



September 30, 2013

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street
27th Floor
Toronto, ON
M4P 1E4

Dear Ms. Walli,

Re: Horizon Utilities Corporation – 2012 Conservation and Demand Management Annual Report (EB-2010-0215)

Horizon Utilities Corporation (“Horizon Utilities”) respectfully submits its 2012 Conservation and Demand Management Annual Report in accordance with the Ontario Energy Board’s filing requirements specified in Section 2.2 and Appendix C: Annual Report Template of the *Conservation and Demand Management Code for Electricity Distributors* issued September 16, 2010.

Should you have any questions pertaining to the above, please do not hesitate to contact me.

Sincerely,

Original Signed by Indy J. Butany-DeSouza

Indy J. Butany-DeSouza, MBA
Vice President, Regulatory Affairs

Horizon Utilities Corporation

Conservation and Demand Management 2012 Annual Report

**Submitted to:
Ontario Energy Board
EB-2010-0215**

September 30, 2013

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
BACKGROUND.....	4
1 CONSERVATION FRAMEWORK.....	5
1.1 Current Framework	5
2 BOARD-APPROVED CDM PROGRAMS	6
2.1 Introduction	6
2.2 TOU Pricing.....	6
2.2.1 Background	6
2.2.2 Description	7
2.3 Horizon Utilities' Application with the OEB.....	7
3 OPA-CONTRACTED PROVINCE-WIDE CDM PROGRAMS.....	8
3.1 Introduction	8
3.2 Program Descriptions	10
3.2.1 Residential Programs	11
3.2.2 Commercial and Institutional Programs	26
3.2.3 Industrial Program	36
3.2.4 Low Income Initiative (HOME ASSISTANCE PROGRAM) (Schedule E)	44
4.2 Evaluation	49
4.3 Spending.....	52
4.4 Additional Comments	57
5 COMBINED CDM REPORTING ELEMENTS.....	59
5.1 Progress towards CDM Targets	59
5.2 Variance from Strategy.....	59
5.3 Outlook to 2014 and Strategy Modifications	60
6 CONCLUSION.....	62
APPENDIX A: INITIATIVE DESCRIPTIONS 2011 – 2014.....	63

APPENDIX B: PRE-2011 PROGRAM DESCRIPTIONS.....76
APPENDIX C: COMMUNITY EVENTS.....77

Executive Summary

Horizon Utilities Corporation (“Horizon Utilities”) respectfully submits its 2012 Conservation and Demand Management (“CDM”) Annual Report (the “Report”) to the Ontario Energy Board (“OEB” or the “Board”), in accordance with the filing requirements specified in Section 2.2 and Appendix C: Annual Report Template of the *Conservation and Demand Management Code for Electricity Distributors* (the “CDM Code”, EB-2010-0215) issued September 16, 2010. This Report provides a progress update as well as a modification to Horizon Utilities strategy. Accordingly, the Report identifies Horizon Utilities’ CDM activities for the period of January 1, 2012 to December 31, 2012. It includes: net peak demand and net energy savings (“Savings”) achieved from 2011 and 2012; discussion of the current CDM framework; CDM program activities and successes and challenges, to date. It also identifies the forecasted savings to the end of 2014.

Horizon Utilities entered into a contract with the OPA, known as the Master CDM Program Agreement (“Master Agreement”), on February 1, 2011 to deliver the portfolio of OPA-Contracted Province-Wide Programs (“OPA Programs”) to all customer segments including residential, commercial, institutional, industrial and low income.

Subsequently, on March 14, 2011, the OEB released the revised final allocation of Local Distribution Company (“LDC”) specific CDM Targets (EB-2010-0215/0216): Horizon Utilities’ electricity consumption reduction target was set at 281.42 GWh (4.7% of the provincial target) and its peak demand reduction target was set at 60.36 MW (4.5% of the provincial target).

The OPA Programs were rolled-out by the OPA during the period January to August 2011. In 2011, program activities were centered on building a foundation for full program execution over the next three years of the program term, including staffing, procurement, and program delivery. In Horizon Utilities’ CDM strategy, the OPA Programs were anticipated to deliver 80% of the Savings required to achieve the CDM targets.

The OPA has presented two scenarios for recognizing Savings. Scenario 1 assumes that demand response resources persist for one year only, and Scenario 2 assumes demand response resources persist until 2014.

As of the end of 2012, Horizon Utilities was actively engaged in the delivery of the OPA Programs that resulted in Savings of 20.3 MW in net demand reduction and 186.7 GWh in cumulative energy reduction towards the 2014 target. Incrementally Horizon Utilities added net Savings of 13.4 MW in demand and 16.8 GWh of annual energy savings, excluding adjustments to previous years verified results, toward the CDM target. A summary of the achievements and forecast towards the CDM targets is shown in Table 1.

Table 1 Estimated Cumulative Peak Demand (Scenario 2) and Energy Reduction

	2011 Verified	2012 Verified	2013 Estimated	2014 Estimated	% of 2014 Target	Target
Annual Peak MW Savings	12.02	20.3	33.51	53.87	89%	60.36
Annual Energy (GWh) Savings	128.51	186.7	241.18	281.42	100%	281.42

However, as noted in the *Guidelines for Electricity Distributor Conservation and Demand Management*, released April 26, 2012, the OEB has deemed Time-of-Use (“TOU”) pricing to be a Board-Approved CDM Program. The OPA is to provide measurement and verification of savings from TOU pricing. At the time of this report, the OPA has not released any verified results of TOU savings to Horizon Utilities.

In 2012, Horizon Utilities experienced a slight decline in CDM results achieved from the mature OPA programs, since these had been in market prior to 2011. While significant contributions to 2014 CDM Savings are expected to be achieved, such will likely be an outcome of new relationships and resources which were deployed with larger Industrial customers through the Key Account Manager, Roving Energy Manager, and Embedded Energy Manager funding provided by the OPA. A pipeline of larger projects from industrial customers is emerging through the effort of these OPA capability funded resources.

As noted in Horizon Utilities’ CDM Strategy (EB-2010-0215) filed November 1, 2010, Horizon Utilities had originally intended that a component of its CDM programs would be identified as Board-Approved CDM Programs.

Of the six potential Board-Approved Programs identified in Horizon Utilities original CDM Strategy, four were deemed duplicative and are currently being executed under existing OPA Programs that have been developed or modified since the filing of the aforementioned CDM Strategy. Horizon Utilities did not apply for any Board-Approved CDM Programs during 2012.

Horizon Utilities has one inactive potential Board-Approved CDM Program - Generation Conservation. This program did not meet the criteria in the CDM Code for quantifiable and verifiable energy savings in its original design.

Horizon Utilities’ 2012 strategy anticipated achieving the majority of CDM results from the OPA Programs.

In addition to its original CDM Strategy, Horizon Utilities may pursue further pilot CDM programs with the OPA or choose to pursue participation in the recent Board-Approved Direct Cooling program submitted by PowerStream Inc., in order to meet the balance of its CDM target.

The updated forecast prepared for this Report identifies that Horizon Utilities will expect to achieve approximately 53.87 MW or 89% of its 2014 peak demand reduction target and 281.42 GWh or 100% of the 2014 cumulative energy savings target. Horizon Utilities continues to work actively on participant engagement in programs that increase demand savings, including partnering with other LDCs.

Horizon Utilities has also been working with the OPA and the Electrical Distributors Association (“EDA”) to enhance the OPA Programs. Horizon Utilities partnered with a third party service provider to submit a proposal to the OPA Social Benchmarking RFP process in 2012.

As per Table 5, the OPA made adjustments due to errors or omissions to the 2011 verified results for all program initiatives. Horizon Utilities is in receipt of these adjustments the net result of which was an increase of 191 kW and 8,600,509 kWh achieved towards the 2014 CDM target.

In 2012, Horizon Utilities contracted with the OPA through the OPA’s Innovation Fund to conduct an Energy Mapping pilot project that would provide more precise customer information in order to better plan and execute CDM programs. Through the Energy Mapping project, Horizon Utilities integrated data from multiple sources including Municipal Property Assessment Corporation (“MPAC”), Environics Analytics, and the Canadian Urban Institute. The intended outcome of this pilot project is the development of CDM program campaigns, with more precise messaging that will resonate with specific targeted customers. Horizon Utilities expects to utilize the Energy Mapping database in its 2013 CDM sales and marketing campaigns.

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, s.o. 1998*, directed the OEB to establish CDM targets to be met by LDCs. Accordingly, on November 12, 2010, the OEB amended Horizon Utilities' distribution license to require Horizon Utilities, as a condition of its license, to achieve 281.42 GWh of energy savings and 60.36 MW of peak demand savings, over the period beginning January 1, 2011 through December 31, 2014.

In accordance with the same Ministerial 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 LDCs must comply in relation to the CDM targets set out in their licenses. To comply with the Code requirements, Horizon Utilities submitted its CDM Strategy on November 1, 2010 which provided, at a high level, a strategy of how Horizon Utilities intended to achieve its CDM targets.

On February 16, 2011, Horizon Utilities filed an addendum to its CDM strategy listing the anticipated program administration budgets for the OPA-Contracted Province-Wide CDM Programs ("OPA Programs") and potential Board-Approved Programs. This addendum also removed the Residential Hot Water Program from the list of potential Board-Approved CDM Programs.

The Code requires distributors to file annual reports with the Board. This is Horizon Utilities second Annual Report and it has been prepared in accordance with the Code requirement and covers the period from January 1, 2012 to December 31, 2012.

