	950			5,198,554	3,871,433			2,007	32,347,112
Demand Response Total (Scenario 1)						2,105	1,870			114,679	44,370			0	159,050
OPA-Contracted LDC Portfolio Total (inc.						3,178	2,799			5,313,234	3,989,994			1,985	32,800,660
Activity & savings for Demand Response resources f quarter represent the savings from all active facilitie						de the summer n rt will be left bla							EB Target:	10,650	53,730,000
contracted since January 1, 2011.						esults will be up				% of Full	OEB Target Achieved	i to Date (S	cenario 1):	18.6%	61.0%

Table 1: Bluewater Power Distribution Corporation Initiative and Program Level Savings by Year (Scenario 1)

### **Table 2: Summarized Program Results**

	Gross S	avings	Net Sa	avings	Contribution to Targets		
Program	Incremental Peak Demand Savings (MW)	Incremental Energy Savings (GWh)	Incremental Peak Demand Savings (MW)	Incremental Energy Savings (GWh)	Program-to-Date: Net Annual Peak Demand Savings (MW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (GWh)	
Consumer Program Total	.49	1.26	.24	.69	.71	7.50	
Business Program Total	.47	2.75	.61	2.31	.68	9.16	
Industrial Program Total	1.79	.04	1.79	.04	.02	.76	
Home Assistance Program Total	.00	.03	.00	.03	.00	.09	
Pre-2011 Programs completed in 2011 Total	.32	1.65	.16	.83	.59	14.98	
Total OPA Contracted Province-Wide CDM Programs	3.07	5.73	2.79	3.98	1.985	32.8	

#### \*Note\*

The Gross Savings were calculated by Bluewater Power since this information was not provided by the OPA to the LDC.

### 4.2 Evaluation

The following has been provided by the OPA from the document "Final 2012 EM&V Findings" posted on the IESO web portal on August 30<sup>th</sup>, 2013.

### **Consumer Program**

#### **Bi-Annual Coupons**

- 15% lower net savings due to a 15% lower net savings due to a change in the net-to gross factors (increased free-ridership, less participant behavior spillover, and less non-participant like spillover).
- Majority of participation, energy, & demand savings are from standard CFLs.
- 15% of net savings due to ~73,000 coupons for new LED measures

#### **Annual Coupons**

- The number of coupons associated with the redemption of 2012 Annual Coupons was 90% lower than 2011 Instant Coupon Booklet. Key factors for the decrease include: 0
  - Shorter duration of available coupons (September 2012 December 2012)
  - In 2012, only online coupons were available
    - 2011 had both online coupons AND coupon mailing booklets.

#### HVAC

- Small decrease (10%) in per unit savings assumptions for furnace with ECM due to change in 2012 customer mix and furnace fan usage.
- Small increase (10%) in free-ridership related to the furnace with ECM measure. •
- Participation remains relatively steady once 2011 true-up values are included.

#### **Appliance Retirement**

0

- Decrease in 2012 participation by 39% compared to 2011.
- In-site metering provided updated per unit assumptions:
  - Small decrease (3.5%) in savings for refrigerators; and 0
  - Sizeable increase (17.5%) in savings for freezers 0

#### Appliance Exchange

- Increase of 30% for exchanged dehumidifiers over 2011, leading to an increase of 4% in overall participation.
- Higher per unit savings for dehumidifiers drove the overall increase in 2012 savings.

#### PeaksaverPLUS

- Province-wide per-unit ex ante estimates for a 1-in-10 August peak day were determined to be 0.50 kW for residential CACs and 0.64 kW for small commercial CACs.
- Evaluation to date has indicated savings from in-home displays (IHDs) are not statistically • significant (in and around zero).
  - However, since 2012 evaluation did not include full year analysis (specifically the 0 summer months), these results have been deemed inconclusive.
- The IHD offer had a positive influence on enrollment and re-enrollment with between 20 to 35% • of new enrollees said they wouldn't have enrolled without the IHD offer.