Horizon Utilities submitted its 2011 Annual Report on September 30, 2012 which summarized the CDM activities, successes and challenges that it experienced for the January 1, 2011 to December 31, 2011 period. The OEB's CDM Report – 2011 Results identified that the delay in the full suite of OPA Programs, and the absence of some programs, negatively impacted the final 2011 CDM results LDCs. This issue was also highlighted in Volumes I & II of the Environmental Commissioner's *Report on Ontario's Annual Energy Conservation Progress, dated June 5, 2012 (Volume 1) January 8, 2013 (Volume 2)*.

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 CDM Programs for an additional one-year period from January 1, 2015 to December 31, 2015.

Despite the delays identified above, there was not a further Ministerial directive to amend the timelines for LDCs to achieve their energy and demand savings targets. Therefore, Horizon Utilities focus remains the achievement of CDM targets by December 31, 2014.

1 Conservation Framework

1.1 Current Framework

Ontario's current CDM framework is a key step towards creating a culture of conservation in the province. The Ministerial directive, to the OEB to establish CDM targets that would be met by LDCs, recognizes the importance of CDM for both electricity customers and the electricity system. CDM helps customers manage rising energy costs, supports the provincial integrated supply plan, and transmission system constraints. The current framework was intended to enable customers to benefit from a suite of both Board-Approved and OPA Programs and to create a portfolio that would meet both broad and specific customer needs.

The state of Board-Approved programs and the current suite of OPA Programs have limited CDM offerings to customers. The detailed customer participant agreements has produced delays and deterred customers from participating in program initiatives limiting savings achieved. Transition to the online OPA application process has created a steep learning curve for customers and channel partners. Delays in processing applications by the OPA have resulted in customers not receiving incentive payments in a timely manner. Further, the process of uploading data into the OPA's customer reporting management ("CRM") system was not fully refined. Such created unnecessary delays in payment to Horizon Utilities third party contracted resources.

The December 21, 2012 Ministerial directive provides continuity (funding) of the conservation programs and associated incentives for the participants; however the subsequent CDM savings will not be attributed to any LDC target, or Board incentive mechanism and in effect would be 'lost' due to misalignment of the current CDM framework and LDC Targets. In addition, the establishment of defined 2015 administrative funding, and LDC incentive mechanism are required to provide the necessary business framework for continued CDM program implementation activities.

Moving forward, the future CDM framework should address the challenges of the current framework and build on its strengths. Currently, the governing structure and the weighty legal requirements result in a slow, bureaucratic process, with a burdensome administrative process to initiate change. 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 they do not have the authority for program design and funding as such is substantially controlled by the OPA.

2 Board-Approved CDM Programs

2.1 Introduction

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

At this time, the implementation of Time-of-Use (“TOU”) Pricing is the only Board-Approved Conservation and Demand Management (“CDM”) program that is being offered in Horizon Utilities’ service area.

2.2 TOU Pricing

2.2.1 Background

In the Guidelines for Electricity Distributor Conservation and Demand Management released April 26, 2012 (“the CDM Guidelines”), the OEB recognized 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 took the position that any evaluations of savings from TOU pricing should be conducted by the OPA for the province, and then allocated to distributors. Horizon Utilities will report these results upon receipt of such 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, and models. The initial TOU evaluations were conducted with five LDCs: Hydro One Networks Inc. (“Hydro One”), Toronto Hydro-Electric System Limited (“Toronto Hydro”), Hydro Ottawa Limited, Thunder Bay Hydro Electricity Distribution Inc. and Newmarket-Tay Power Distribution Ltd. Preliminary results from these five LDCs have not been released as anticipated by the OPA in their 2012 verified CDM Results report on August 31, 2013.

As of September 30, 2013, the OPA has not released any verified results of TOU savings to Horizon Utilities. Therefore, Horizon Utilities is not able to provide any

verified savings related to Horizon Utilities' TOU program or speculate on TOU Savings, at this time.

2.2.2 TOU Program Description Target Customer Type(s): Residential and small business customers (General Service <50 kW)

Initiative Frequency: Year-Round

Objectives: TOU pricing is designed to encourage 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 of the transfer of 3.6 million RPP customers to TOU pricing by June 2011, and to ensure that smart meters funded at the ratepayer expense were being used for their intended purpose.

The RPP TOU price is adjusted in May and November each year by the OEB. A summary of the RPP TOU pricing is provided below:

RPP TOU Effective Date	Rates (cents/kWh)		
	On Peak	Mid Peak	Off Peak
1-Nov-10	9.9	8.1	5.1
1-May-11	10.7	8.9	5.9
1-Nov-11	10.8	9.2	6.2
1-May-12	11.7	10.0	6.5
1-Nov-12	11.8	9.9	6.3
1-May-13	12.4	10.4	6.7

Delivery: The OEB sets the rates; Horizon Utilities installs and maintains the smart meters; Horizon Utilities converts customers to TOU billing. Customers receive education materials on smart meters at the time of installation and are advised of new TOU rates in advance of rate changes.

Initiative Activities/Progress: Horizon Utilities began transitioning its RPP customers to TOU billing in December, 2009. As of the end of 2012, Horizon Utilities is billing 216,510 residential and 15,129 General Service (<50 kW) customers for a total of 231,639 customers on TOU rates. This is in line with Horizon Utilities' smart meter filings with the OEB.

2.3 Horizon Utilities' Application with the OEB

To date, Horizon Utilities has not filed any applications for Board-Approved CDM Programs.

3 OPA-Contracted Province-Wide CDM Programs

3.1 Introduction

Effective February 25, 2011, Horizon Utilities entered into a Master Agreement with the OPA to deliver CDM programs from January 1, 2011 to December 31, 2014. Program initiative descriptions are included in Appendix A.

Table 2 below identifies those programs for which Horizon Utilities has contracted with the OPA. In addition to reporting results achieved from the programs listed in this table, Horizon Utilities will also report results from projects started pre-2011, which Horizon Utilities completed in 2011 and 2012. The pre-2011 programs implemented by Horizon Utilities are listed in Appendix B.

Table 2

Initiative	Schedule	Date Schedule Posted	Customer Class	In-Market Date for Horizon Utilities
Residential Program				
Appliance Retirement	Schedule B-1, Exhibit D	Jan 26 2011	All residential rate classes	January 26, 2011
Appliance Exchange	Schedule B-1, Exhibit E	Jan 26 2011	All residential rate classes	January 26, 2011
HVAC Incentives	Schedule B-1, Exhibit B	Jan 26 2011	All residential rate classes	January 26, 2011
Conservation Instant Coupon Booklet	Schedule B-1, Exhibit A	Jan 26 2011	All residential rate classes	January 26, 2011
Bi-Annual Retailer Event	Schedule B-1, Exhibit C	Jan 26 2011	All residential rate classes	January 26, 2011
Residential Demand Response	Schedule B-3	Aug 22 2011	All general service classes	August 22, 2011
New Construction Program	Schedule B-2	Jan 26 2011	All residential rate classes	January 26, 2011
Commercial & Institutional Program				
Efficiency: Equipment Replacement	Schedule C-2	Jan 26 2011	All general service classes	January 26, 2011 using a paper based application
Direct Install Lighting	Schedule C-3	Jan 26 2011	General Service < 50 kW	January 1, 2011
Existing Building Commissioning Incentive	Schedule C-6	March 2, 2011	All general service classes	July 5, 2012
New Construction and Major Renovation Initiative	Schedule C-4	Feb 1, 2011	All general service classes	Feb 1, 2011
Energy Audit	Schedule C-1	Jan 26, 2011	All general service classes	April 2011
Commercial Demand	Schedule B-3	Jan 26, 2011	All general service	

Initiative	Schedule	Date Schedule Posted	Customer Class	In-Market Date for Horizon Utilities
Response (part of the Residential program schedule)			classes	
Demand Response 3 (part of the Industrial program schedule)	Schedule D-6	May 31, 2011	General Service 50 kW & above	January 1, 2011
Industrial Program				
Process & System Upgrades	Schedule D-1	May 31, 2011	General Service 50 kW & above	August 2011
Monitoring & Targeting	Schedule D-2	May 31, 2011	General Service 50 kW & above	August 2011
Energy Manager	Schedule D-3	May 31, 2011	General Service 50 kW & above	January 26, 2011
Key Account Manager	Schedule D-4	May 31, 2011	Large User >5 MW	August 2011
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	Schedule C-2	May 31, 2011	General Service 50 kW & above	January 1, 2011
Demand Response 3	Schedule D-6	May 31, 2011	General Service 50 kW & above	January 2011
Home Assistance Program				
Home Assistance Program	Schedule E-1	May 9, 2011	All residential rate classes	June 2012
Pre-2011 Programs completed in 2011				
Electricity Retrofit Incentive Program	Schedule B-2 -A	April 12, 2010	All general service classes	January 1, 2011
High Performance New Construction	n/a	n/a	All general service classes	January 1, 2011
Multifamily Energy Efficiency Rebates	n/a	n/a	All general service classes	N/A

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

Table 3

Initiative Not in Market in 2012	Objective	Status
Residential Program		
Midstream Electronics	The objective of this initiative is to encourage retailers to promote and sell high efficiency televisions, and for distributors to distribute high efficiency set top boxes.	Never launched and removed from Schedule in Q2, 2013.
Midstream Pool	The objective of this initiative is to	Never launched and removed from

Initiative Not in Market in 2012	Objective	Status
Equipment	encourage pool installers to sell and install efficient pool pump equipment in residential in-ground pools.	Schedule in Q2, 2013.
Aboriginal Conservation Program	First Nations programs are delivered by the OPA and results are attributed to LDCs for reporting.	Launched in 2013 by OPA.
Home Energy Audit Tool	This is a provincial online audit tool to engage customers in conservation and help drive customer participation to CDM programs.	Never launched and removed from Schedule in Q2, 2013.
Commercial & Institutional Program		
Direct Service Space Cooling	The objective of this initiative is to offer free servicing of air conditioning systems and refrigeration units for the purpose of achieving energy savings and demand reduction.	Not launched to market in 2011/2012. As per the OPA there no plans to launch this Initiative in 2013.
Demand Response 1 ("DR1")	This initiative allows distribution customers to voluntarily reduce electricity demand during certain periods of the year pursuant to the DR 1 contract. The initiative provides DR payment for service for the actual electricity reduction provided during a demand response event.	No customer uptake for this initiative. As a result this Initiative was removed from the Schedule in Q4, 2012.
Industrial Program		
DR1	As above	No customer uptake for this initiative. Removed in Q4, 2012.

The Master Agreement includes a program change management provision in Article 3. In 2011, and throughout 2012, the change management provision was implemented to enhance the saveONenergy program suite. While the change management process allows for modifications to the Master Agreement and initiative schedules, the process is extremely time-consuming and does not lend itself to appropriate responsiveness to market requirements. The ability to make program/ initiative enhancements in a timely manner would give LDCs additional tools and greater flexibility to deliver programs in a way that meets the needs of customers and further encourage participation in the initiatives.

3.2 Program Descriptions

Full OPA CDM Program descriptions are available on the OPA's website at <http://www.powerauthority.on.ca/ldc-province-wide-program-documents> and additional

initiative information can be found on the saveONenergy website at <https://saveonenergy.ca>.

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 protect 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 Residential Program portfolio is predominately a carryover of initiatives from previous programs. It is mostly driven by retailers and contractors who many not have fully delivered what was anticipated. Three new initiatives were never launched and subsequently removed from the schedule in 2013 with no new additions. Delays in communication with regards to Initiative offerings and results reporting have hampered LDCs' abilities to engage customers and promote participation. Provincial wide advertising has provided limited value due to inconsistency and non-specific messaging.

The most important of the Residential Program initiatives with respect to the provision of Savings are the Residential Demand Response Program ("the RDR Program", also known as **peaksaver PLUS**[®]), the Heating and Cooling ("HVAC") Incentives initiative, and the Appliance Retirement initiative (also known as the Fridge & Freezer Pick-up).

The **peaksaver PLUS**[®], which Horizon Utilities launched in June 20, 2012 is a continuation of the previous **peaksaver**[®] program, with the additional inclusion of an In-Home Energy Display ("IHD") at no cost to the customer. The 2012 For Home Evaluation Results (OPA SaveOnEnergy Webinar, August 8, 2013) notes that 75% of **peaksaver PLUS**[®] customers surveyed report that the IHD led to changes in behavior.

Both the HVAC Incentives and the Appliance Retirement initiatives are also continuations of earlier, similar programs for which no enhancements have been introduced since prior to 2011.

Despite a higher than average level of awareness of the Appliance Retirement initiative, declining participation below Horizon Utilities' anticipated market share is an indication that market saturation for this initiative has occurred.

Based on the data published by the OPA in its Final Verified 2012 Results Report, Horizon Utilities has experienced an average participation rate of 5.1% in all residential programs. Where the OPA allocates provincial results for residential programs to all

LDC's, Horizon Utilities is assigned 4% of provincial results. This suggests that Horizon Utilities' marketing and promotional activities for initiatives allocated by individual LDC results have been as effective as most other LDCs.

The appliance retirement program results in 2012 were down 1,671 participants, or 45%, from prior year customer participation levels. Similarly, the provincial decline in participation was 39% indicating that Horizon Utilities' results in this initiative are reaching saturation levels.

Work to revitalize and increase the effectiveness and breadth of the Residential Program Initiatives needs to be a high priority. There are opportunities within the residential marketplace that need to be identified, developed and offered to customers. A revised home audit and other initiatives which could engage an average residential customer could be considered. Increased control by the LDCs such as 100% attributable coupons for LDCs and/or LDC hosted exchange events may present an opportunity for improved saving.

The 2012 incremental peak demand savings (MW) results show that the consumer portfolio contributed to a total of 29% of the total 13.6 MW achieved at the end of 2012. There was an increase in the number of **peaksaver PLUS**[®] participants in 2012; such represented a 76% increase over 2011. This represents 68% of the overall MW contribution of the consumer portfolio.

In 2012, Horizon Utilities' CDM events ambassadors attended 30 events and actively engaged directly with over 6,400 customers promoting the saveONenergy program initiatives.

As per Table 5, adjustments due to errors or omissions to the 2011 verified results for residential program initiatives were made by the OPA resulting in a reduction of 293 kW and 1,783,628 kWh to the 2014 CDM target.

Use of the Energy Mapping data to determine residential customers that could best benefit from the residential CDM programs will be an objective in 2013. In 2012, Horizon Utilities tracked its direct mail results for **peaksaver PLUS**[®] to provide a baseline for comparison and to help in our market segmentation efforts. We studied the existing participants to learn more about what areas we would do more targeted marketing for the appliance retirement, heating and cooling incentives and **peaksaver PLUS**[®] program initiatives. 2013 residential campaigns will leverage the results of this, and ongoing, analysis.

3.2.1.1 Appliance Retirement Initiative (Exhibit D)

Initiative Activities/Progress: The following illustrates the initiative activities and progress achieved in 2012:

Participation / Activity:

- Total province-wide appliances uptake/participation was 34,146 units, of which Horizon Utilities contributed 1,671 or 5% to the provincial results

Net Savings:

- The incremental peak demand savings was 96 kW and the incremental energy savings was 669,778 kWh

Contribution to Targets:

- The 2012 net peak demand savings contributed 263 kW to the 2014 demand target
- The 2011-2014 net cumulative energy savings is 6,960,954 kWh

Marketing & Promotional Tactics Used:

In 2012, Horizon Utilities provided marketing support for this initiative through:

- Bill inserts through five distinct campaigns with a total distribution of 355,000 inserts targeted to 90,000 potential households
- Outer bill envelope printed advertising with over 682,000 distributed
- Bill statement messaging was printed on over 800,000 bills distributed to all residential customers
- Television advertising on CHCH TV co-branded with Hydro One and specific Golden Horseshoe area LDCs:
 - 3 two week time slots in March, June and September
 - 156 commercials
 - 6,106,000 adults 25+ viewers reached
- Horizon Utilities' website promotion is active year round
- 16 retail events resulted in over 2100 customer interactions
- Promotion at 14 community events, including 5 home shows, achieving a total of over 4,300 customer interactions (see Appendix C for list of events)
- Collateral materials and fridge magnet handouts continued year round
- Advertising on the boards in Jack Gatecliff Arena created a gross number of 200,000 impressions at Niagara Ice Dogs home games during the 2011/2012 season
- Posters and advertising at community arenas continued all year, with a gross number of 1,000,800 impressions St. Catharines, Seymour Hannah Sports and Entertainment Centre
- Print newspapers advertising was sustained throughout the year, a total of 36 one-page ads in Hamilton Spectator, St. Catharines Standard, Hamilton Community Press, achieving approximately 8,211,600 impressions
- Online banner advertising in the Hamilton Spectator created 100,000 impressions and in the St. Catharines Standard, created 31,000 impressions
- Email advertising reached 600 customer contacts
- Free Standing Insert Newspaper 145,000 distributed with an additional 31,000 gross impressions with online banner support

- Press Release promoting the Fridge and Freezer Pickup program at SuperCrawl in September 2012
- Radio interview on CHML featuring the Chief Conservation Officer on July 2012 (promotion of interview on website)
- Google Search Engine Optimization registered 880 visits and nearly 1300 page views
- Created awareness campaign using Social Media including Facebook, Blogs and Twitter

Additional Comments:

- Horizon Utilities used existing participant postal code and participant information in conjunction with Energy Mapping project.
- This initiative (previously known as The Great Refrigerator Round-Up) has been offered by Horizon Utilities continuously since 2006. Horizon Utilities has had strong participation since its inception. This initiative is approaching market saturation as appliances have a natural life cycle. The number of eligible appliances retired by Horizon Utilities' customers in 2012 declined by 45% over 2011, which was on pace with the overall provincial results which declined by almost 40%. Historical results for the appliance retirement program since 2006 are as follows:

Year	Pickups
2006	1,449
2007	1,875
2008	3,824
2009	4,900
2010	2,972
2011	3,034
2012	1,671
Total	19,725

- Participation rates in this initiative have been responsive to province-wide advertising by the OPA, supported by LDCs. In 2012, however, the OPA provided no mass media advertising support for this initiative.
- The cost-effectiveness of this program is declining based on the achieved Savings and participation results in 2012. Based on heightened marketing and advertising activities completed in 2012, participation in the program declined by 45% compared to 2011. In order to be more cost effective, cross promotion of the appliance retirement with other initiatives was done.
- The OPA can make the availability of customer participation information more accessible on this program by including it in the LDC portal. This data would be

useful in determining past participants in order to gauging marketing tactics to new potential participants versus program activity.