#### **Residential New Construction**

All projects are opting for the prescriptive or performance path - there have been no custom project applications to date.

#### **Business Programs**

#### Retrofit

- Reported savings for prescriptive lighting projects continue to be overstated:
  - Verified wattage reductions were 15% higher than assumed; and
  - Verified operating hours were 11% higher than assumed.
- A lower realization rate in the engineered measure track can be partially explained by overstated lighting operation hour assumptions reported on the application.
- Net-to-gross ratios for the initiatives were above 75% in 2012, which is consistent with 2011.

#### **Small Business Lighting**

- Reported hours of usage continue to be inaccurate only 12% of site visits had verified annual hours of use within +/-10% of the assumed value.
- The saturation of eligible customers and preferred business types are resulting in participation from building types that may not fully operate during the summer peak period.
  - This trend contributes to lower realization rates for demand savings in 2012.
- Due to changing regulations in lighting measures, the assumed baseline technology will eventually be phased out. This regulation impacts the persistence of savings over the lifetime of lighting measures.

#### **Existing Building Commissioning**

- There were no applications in 2012.
- Market feedback suggests that EBC's focus on chilled-water space-cooling systems may be too narrow, and participation could be expanded by incenting a wider range of measures.

#### New Construction

• Custom projects account for 66% of program savings, with the remainder coming from the prescriptive track

#### Audit Funding Program

- Through Audit Funding, 280 projects were completed in 2012 based on recommendations from the auditors, resulting in1.4 MW and 7 GWh of Program Enabled Savings.
- Office buildings represented the largest portion of applicants for 2012.

#### Industrial Programs

#### Process and Systems Upgrade Initiative

- Energy managers are seen as important drivers of Program Enabled savings projects.
  - 88% of survey respondents indicated that the assistance provided by energy managers was "somewhat" or "very" important to implementing projects.
- Energy Managers indicated that additional support (additional training and guides) may further help influence the adoption of energy efficiency measures by the participants.
- Documentation for Program Enabled Savings projects varied substantially by LDC. More guidance on documentation requirements would be beneficial to all parties.

#### DR-3

•

• 2012 saw improvements in the performance of DR-3 participants resulting higher ex ante realization rates, particularly for the industrial participants.

#### Home Assistance Program

- Participation in the initiative ramped up in 2012, with over 5,000 homes participating in the initiative.
- Majority of energy savings (62%) comes from lighting measures, while 21% of energy savings resulting from refrigerator and freezer replacements.

# 4.3 Spending

### Table 3: 2012 Spending

Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
Consumer Program					
Appliance Retirement	\$123,785.58	0	0	0	\$123,785.58
Appliance Exchange	\$2,712.00	0	0	0	\$2,712.00
HVAC Incentives	\$2,712.00	0	0	0	\$2,712.00
Conservation Instant Coupon Booklet	0	0	0	0	0
Bi-Annual Retailer Event	\$2,596.00	0	0	0	\$2,596.00
Retailer Co-op	0	0	0	0	0
Residential Demand Response	\$31,082.58	0	0	0	\$31,082.58
New Construction Program	\$13,000.00	0	0	0	\$13,000.00
Business Program			I		· · · · · · · · · · · · · · · · · · ·
Efficiency: Equipment Replacement	\$74,037.08		\$277,309.55		\$351,346.63
Direct Installed Lighting	\$2,116.01	\$94,875.00	\$439,708.00		\$536,699.01
Existing Building Commissioning Incentive	0				0

Bluewater Power 2012 CDM Annual Report

2.74		0 0 0 0 \$24,352.74 0 0
2.74		0 0 0 \$24,352.74 0
2.74		0 \$24,352.74 0
2.74		\$24,352.74 0
2.74		\$24,352.74 0
2.74		0
2.74		0
		0
		0
		0
		0
		0
		0
		0