- Year-end marketing research conducted by the OPA (*Triple A- Consumer Program Awareness, Attitude, Action*, In-Market Market Research Report, and Q4 2012) shows “awareness of the Fridge & Freezer Pickup is once again substantially higher in the Horizon Utilities service territory than in the rest of the CLD group and the provincial average.” (Page 29) Horizon Utilities achieved an 86% program awareness, versus a 61% awareness for CLD and a provincial average of 65%. Horizon Utilities’ program awareness levels are 21 points higher than the Ontario average of 65%, which is a direct result of the marketing and outreach efforts that Horizon Utilities invested throughout 2012 in an effort to increase uptake and achieve savings.
- With the change in the eligibility requirements for 2013, increasing the minimum age of the appliance to a minimum of 20 years, further declines in participation rates are anticipated. Horizon Utilities is aware that consideration is being given to remove this initiative from the Residential Program portfolio for this reason.
- Rather than strictly remove this initiative from the schedules, the OPA and LDCs could review what opportunities there are to include other appliances 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. The Residential portfolio could be strengthened through program evolution rather than weakened through diminished program offerings.
- The experience of other jurisdictions should also be considered, where similar appliance retirement programs have typically included participant incentives of \$25 to \$50. (No participant cash incentives have been offered for any appliance pick up initiatives since the concept was first introduced into the Ontario market in 2006.)
- The OPA and Horizon Utilities will continue working to establish partnerships with independent retailers and municipalities. Horizon Utilities’ experience with Just Junk offering a “referral fee” to attract participants is an example of such a partnership. Horizon Utilities did approach both cities’ municipal waste management facilities but was not successful in proceeding with further dialogues.

3.2.1.2 Appliance Exchange Initiative (Exhibit E)

Initiative Activities/Progress:

The following illustrates the initiative activities and progress achieved in 2012:

Participation / Activity:

- Total province-wide Appliance Exchange uptake/participation was 3,836
- Horizon Utilities’ uptake/participation for the Appliance Exchange Initiative was 131 units, or 3.4% of the provincial results

Net Savings:

- The incremental peak demand savings was 19 kW and the incremental energy savings was 33,812 kWh

Contribution to Targets:

- The total program-to-date verified net peak demand savings from this program initiative that contributes to the 2014 demand target is 25 kW
- The program-to-date 2011-2014 net cumulative energy savings is 175,999 kWh

Marketing & Promotional Tactics Used:

In 2012, Horizon Utilities provided marketing support for this initiative through:

- Website promotion active throughout the year
- Promotion at 16 retail events resulted in over 2100 customer interactions
- Promotion at 14 community events, including 5 home shows, achieved a number of over 4,300 customer interactions (see Appendix C for list of events)
- Press Release was issued June 2012 to industry and media channels that listed the local retailer participants and the CDM events staff schedule that supported the local exchange events.

Additional Comments:

- Client participants at retailers holding exchange events reported the store staff were not properly trained or made aware of OPA events and full support for the exchange in-store did not materialize
- As the in-store events are limited to twice per year, it would be helpful to be able to provide consumers with an in-store coupon incentive program, for products that can be purchased and contribute towards Horizon Utilities' Savings
- The initiative, eligible measures and incentive amounts are influenced by the retail partner with no direct involvement from Horizon Utilities. The restricted, 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 forecasted by Horizon Utilities have not materialized.
- Evaluation, Measurement, and Verification (EMV) results indicated that the value of Savings for retired room Air Conditioners ("ACs") has dropped resulting in a program change recommendation that removed window ACs from the list of eligible appliances for 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 Canada Inc. for appliance removal.
- The initiative appears to require more promotion from retailers and LDCs.

3.2.1.3 HVAC Incentives (Exhibit B)

Initiative Activities/Progress:

The following illustrates the initiative activities and progress achieved in 2012:

Participation / Activity:

- Total province-wide HVAC incentives uptake/participation was 85,221 units of which Horizon Utilities contributed 5,007, or 5.8% of the provincial results

Net Savings:

- The incremental peak demand savings was 1,091 kW and the incremental energy savings was 1,843,136 kWh

Contribution to Targets:

- The program-to-date net peak demand savings that contributes to the 2014 demand target is 2,784 kW
- The program-to-date 2011-2014 net cumulative energy savings is 17,809,596 kWh

Marketing & Promotional Tactics Used:

In 2012, Horizon Utilities provided marketing support for this initiative through:

- Print newspaper advertising -posted a total of 21 one page ads in Hamilton Spectator, St. Catharines Standard, Hamilton Community Press and created approximately 4,790,000 impressions
- Promotion on outer bill envelope which totaled over 1,719,500 distributed
- Website promotion was consistent throughout the year and accumulated over 1,000 website hits and views
- Promotion at 16 retail events resulted in over 2,100 customer interactions
- Promotion at 14 community events, including 5 home shows, generated over 4,300 customer interactions (see appendix for list of events)
- Collateral material handouts were consistent throughout the year
- Bill Inserts of three distinct waves, total of 235,000 distributed
- Online banner advertising through 2 waves on The Weather Network, creating 545,000 impressions
- Radio interview on CHML

- Created awareness campaign using Social Media such as Facebook, Blogs and Twitter

Additional Comments:

- In 2012, Horizon Utilities worked with the OPA to gather HVAC incentive participant specific location or postal code information to be used in conjunction with the Energy Mapping project.
- Branding needs to be extended to Heating Refrigeration Air Conditioning Institute (“HRAI”) contractors on advertising that they promote to encourage them to be more effective in leveraging the saveONenergy HEATING AND COOLING INCENTIVE^{OM}
- 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 AIRMILES incentive in 2013 may help with this.
- This Initiative is contractor driven with Horizon Utilities 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. OPA can make the availability of LDC program participation more accessible by including it in the LDC portal. This data would be useful in gauging marketing tactics versus program activity.
- 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 4,500-5,000 HVAC contractors in the Province, however only 1,500 are participating in program. Horizon Utilities has 56 participating contractors in the HVAC incentive initiative in our service territory.
- Year-end marketing research conducted by the OPA (*Triple A- Consumer Program Awareness, Attitude, Action*, In-Market Market Research Report, (Q4 2012) shows “awareness of the Heating & Cooling Incentive in Horizon Utilities’ service territory during Q4 higher than in the CLD group and in the province as a whole. (Page 37). Horizon Utilities has generated 47% program awareness, compared to the CLD and provincial averages, which are 42%, 5 points lower than Horizon Utilities.

3.2.1.4 Conservation Instant Coupon Initiative (Exhibit A)

Initiative Activities/Progress:

The following illustrates the initiative activities and progress achieved in 2012:

Participation / Activity:

- Total province-wide coupons uptake/participation was 30,891 units of which Horizon Utilities was allocated 1,249 or 4% to the provincial results

Net Savings:

- The incremental peak demand savings was 9 kW and the incremental energy savings was 56,527 kWh

Contribution to Targets:

- The program-to-date net peak demand savings that contributes to the 2014 demand target is 59 kW
- The program-to-date 2011-2014 net cumulative energy savings is 3,410,755 kWh

Marketing & Promotional Tactics Used:

- Promotion at 16 retail events resulted in over 2,100 customer interactions
- Promotion at 14 community events including 5 home shows, generated a total of over 4,300 customer interactions (see appendix for list of events)
- Generated awareness through website which received over 880 website hits and views
- Newsletter with distribution to over 60,000 households

Additional Comments:

- In Horizon Utilities' territory many participants have limited access to online coupons 22% in the Horizon territory do not have access to internet (source: OPA residential profile 2010)
- A conservation coupon booklet could be used all year to encourage customer participation and in-store retailer visits
- This initiative was ineffective for most of 2012 as the Instant coupons (annual) for Horizon Utilities were not available to consumers until September 2012. As such, savings forecasted 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. These delays, coupled with incomplete results reporting, limit 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. The absence of the coupon booklet in the market place in 2012 had a noticeable impact on market activity, reducing it by 94% from 2011 totals.
- 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 should 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.
- Year-end marketing research conducted by the OPA (Triple A- *Consumer Program Awareness, Attitude, Action*, In-Market Market Research Report, Q4 2012) shows “Awareness of the coupon event in Horizon service territory during Q4 is similar to the provincial average. Recall of seeing the coupons is higher than CLD and provincial average. Claimed participation in the initiative is also higher than CLD and provincial average. (Page 19). Close to half, 48%, of Horizon customers recall seeing a rebate coupon. This is 6 points higher than the Ontario average of 42% for this quarter. (Page 22) Program awareness was high but participation was lower than 2011 results

3.2.1.5 Bi-Annual Retailer Event Initiative (Exhibit C)

Initiative Activities/Progress:

The following illustrates the initiative activities and progress achieved in 2012:

Participation / Activity:

- Total province-wide bi-annual retailer event uptake/participation was 1,060,901 units
- The OPA allocated Horizon Utilities participation results for the bi-annual retailer event. The result was 42,891 units, or 4% to the provincial results.

Net Savings:

- The incremental peak demand savings was 60 kW and the incremental energy savings was 1,082,743 kWh

Contribution to Targets:

- The program-to-date net peak demand savings that contributes to the 2014 demand target is 128 kW
- The program-to-date 2011-2014 net cumulative energy savings is 8,000,594 kWh

Marketing & Promotional Tactics Used:

In 2012, Horizon Utilities provided marketing support for this initiative through:

- Website promotion throughout the year
- Promotion at 16 retail events resulted in over 2,100 customer interactions
- Promotion at 14 community events, including 5 home shows, for a total of over 4,300 customer interactions (see appendix for list of events)
- Bill insert of a single wave, which generated a total of 60,000 inserts distributed
- Press release was sent out in September 2012 to announce the CDM events team attending participating retailer events.