Home Assistance Program	\$3,805.02		\$19,539.00		\$23,344.02			
Pre 2011 Programs								
Electricity Retrofit Incentive Program	0	0	0	0	0			
High Performance New Construction	0	0	0	0	0			
Toronto Comprehensive	0	0	0	0	0			
Multifamily Energy Efficiency Rebates	0	0	0	0	0			
Data Centre Incentive Program	0	0	0	0	0			
EnWin Green Suites	0	0	0	0	0			
Initiatives Not In Market								
Midstream Electronics	0	0	0	0	0			
Midstream Pool Equipment	0	0	0	0	0			
Demand Service Space Cooling	0	0	0	0	0			
Demand Response 1 (Commercial)	0	0	0	0	0			
Demand Response 1 (Industrial)	0	0	0	0	0			
Home Energy Audit Tool	0	0	0	0	0			
TOTAL Province-wide CDM PROGRAMS	\$280,246.68	\$94,875.00	\$736,556.55	0	\$1,111,678.23			

Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
Consumer Program	1				
Appliance Retirement	\$191,246.85	0	0	0	\$191,246.85
Appliance Exchange	\$5,517.11	0	0	0	\$5,517.11
HVAC Incentives	\$8,322.22	0	0	0	\$8,322.22
Conservation Instant Coupon Booklet	\$5,610.22	0	0	0	\$5,610.22
Bi-Annual Retailer Event	\$5,401.11	0	0	0	\$5,401.11
Retailer Co-op	0	0	0	0	0
Residential Demand Response	\$38,428.77	0	0	0	\$38,428.77
New Construction Program	\$13,000.00	0	0	0	\$13,000.00
Business Program			J		J
Efficiency: Equipment Replacement	\$117,676.38	0	\$352,875.00	0	\$470,551.38
Direct Installed Lighting	\$12,101.81	\$118,800.00	\$516,405.00	0	\$647,306.81
Existing Building Commissioning Incentive	0	0	0	0	0
New Construction and Major Renovation Initiative	\$47.67	0	0	0	\$47.67

### Table 4: Cumulative Spending (2011-2014)

Bluewater Power 2012 CDM Annual Report

Energy Audit	0	0	0	0	0
Small Commercial Demand Response (part of the Residential program schedule)	0	0	0	0	0
Demand Response 3 (part of the Industrial program schedule)	0	0	0	0	0
Industrial Program					
Process & System Upgrades	\$24,352.74	0	0	0	\$24,352.74
a) preliminary engineering study	0	0	0	0	0
b) detailed engineering study	0	0	0	0	0
c) program incentive	0	0	0	0	0
Monitoring & Targeting	0	0	0	0	0
Energy Manager	0	0	0	0	0
Key Account Manager ("KAM")	0	0	0	0	0
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	0	0	0	0	0
Demand Response 3	\$14,492.73	0	0	0	\$14,492.73
Home Assistance Program					
Home Assistance Program	\$6,596.63	0	\$19,539.00	0	\$26,135.63
Pre 2011 Programs					

Bluewater Power 2012 CDM Annual Report

Electricity Retrofit Incentive Program	0	0	\$201,845.94	0	\$201,845.94
High Performance New Construction	0	0	0	0	0
Toronto Comprehensive	0	0	0	0	0
Multifamily Energy Efficiency Rebates	0	0	0	0	0
Data Centre Incentive Program	0	0	0	0	0
EnWin Green Suites	0	0	0	0	0
Initiatives Not In Market					
Midstream Electronics	0	0	0	0	0
Midstream Pool Equipment	0	0	0	0	0
Demand Service Space Cooling	0	0	0	0	0
Demand Response 1 (Commercial)	0	0	0	0	0
Demand Response 1 (Industrial)	0	0	0	0	0
Home Energy Audit Tool	0	0	0	0	0
TOTAL Province-wide CDM PROGRAMS	\$442,794.24	\$118,800.00	\$1,090,664.94	0	\$1,652,259.18

# 4.4 Additional Comments

In 2011-2012 and even in prior years going back to Third Tranche, Bluewater Power has always exercised best practices to achieve the "culture of conservation" in Ontario. We have been faced with significant challenges in the delivery of these OPA programs. Occasionally, the implementation issues with the programs have placed Bluewater Power in an unfavourable light with our customers. The participant levels are down in nearly every initiative of the consumer portfolio and are in dire need of a makeover. However, Bluewater Power believes that conservation is long term and we remain committed to doing our best in assisting our customers achieve energy and cost savings in their homes and their places of business. It is also our commitment that we will continue to deliver energy conservation programming to 2014 and well beyond.

# 5 Combined CDM Reporting Elements

## 5.1 Progress Towards CDM Targets

Implementation Period	Annual (MW)					
Implementation Feriod	2011	2012	2013	2014		
2011 – Verified by OPA	3.2	1.1	1.1	1.1		
2012 – Verified by OPA		2.8	0.9	0.9		
2013						
2014						
Verified	2.0					
BLUEWATER I	10.7					
Verified Portion of F	18.6%					

Table 5: Net Peak Demand Savings at the End User Level (MW)

Table 6: Net Energy Savings at the End-User Level (GWh)

Implementation Period		Cumulative (GWh)			
	2011	2012	2013	2014	2011-2014
2011 – Verified by OPA	5.3	5.2	5.2	5.2	20.9
2012 – Verified by OPA		4.0	3.9	3.9	11.9
2013					
2014					
Verif	32.8				
BLUEWATER POW	53.7				
Verified Port	61.0%				

## 5.2 Variance from Strategy

Despite numerous startup problems, the province wide suite of OPA programs is working better.

The consumer program savings both in energy (kWh) and demand saw a 50% reduction. While 2011 evaluation of initiatives such as Appliance Retirement predicted a decrease in participation levels and energy savings Bluewater Power did not expect a dramatic decrease in HVAC incentives. This decrease

greatly impacted our overall Consumer Program total energy savings in a negative manner. Bluewater Power is hopeful that the OPA evaluation determines that an increase in demand savings will be attained with peaksaverPLUS and we anticipate being in market in 2014 should an optimal solution be available. Business programs are performing well but Bluewater Power needs to attract more Demand Response customers. We are actively pursuing DR participants and work very closely with one of the OPA aggregators. However, Bluewater Power feels that in competitive fairness, our customers should have access to the same DR rates as other jurisdictions in the province to assist Bluewater Power in achieving demand savings targets.

Funding for the Key Account Manager should continue since assistance from this resource will be instrumental in securing applications in the Industrial sector. In the pipeline, Bluewater Power has two Preliminary Engineering Studies and two Detailed Engineering Studies. We also have one Capital Incentive project approved and hope to see a second application within the next month. These projects will provide very good energy and demand savings and will serve to reduce the variance between actual results and Bluewater Power's CDM strategy.

# 5.3 Outlook to 2014 and Strategy Modifications

Conservation and Demand Side management remains a bargain when compared to any new supply options, a view that was echoed by current Environmental Commissioner, Gord Miller, at a recent OPA workshop.

As stated previously, it appears Bluewater Power is on track to meet our Energy Savings targets; however looking at 2013 and forward to 2014 there are a number of considerations in order to achieve the peak demand savings.

When we look in the Retrofit pipeline, it appears to be quite healthy and we are beginning to see more non-lighting engineered and custom projects. As such, the business programs appear to be working well; although it must be mentioned that while in 2012 the Direct Install Lighting program exceeded 2011 results, Bluewater Power fears this initiative is nearing saturation. An updated list of measures was introduced in 2013, but without the ability to revisit earlier participants, the opportunity to capture greater energy savings will be lost. Both of these initiatives provide good demand savings that are inherent with energy efficiency projects but Bluewater Power needs to not only maintain momentum, we need to attract more projects yielding better demand savings.