Additional Comments:

- A positive adjustment to Horizon Utilities resulted in an increase of 3,308 participants.
- Horizon Utilities experienced a 22% increase in participation in 2012 versus 2011.
- Horizon Utilities event teams at in-store events helped drive product sales and provide education to customers and, in some instances, provided store staff with program setup and logistics.
- 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.
- The Product list should be distinctive from the Conservation Instant Coupon Initiative in order to gain more consumer interest and uptake.
- Limited engagement of local retailers can restrict the savings potential for this Initiative.
- A review conducted by the Electrical Distributors Association (“EDA’s”) Consumer Working Group (a committee established by the EDA CDM Caucus) 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 tends 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.
- Program evolution, including new products (for example, LED lighting) and review of incentive pricing for the coupon initiatives, must be a regular activity to ensure continued consumer interest
- Point of presence advertising and coupon display did not match the eligible product on the shelf

3.2.1.6 Retailer Co-Op

2012 Results:

- None

Additional Comments:

- This initiative was not in market in 2012 and produced no Savings provincially or for Horizon Utilities.

3.2.1.7 Residential New Construction (Schedule B-2)

Initiative Activities/Progress:

The following illustrates the initiative activities and progress achieved in 2012:

Participation / Activity:

- Horizon Utilities' uptake/participation for Residential New Construction was 0 and the province wide results were only 45 participants to date.

Net Savings:

- None.

Contribution to Targets:

- None.

Marketing & Promotional Tactics Used:

- Attended home builder meetings to discuss the program with individual builders and developers.

Additional Comments:

- Provincially, there have been 26 participants in this program initiative to date. Since the online application system is a one to one relationship, this program was only practical for custom builders who were building one home at a time. This type of application process is an administrative challenge for builders who are building multiple houses in a subdivision, therefore program interest is low.
- Administrative requirements must align with perceived stakeholder payback.
- This initiative provides incentives to home builders for incorporating energy efficiency into their buildings. To support this, Horizon Utilities needs to provide education to the consumers illustrating the long term benefits to the consumer and the environment when choosing energy efficient builder upgrade options which do not present 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 an inherent lag between participation and results due to building completion time.
- Administrative requirements, in particular individual home modeling, must align with perceived stakeholder payback. As per the Electricity Distributors Association (“EDA”) Working Groups, changes were made through change management processes in 2012. However, the lengthy change management process has resulted in continued non-participation from builders in 2012.

3.2.1.8 Residential Demand Response (Schedule B-3)

Initiative Activities/Progress:

The following illustrates the initiative activities and progress achieved in 2012:

Participation / Activity:

- Total 2012 province-wide **peaksaver PLUS**[®] uptake/participation was 78,838 units
- Horizon Utilities’ uptake/participation for **peaksaver PLUS**[®] installations was 3,441 new programmable thermostats to residential consumers, or 4.4% of the provincial totals.
- Horizon Utilities is continuing to engage the OPA in a final reconciliation of our 2012 results that indicate 2012 participants to be 3926 (1607 new participants plus 2319 existing **peaksaver**[®] participants). Therefore an increase of 483 participants should have been reflected in the verified 2012 results. Also the total in-home displays should be equivalent to the 3926 participants signed onto the **peaksaver PLUS**[®] program.

Net Savings:

- The OPA reported incremental peak demand savings was 1,606 kW and the incremental energy savings was 10,820 kWh
- Further to the adjustment in participation results Horizon Utilities anticipates that the Savings will have been increased by 233 kW and 1,525 kWh in incremental annual energy savings.

Contribution to Targets:

- The program-to-date net peak demand savings that contributes to the 2014 demand target is not reported by the OPA.
- The program-to-date 2011-2014 net cumulative energy savings is 16,480 kWh
- Further to the anticipated upward adjustment in energy and demand savings, the contributions to target should be 1,839 kW in demand savings and 18,005 kWh in energy savings

Marketing & Promotional Tactics Used:

In 2012, Horizon Utilities provided marketing support for this initiative through:

- Website promotion generated a total of 36,000 hits and views
- Bill statement inserts in three distinct waves, which totaled 260,000 inserts
- Promotion at 16 retail events which generated a total number of over 2100 of customer interactions
- Promotion at 14 community events, including 5 home shows, creating a total of over 4,300 customer interactions (see appendix for list of events)
- Collateral material 14,000 handouts which were distributed during the duration of the program
- Welcome packages which included 13,000 handouts
- Promotion using addressed Direct Mail for 179,000 new customers and 24,000 existing customers for **peaksaver PLUS[®]**
- Press release for launching new **peaksaver PLUS[®]** in June
- Voice broadcast to 1,363 customers to announce peaksaver promotion to residential customers
- A total of 78,455 email blasts and 16,171 direct mail using AIRMILES as a promotional tool
- Designed a new pull up banner for **peaksaver PLUS[®]**
- Designed new door hangers for installers to hand out during installations
- Created rack cards for community events, co-branded with AIRMILES promotion
- Radio interview on CHML
- Created awareness campaign using Social Media such as Facebook, Blogs and Twitter

Additional Comments:

- In 2012, Horizon Utilities used the Energy Mapping project to refine the listing of customers with central air conditioning. Also adding the location of existing customer participants we were able to be more specific with our marketing activities for the **peaksaver PLUS[®]** program initiative.
- In 2012, Horizon Utilities launched two key direct mail campaigns:
 - In May 2012, Horizon Utilities sent 89,000 Direct Mail pieces to consumers that Horizon Utilities identified as having central air conditioning, through an examination of electricity consumption patterns. Horizon Utilities' CDM efforts yielded approximately 0.78% enrollments.
 - In November 2012, Horizon Utilities sent out an additional 89,000 Direct Mail pieces to customers identified with central air conditioning and had a 0.37% enrolment.
- In examining the demographic nature of the people enrolling in the **peaksaver PLUS[®]** program, Horizon Utilities learned that the largest segment of new participants represented middle class, financially conservative customers. Horizon Utilities suspects that the Direct Mail messaging may not have fully aligned to the values of the demographic groups most likely to sign up, which negatively impacted enrolment. In 2013, Horizon Utilities' Direct Mail messaging will be adjusted to better align to the values of the target audience. Horizon Utilities will be leveraging the Energy Mapping Database to identify key target audience for **peaksaver PLUS[®]**.
- A higher success rate for enrolments was reached when the Horizon Utilities standard envelope was used with the direct mail piece.
- Two curtailment events were announced and Horizon Utilities experienced no customer requests for removals of the **peaksaver PLUS[®]** devices.
- In 2012 the initial focus for the **peaksaver PLUS[®]** program was in upgrading past **peaksaver[®]** participants to **peaksaver PLUS[®]**. The key upgrade component was the introduction of an In-Home Energy Display. The final results do not attribute Savings to the in-home energy display. This causes concern about the cost that has been incurred to attract past participants to **peaksaver PLUS[®]**.
- Difficulties were experienced with the entry of project completion reports in the OPA Customer Reporting Management ("CRM") system. This resulted in zero successful project completion reports being uploaded, creating unnecessary delays in payment to Horizon Utilities' third party provider.
- In a few cases customers did not want the in home energy display due to performance limitations of the device to communicate over a long distance between the electrical meter and the dwelling. Currently the Blue Line in-home energy display product does not adapt to statutory holidays for off peak energy pricing.
- Horizon Utilities' Year-end marketing research conducted by the OPA (Triple A-Consumer Program Awareness, Attitude, Action, In-Market Market Research

Report , Q4 2012) shows “In Horizon service territory awareness of **peaksaver PLUS**® during Q4 is higher than in the CLD group and in the province as a whole.” (Page 45). Horizon Utilities’ Territory awareness reached 89%, while CLD only achieved 82%, and the provincial average was only 77% province, 12 points lower than Horizon Utilities.

- Horizon Utilities has been in market with a residential demand response program offering of a programmable thermostat since 2006 and have determined a technical potential of 90,000 residential customers with central air conditioning. Historical results for the **peaksaver**® and **peaksaver PLUS**® shown below are indicative that the program may be reaching declining participation by end of 2014 and our cost of acquisition will continue to increase.

Year	New installations
2006	807
2007	830
2008	2,196
2009	3,485
2010	2,254
2011	1,952
2012	1,607
Total	13,131

3.2.2 Commercial and Institutional Programs

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

Targeted Customer Type(s): Commercial, Institutional, Agricultural, Multi-family buildings, Industrial

Objective: 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: The Commercial and Institutional (“C&I”) Program portfolio is comprised of three initiatives that are continuations of previous initiatives, and two new initiatives. Similar to many of the initiatives in the Residential Program portfolio, customer interest in participating in the C&I Program is largely driven by supply channel partners such as commercial lighting contractors, commercial heating, ventilation, air conditioning and refrigeration (“HVACR”) contractors, and other parties. While lighting contractors have

actively supported the C&I Program, other supply channel partners have been less supportive. This has been due to concerns including the complexity of the application process, the need to apply for projects in advance of their commencement, and insufficient incentives. The most important of the C&I Program initiatives with respect to the provision of Savings are the Efficiency: Equipment Replacement Incentive Initiative (the “Retrofit Program”, also known as the “ERII” Program) and the Direct Install Lighting (“DIL”) Program initiative (also known as the Small Business Lighting Program). Both are continuations of earlier programs that have been refined over time, particularly to increase the incentives available.

The DIL Program, in which participants can receive more energy-efficient lighting and other products at no cost to a maximum of \$1,500 (previously \$1,000), restricts the customer to participating only once in the initiative. Horizon Utilities experienced strong participation in the previous version of this initiative, the “Power Savings Blitz”, prior to 2011 and as such has experienced lower participation rates in 2011 and 2012 versus the provincial average. Horizon Utilities participation rates for the ERII Program are slightly lower than the provincial average due to Horizon Utilities being in market since 2007 with the Electricity Retrofit Incentive Program (“ERIP”) and the average Savings per project is lower than the provincial average.

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 completely removed from the process.

Horizon Utilities’ 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. Feedback from channel partners and program participants indicated that Horizon Utilities was more stringent in upholding the program eligibility requirements.

Despite these challenges, the C&I Working Group, working in cooperation with the OPA, has managed to iron out many of the issues. In particular, 2012 saw the advent of the expedited change management as a 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.

As per Table 5 adjustments due to errors or omissions to the 2011 verified results for commercial and institutional program initiatives were made by the OPA resulting in a reduction of 189 kW and 3,709,274 kWh to the 2014 CDM target.

To that end, Horizon Utilities is working on trying to increase the completion rates for projects submitted by taking on a more active role in customer communications and for the work involved in processing an application.

3.2.2.1 Equipment Replacement Incentive Initiative (ERII) (Schedule C-2)

Initiative Activities/Progress:

The following illustrates the initiative activities and progress achieved in 2012:

Participation / Activity:

- Total province-wide ERII project currently has 5605 participants,
- Horizon Utilities contributed 178 or 3.08% to the provincial results

Net Savings:

- The incremental peak demand savings was 1659 kW and the incremental energy savings was 9,600,471 kWh

Contribution to Targets:

- The program-to-date net peak demand savings that contributes to the 2014 demand target is 2,565 kW
- The program-to-date 2011-2014 net cumulative energy savings is 50,209,612 kWh

Marketing & Promotional Tactics Used:

In 2012, Horizon Utilities provided marketing support for this initiative through:

- Channel Partner Promotion through a total of 11 channel partner events including meetings and two in-house “Lunch & Learns.”
- Horizon Utilities presented program information at five channel partner information sessions, such as BBQs
- More emphasis was placed on marketing of non-lighting technologies with customers and channel partners
- In 2012, recognition of key ERII projects was captured for the purposes of developing case studies. To build awareness with potential future participants
- Collateral material, such as sell sheets, which were provided as sales support tools for Sales Team and Channel Partners
- Created awareness campaign using Social media such as Blogs, Twitter and Facebook

- Free standing print newspaper insert, Hamilton Spectator distribution 93,576 and St. Catharines Standard distribution 47,519 on July 25 and 26, 2012
- Radio advertising, ran 288 10 second tags on Hamilton radio stations K-Lite, and CHML and 224 10 second tags on St. Catharines radio stations CHRE and CHTZ, which generated 483,016 impressions in July and October 2012
- Press Release with City of Hamilton Wastewater treatment plant October 2012
- Recognition Event with City Of Hamilton Wastewater treatment plant October 2012
- Developed customer database of top 150 companies with key contact information
- Developed Business Recognition program for both customers and contractors
- Bill inserts to 200 accounts with messaging on “Incentive to help organizations become more energy efficient”.
- Promotion on website resulting in 1354 page hits and views

Additional Comments:

- Horizon Utilities’ 2012 ERII results were increased by 91 participants, including the adjustments to 2011 participants
- The online application process serves the program objectives of documentation well but does not work as a “self-serve” process for the customer to navigate. The process needs trained personnel to process the applications and follow up on the progress. The RETROFIT Prescriptive Measures Input Assumption document was used to determine eligibility of the various measures. It turns out that the document was only to be used for information purposes not a guide for determination of eligibility. The use of this document meant that many potential projects Horizon Utilities determined to be ineligible had their CDM savings discounted measurably. As a result, there was a significant amount of CDM savings opportunities lost. The intent of documents such as this need to be clearly defined in the body of the document at the onset of their available and not buried in footnotes.
- An inconsistent methodology for calculating “eligible costs” for the various application streams caused significant delays for projects with multiple streams. The exclusion of labor for the prescriptive project costs means that any project that combines prescriptive measures with any other needs to be reviewed and possibly submitted as multiple, separate projects. This caused significant delays and frustrations for many months until the channel partners who were generating these projects learned how to address this concern.
- The requirement for pre-approval of HVAC equipment replacement is a barrier for participants that need to replace systems that fail in an emergency scenario. Feedback from HVAC contractors indicates that the requirement for pre-approval and the minimal incentive values for HVAC effectively eliminate this market

segment from participating in ERII. Higher incentives are required to warrant the additional expenditure and effort by the customer and their HVAC contractor.

- Horizon Utilities experienced an increase in the percentage of non-lighting retrofit applications of 16.6% for 2012 as compared to 8.1% for 2011.
- Uptake of retrofitting compressed air systems occurred in 2012.
- Having more prescriptive measures for compressed air systems would improve the CDM savings.

3.2.2.2 Direct Install Initiative (“DIL”) (Schedule C-3)

Initiative Activities/Progress:

The following illustrates the initiative activities and progress achieved in 2012:

Participation / Activity:

- Total province-wide direct install lighting participation was 18,490 projects
- Horizon Utilities contributed 662 or 3.6% to the provincial results

Net Savings:

- The incremental peak demand savings was 550 kW and the incremental energy savings was 1,875,038 kWh

Contribution to Targets:

- The program-to-date net peak demand savings that contributes to the 2014 demand target is 1,104 kW
- The program-to-date 2011-2014 net cumulative energy savings is 12,170,375 kWh

Marketing & Promotional Tactics Used:

In 2012, Horizon Utilities provided marketing support for this initiative through:

- Year round website promotion with 200 hits or views
- Collateral materials provided for the program and distributed by our 3rd party service provider to prospective customers
- Created awareness using Social Media such as Blog, Twitter, Facebook
- Promotion with local Business Improvement Associations (“BIAs”) by providing sell sheets and newsletters
- Radio interview on CHML

Additional Comments:

- The inclusion of the bulk-metered properties with tenants who are estimated to be GS < 50 kW provided a good supply of additional program activity. Currently the participation rate of eligible customers is close to 50%. This new market of bulk-metered properties was critical to maintain sufficient economic opportunity to support ongoing activity.
- Significant increases to the cost of materials used in the small business lighting continue to be a barrier for Horizon Utilities' delivery contractors. Increasing the allowance to \$1,500 has no effect when one considers that the margins on most measures are too small to encourage continued support from the contractors. Many appropriate measures are not being installed as the contractors' purchase price is higher than the pricing offered by the OPA leaving little or no margin. A prime example would be medium bay fixtures where the OPA pricing allowance is less than the cost of the fixture itself. When labour costs are added these measures are far more expensive than the price list, resulting in contractors losing money on the installation.
- A significant number of customers have not participated due to a lack of appropriate measures for their business. Adding more directional lighting measures in the LED technology should make the program viable for many retail and food service customers.
- Outdoor and sign lighting is an opportunity that is not currently available in the program offering.

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

Initiative Activities/Progress:

The following illustrates the initiative activities and progress achieved in 2012:

Participation / Activity:

- None

Net Savings:

- None

Contribution to Targets:

- None

Marketing & Promotional Tactics Used:

- 2012 saw the deployment of the first channel partner to support this initiative in Ontario. Horizon Utilities signed up the John St facility as a participant in this program to lead by example and test the initiative for Horizon Utilities' customers.

Additional Comments:

- The prescribed implementation of this initiative dictates that all measurements, both pre and post project, be conducted within the months of June through September. Given that the pre-project phase requires data be collected for 60 consecutive days, it is imperative that all pre-project measurements commence in early June or the implementation of the improvements will not be credited until the following calendar year. However, technology currently exists to collect this data in as little as two weeks. The schedule must be rewritten to remove the 60 day collection clause and replace it with a "sufficient information" clause to take advantage of this technology and increase Savings from this initiative.
- The initiative is indicating that significant Savings can be delivered, largely through operational and non-capital intensive upgrades. Most systems appear to be set up to address other considerations at the expense of operational efficiency.

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

Initiative Activities/Progress:

The following illustrates the initiative activities and progress achieved in 2012:

Participation / Activity:

- Total province-wide HPNC projects amounted to 33 projects
- Horizon Utilities contributed 2 projects to the provincial results.

Net Savings:

- The OPA verified results indicated incremental peak demand savings of 0 kW and the incremental energy savings was 1,331 kWh
- Currently we are working with the OPA to reconcile the 2012 Savings and are expecting an adjustment of 9 kW and 23,169 kWh. The final results show 2 projects but the preliminary results, which agree with Horizon Utilities' records, indicated 9 kW of demand savings and 24,500 kWh from only 1 participant.

Contribution to Targets:

- The OPA verified results indicate program-to-date net peak demand savings that contributes to the 2014 demand target is 0 kW
- The OPA verified results indicate the program-to-date 2011-2014 net cumulative energy savings is 3,993 kWh

- Currently we are working with the OPA to reconcile the 2012 Savings and are expecting an adjustment of 9 kW and 69506 kWh. The preliminary program-to-date 2011-2014 demand savings is 9 kW and net cumulative energy savings was 73,499 kWh from only 1 participant.