Quite clearly, Bluewater Power needs more Demand Response, in fact the province need more DR. For residential demand response, we feel we will be in market with peaksaverPLUS in 2014. However, on the commercial and industrial side, we seem to have stalled. There appears to be insufficient interest, due in part to the low incentive monies offered to a Discount Zone participant. Bluewater Power is located within a Discount Zone so the financial rewards available to potential participants in constrained areas of the province (e.g. GTA) are not the same. This puts Bluewater Power at a distinct disadvantage in meeting

targets as compared to other LDCs not in a discount zone. As part of the Conservation First consultations, there was a recommendation to expand DR into 2018. To help Bluewater Power meet its 2014 demand savings target we need to see DR payments paid in our service territory at the same level as is paid in other areas either in a standard or premium rate format. This will move Bluewater Power customers closer to the levels of DR that is paid in other jurisdictions. The contract length needs to be increased in order to improve participation.

# 6.0 Conclusion

Over the course of 2012, Bluewater Power achieved 2.8 MW in peak demand savings and 4 GWh in energy savings. To date, Bluewater Power has achieved is 2.0 MW peak demand savings and 32.8 GWh net energy savings which represents 18.6% and 61% progress to target respectively. These results are representative of a considerable effort expended by Bluewater Power, 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.

However, despite continuing improvements to existing programs Bluewater Power faces challenges in the remaining years of the current CDM framework. With the current slate of available OPA Programs, and the current forecast of implementation and projected savings, Bluewater Power expects to meet its 53.7 GWh consumption target but will struggle to meet its 10.7 MW peak demand savings target.

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:

• SaveONenergy website <u>https://saveonenergy.ca/Consumer/Programs/Appliance-</u> <u>Retirement.aspx</u>

In Market Date: March 2011

APPLIANCE EXCHANGE INITIATIVE (Exhibit E)

Target Customer Type(s): Residential Customers

Initiative Frequency: Spring and Fall

**Objective:** The objective of this Initiative is to remove and permanently decommission older, inefficient window air conditioners and portable dehumidifiers that are in Ontario.

**Description:** This Initiative involves appliance exchange events. Exchange events are held at local retail locations and customers are encouraged to bring in their old room air conditioners (AC) and dehumidifiers in exchange for coupons/discounts towards the purchase of new energy efficient equipment.

#### 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:

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

In Market Date: April 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:

SaveONenergy website <u>https://saveonenergy.ca/Consumer.aspx</u>

In Market Date: March 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<sup>®</sup> qualified Standard Compact Fluorescent Lights ("CFLs"),ENERGY STAR<sup>®</sup> 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:

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

In Market Date: March 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:

• 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

**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: Bluewater Power did not participate in any Retailer Co-op events in 2012.

#### 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:

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

In Market Date: March 2011

#### RESIDENTIAL DEMAND RESPONSE PROGRAM (Schedule B-3)

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

#### Initiative Frequency: Year round

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

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

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

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

Additional detail is available:

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

In Market Date: Bluewater Power is not in market with peaksaverPLUS.

### 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:

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: May 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. (Should this read \$1,500 or is it just copied from the Schedule?)

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:

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

#### In Market Date: May 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:

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

In Market Date: March 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:

SaveONenergy website <u>https://saveonenergy.ca/Business/Program-Overviews/New-Construction.aspx</u>

In Market Date: March 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:

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

In Market Date: March 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.

• SaveONenergy website <u>https://saveonenergy.ca/Business.aspx</u>

In Market Date: May 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:

• SaveONenergy website <u>https://saveonenergy.ca/Business.aspx</u>

In Market Date: May 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:

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

In Market Date: May 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

Delivery: LDC delivered

In Market Date: September 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:

• SaveONenergy website <u>https://saveonenergy.ca/Business.aspx</u>

In Market Date: May 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 (Schedule E-1)

Target Customer Type(s): Income Qualified Residential Customers

Initiative Frequency: Year Round

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

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

Targeted End Uses: End use measures based on results of audit (i.e. compact fluorescent light bulbs)

**Delivery:** LDC delivered.

In Market Date: October 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

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

#### 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): Commercial and Institutional Customers

Initiative Frequency: Year round

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

#### ENWIN GREEN SUITES

Target Customer Type(s): Hotel and Hospitality

Initiative Frequency: Year round

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