Marketing & Promotional Tactics Used:

- In 2012, Horizon Utilities provided business to business support for this initiative through the services of Enbridge Gas Distribution Inc. (“Enbridge”) for the delivery of this program

Additional Comments:

- The net to gross ratio applied on the net Savings was 50% which was unexpectedly higher.
- Currently the schedule requires the application to be submitted before the building permit is issued. This is onerous at best as the design continues to evolve throughout the project lifetime. The eligibility criteria needs to be simplified to require an “intent to participate” in order to maintain the flexibility that the developers need through the build process.
- Payments of incentives are contingent upon an occupancy permit being released. It is recommended that incentive payments are split 50% once the project is designed and building permit is released and 50% once the occupancy permit is released.

3.2.2.5 Energy Audit Initiative (Schedule C-1)

Initiative Activities/Progress:

The following illustrates the initiative activities and progress achieved in 2012:

Participation / Activity:

- The total province-wide number of Energy Audits was 280 projects
- Horizon Utilities contributed 3 projects, or 1% to the provincial results

Net Savings:

- Incremental peak demand savings attributed to the audits was 16 kW and the incremental energy savings was 75,529 kWh

Contribution to Targets:

- The program-to-date net peak demand savings that contributes to the 2014 demand target is 68 kW

- The program-to-date 2011-2014 net cumulative energy savings is 1,233,636 kWh

Marketing & Promotional Tactics Used:

- Horizon Utilities provided marketing support for this initiative through channel partner development and relations with two Engineering Consultants.
- Horizon Utilities created awareness of the Energy Audit initiative at 11 channel partner events

Additional Comments:

- The OPA has taken the approach that energy audit funding is not well spent if focused on lighting and has therefore mandated that energy audits be conducted on the entire facility. This adds to the cost of the audit and limits funding for lighting-specific investigation. For most small businesses that undertake an audit the lighting represents the majority of the CDM potential. Additionally, industry experts have demonstrated that proper lighting assessments through a full lighting audit can deliver far greater CDM results than the “one-for-one” approach. Acknowledging this by allowing lighting-focused audits to be funded would increase Savings.

3.2.2.6 Small Commercial Demand Response (Schedule B-3)

Initiative Activities/Progress:

The following illustrates the initiative activities and progress achieved in 2012:

Participation / Activity:

- Horizon Utilities enrolled 9 small commercial participants into **peaksaver PLUS[®]** in 2012.

Net Savings:

- The incremental peak demand savings was 6 kW and the incremental energy savings was 33 kWh

Contribution to Targets:

- The program-to-date net peak demand savings that contributes to the 2014 demand target is not reported by the OPA.
- The program-to-date 2011-2014 net cumulative energy savings is 33 kWh and provincially 1,224 kWh.

- The spillover of the residential marketing materials resulted in participation of 9 small commercial customers.

Marketing & Promotional Tactics Used:

- The spillover of the residential marketing materials resulted in participation of 9 small commercial customers.

Additional Comments:

- Changes to the schedule in 2013 will allow Horizon Utilities to target small commercial customers with central air conditioning.

3.2.2.7 Demand Response 3 (Schedule D-6)

Initiative Activities/Progress:

The following illustrates the initiative activities and progress achieved in 2012:

Participation / Activity:

- Horizon Utilities had 4 commercial/institutional customers enroll in 2012 which is a decline by 1 participant from 2011.
- There were 151 participants provincially from the commercial/institutional sector
- Horizon Utilities contributed 4 participants or 2.6% of the provincial total.

Net Savings:

- The net peak demand savings was 531 kW and the incremental energy savings was 7,718 kWh. There was a decrease of 5 kW in demand savings with the loss of one participant.

Contribution to Targets:

- The program-to-date 2011-2014 net cumulative energy savings was 28,654 kWh and provincially 915,244 kWh.
- Under scenario 2 there is 531 kW achieved in 2012 that contributes to the 2014 target.

Marketing & Promotional Tactics Used:

- This initiative is promoted through our business to business strategy by our Roving Energy Managers and Key Account Managers.

Additional Comments:

- None

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 savings opportunities. It includes financial incentives and technical expertise to help organizations modernize systems for enhanced productivity and product quality, as well as provide a substantial boost to energy productivity. This allows facilities to take control of their energy so they can create long-term competitive energy advantages which reach across the organization.

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

Objective: 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.

Activities carried out in 2012 by the Key Account Manager (“KAM”) resources for Horizon Utilities and the eight other KAM LDC’s serviced by Horizon Utilities resulted in identification of potential CDM projects, through onsite energy assessments and further engineering studies.

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 into 2015; however the subsequent savings would not be attributed to the 2011 – 2014 Horizon Utilities Savings 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 the Horizon Utilities Savings target 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 the Horizon Utilities 2011 – 2014 Savings.

3.2.3.1 Process & Systems Upgrades (“PSUI”) (Schedule D-1)

Initiative Activities/Progress:

The following illustrates the initiative activities and progress achieved in 2012:

Participation / Activity:

- Provincially, there was no PSUI activity for 2012
- Horizon Utilities did not have any eligible PSUI projects in 2012.

Net Savings:

- The incremental peak demand savings is 0 kW and the incremental energy savings was 0 kWh

Contribution to Targets:

- The program-to-date net peak demand savings that contributes to the 2014 demand target is 0 kW
- The program-to-date 2011-2014 net cumulative energy savings is 0 kWh

Additional Comments:

- The OPA’s PSUI contract with customers for capital incentives remains as a significant barrier as the contract term is too long and contains other complicated provisions
- The ongoing commitment to supply data that verified the CDM savings is seen as a barrier to participation. The ERII initiative stream looks far more attractive as the comparable incentives one considers the costs of supporting the ongoing requirement to provide supporting documentation of savings.
- Three significant PSUI projects that were expected to have considerable contributions to our CDM targets. These projects are not only critical with respect to Horizon Utilities Corporation’s CDM targets but also to the economic viability of the customer’s operation. Given the long time required to build and commission these projects the delays have caused significant concern for these customers.
 - The first project 1 is a large user has a 5.6 MW cogeneration project that is designed to produce high quality steam for generation and to use the “waste” steam for the production process. Their detailed engineering study was completed in October of 2012 but the OPA has not approved the review of the project and has prevented it from moving forward.

- A second large user is currently burning waste gas that they are anxiously hoping to use to build a 5.0 MW cogeneration facility that will completely displace their load. This customer has been engaged in attempting to get the project to move forward at the OPA through Horizon Utilities since November of 2011.
- A third large user cogeneration project expected to deliver 9.1 MW and 72 GWh of annual incremental energy savings was delayed due to a work-stoppage but Horizon Utilities worked with the OPA to obtain a waiver that allowed them to continue the project through the current PSUI. However, economic conditions since 2011 have adversely affected their production and curtailed the production of furnace gases necessary to feed the generation.
- The technical approval process has also been frustrating for the customer's participating in the PSUI. The M&V requirements are often seen as onerous and excessive, increasing customer frustration and reducing participation levels.

3.2.3.2 Monitoring & Targeting Initiative (“M&T”) (Schedule D-2)

Initiative Activities/Progress:

The following illustrates the initiative activities and progress achieved in 2012:

Participation / Activity:

- None

Net Savings:

- None

Contribution to Targets:

- None

Additional Comments:

- The M&T initiative was originally 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. Through the OPA change management process in 2012, changes were made to both the M&T schedule and ER11 to allow smaller facilities to employ M&T systems
- The addition of M&T projects of all sizes was instrumental in generating 3 projects that were started in the Horizon Utilities territory in 2012.

3.2.3.3 Energy Manager Initiative (Schedule D-3)

Initiative Activities/Progress:

The following illustrates the initiative activities and progress achieved in 2012:

Participation / Activity:

- There are 33 active Energy Managers in the province in 2012
- Horizon Utilities had 3 customer participants enroll, or 9% of the provincial totals

Horizon Utilities hired three Roving Energy Managers in 2012 that provided 6 months of service to the market, on average. In spite of not being in service for the entire year, the team provided assistance to 52 customers under these CDM program activities:

- 193 Site meetings with customers
- 2 Energy Plans
- 2 Detailed Engineering Studies
- 91 Retrofit Applications
- 1 Building Re-Commissioning Application
- 8 Energy Audits
- 1 Process and System Upgrade Capital Incentive application
- 3 Monitoring and Targeting project applications

Net Savings:

- The incremental peak demand savings was 60 kW and the incremental energy savings is 479,921 kWh

Contribution to Targets:

- The program-to-date net peak demand savings that contributes to the 2014 target was 60 kW
- The program-to-date 2011-2014 net cumulative energy savings is 1,439,764 kWh

Additional Comments:

- The CDM potential in the “middle market” of users from 0.5 MW to 5 MW is very promising. The majority of these customers appear to have been largely ignored by the channel partner network implementing CDM measures. These customers are typically too small to have an energy team and too big to benefit from the small business initiative. Most require a higher level of support like that received from a Roving Energy Manager.
- The non-incented CDM Savings requirement of 90 kW has been difficult to meet. The opportunities need to remain on the objectives for the energy managers but

not a hard target. These opportunities are easy to exploit when they are discovered but cannot be developed where they don't exist.

- Restricting a roving energy manager to three customers underutilizes the potential of these resources to achieve CDM Savings. Maximum CDM potential is realized when this resource is deployed to the largest number of engaged customers that the resource can support. As such, these resources have been deployed accordingly at Horizon Utilities.

3.2.3.4 Key Account Manager (“KAM”) (Schedule D-4)

Initiative Activities/Progress:

The following illustrates the initiative activities and progress achieved in 2012:

Participation / Activity:

Horizon Utilities, working with eight other LDCs, has a team of three Key Account Managers in place. Two have been active since the middle of 2011 and one joined the team in February of 2012. Together the KAM team has been servicing 30 large user customers in the 9 LDC service territories since August 2011. Additional support is being given to larger customers at the other LDCs that are able to support project activity beyond their prescribed large-user accounts. This has greatly helped these other LDCs augment their total commercial CDM production.

The three Key Account Managers have provided assistance to the 30 large user industrial customers and numerous other commercial customers under these CDM program initiatives;

- 319 Site meetings with customers
- 30 Energy Assessment Reports
- 36 Retrofit Applications
- 2 Preliminary Engineering Studies
- 11 Detailed Engineering Studies
- 6 Embedded Energy Managers
- 9 Process and System Upgrade Capital Incentive Applications
- 3 Monitoring and Targeting project applications

Additional Comments:

- The multi-year duration for this initiative is proving to be critical in its potential for success. The long business cycle required to identify, propose and implement projects with this customer base requires a multi-year program at minimum and an open ended initiative in the ideal case in order to build the long-lasting relationships and trust necessary to move these projects forward.

- The effectiveness of the Key Account Manager resource is largely a function of the initiatives that they are supporting. Improvements to the PSUI contract would undoubtedly improve the CDM savings of this resource.

3.2.3.5 Equipment Replacement Incentive Initiative (ERII) (Schedule C-2)

Initiative Activities/Progress:

The following illustrates the initiative activities and progress achieved in 2012:

Participation / Activity:

- None
- In 2011, the OPA reported on ERII projects completed in the Industrial sector. For 2012, there were no reported Industrial ERII projects for Horizon Utilities or the Province.

Net Savings:

- The incremental peak demand savings is 0 kW and the incremental energy savings was 0 kWh for Horizon Utilities and the province.

Contribution to Targets:

- The program-to-date net peak demand savings that contributes to the 2014 target was 70 kW
- The program-to-date 2011-2014 net cumulative energy savings was 1,610,107 kWh

Additional Comments:

- It appears that the OPA is combining the ERII program results into the Business Program for 2012. Horizon Utilities preference would be that the OPA reports ERII projects completed from the Industrial sector going forward.

3.2.3.5 Demand Response 3 (“DR3”) (Schedule D-6)

Initiative Activities/Progress:

The following illustrates the initiative activities and progress achieved in 2012:

Participation / Activity:

- Total province-wide DR3 uptake/participation in the Industrial DR-3 program was 185 contracts

- Horizon Utilities contributed 7 participants, or 3.8% to the provincial participation and 8.7% of the gross MW contracted capacity

Net Savings:

- The peak demand savings is 6,445 kW and the incremental energy savings was 155,311 kWh

Contribution to Targets:

- The 2012 net peak demand savings under scenario 2 that contributes to the 2014 demand target was 6,445 kW
- The program-to-date net 2011 and 2012 energy savings to our 2014 target was 360,657 kWh

Marketing & Promotional Tactics Used:

In 2012, Horizon Utilities provided marketing support for this initiative through:

- Business to business contact through our Roving Energy Managers and Key Account Managers.
- Interaction with, and support of, active aggregators.
- Website promotion throughout the entire year.

Additional Comments:

- There is one large industrial customer that Horizon Utilities was active in registering in the DR-3 program with loads on both the distribution and transmission systems. The transmission connected load registered in the DR-3 program does not count to the CDM target but Horizon Utilities was very influential in the registration process.
- Horizon Utilities has limited visibility to their DR3 participants. Customer meter number, contracted amount, and contract term are not provided by the OPA on an individual customer basis. This makes it difficult to understand who is benefiting from these programs and it limits Horizon Utilities' ability to effectively market them to prospective participants
- The program could benefit by utilizing the LDCs as the trusted source of information when marketing to the customers.
- Uncertainty in realizing contract values creates hesitation for the customer to move forward in many circumstances.
- DR3 is usually triggered by – the program is called sporadically
- Many potential DR participants are being lost to the very risky application process when it comes to standby generation. The majority of the potential DR assets are diesel-powered generators. Currently, the process of requiring the customer to upgrade the asset for environmental concerns and investing significant amounts of money prior to being allowed to apply for the DR contract

puts all of the program uncertainty in the hands of the customer. The process needs to be changed so that the customer can apply for and receive provisional approval of their DR contract prior to spending money on upgrading the generation asset.

3.2.4 Low Income Initiative (HOME ASSISTANCE PROGRAM) (Schedule E)

Initiative Activities/Progress:

The following illustrates the initiative activities and progress achieved in 2012:

Participation / Activity:

- 5,033 audits were conducted provincially in 2012
- Horizon Utilities had 235 participants, or 4.7% of the provincial total.

Net Savings:

- The 2012 incremental net demand savings was 24 kW which contributed to the 2014 target.
- The 2012 incremental net energy savings was 286,839 kWh.

Contribution to Targets:

- The program-to-date net demand savings is 24 kW to the 2014 target.
- The program-to-date cumulative energy savings is 860,516 kWh.

Marketing Tactics Used:

- On alternate Tuesday mornings from June through December, Horizon Utilities hosted social services providers and social housing providers to provide an overview of the program.
- For larger social services providers, such as Ontario Works and the United Way, Horizon Utilities conducted on-site presentations to staff.
- Horizon Utilities worked directly with social housing providers to explain the value of the program to both housing providers and to their tenants.
- Horizon Utilities' also provided collateral materials to Social Agencies.

Additional Comments:

- Horizon Utilities received very low participation from social services providers. Social services providers cited an already high workload as a key reason for not bringing the Home Assistance Program to their client's attention.
- Attending community events yielded very low results as many potential participants did not have active telephone numbers and were not comfortable with the concept of an "audit". Horizon Utilities have begun referring to the audit as an "energy assessment"
- Social Housing providers proved to be the most effective channel for accessing low income customers.

- Traditional methods of marketing were avoided due to the sensitivity of the income eligibility criteria for this program. People who did not qualify for the program could be angry about funding being used to provide energy upgrades to people who may already be receiving social assistance funding. Horizon Utilities chose to market to channels where customers self-qualify.

3.2.5 Pre-2011 Programs

Horizon Utilities activities in 2012 derived from the pre-2011 programs were associated only with the High Performance New Construction program projects that were completed in 2012 but applications were filed prior to 2011.

3.2.5.1 Electricity Retrofit Incentive Program

Initiative Activities/Progress:

None

Participation / Activity:

This program is no longer in market.

3.2.5.2 High Performance New Construction

Initiative Activities/Progress:

The following illustrates the initiative activities and progress achieved in 2012:

Participation / Activity:

- There were 69 participants provincially
- Horizon Utilities had 3 participants that completed projects in 2012 from pre-2011 applications, or 4.3% of the provincial total.

Net Savings:

- The 2012 incremental net demand savings was 146 kW contributed to the 2014 target.
- The 2012 incremental net energy savings was 582,164 kWh.

Contribution to Targets:

- The program-to-date net demand savings is 684 kW contributed to the 2014 target.
- The program-to-date cumulative energy savings is 13,399,708.

Marketing Tactics Used:

- Since this is a pre-2011 program all marketing and outreach was done under the New Construction business program initiative in 2012.

Additional Comments:

- There remains one more project currently in post-project review yet to be completed. The anticipated demand reduction is 329 kW and energy reduction of 1,748,679 kWh.

4 2012 LDC CDM RESULTS

4.1 Participation and Savings

Table 4:

Initiative	Unit	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	2011-2014
		2011	2012	2011	2012	2011	2012	2014 Net Annual Peak Demand Savings (kW)	Net Cumulative Energy Savings (kWh) 2014
Consumer Programs									
Appliance Retirement	Appliances	3,034	1,671	172	96	1,238,865	669,778	263	6,960,954
Appliance Exchange	Appliances	186	131	18	19	21,438	33,812	25	175,999
HVAC Incentives	Equipment	6,097	5,007	1,693	1,091	3,070,047	1,843,136	2,784	17,809,596
Conservation Instant Coupon Booklet	Items	21,540	1,249	50	9	810,293	56,527	59	3,410,755
Bi-Annual Retailer Event	Items	35,186	42,891	68	60	1,188,091	1,082,743	128	8,000,594
Retailer Co-op	Items	0	0	0	0	0	0	0	0
Residential Demand Response (switch/psat)	Devices	1,952	5,393	1,093	2,699	2,830	13,650	0	16,480
Residential Demand Response (IHD)	Devices	0	3,855	0		0			
Residential New Construction	Homes	0	0	0	0	0	0	0	0
Consumer Program Total				3,093	3,975	6,331,565	3,699,646	3,259	36,374,378
Business Programs									
Retrofit	Projects	71	178	857	1,659	4,805,916	9,600,471	2,453	47,746,248
Direct Install Lighting	Projects	693	662	661	550	1,693,346	1,875,038	1,078	11,931,515
Building Commissioning	Buildings	0	0	0	0	0	0	0	0
New Construction Energy Audit	Buildings	0	2	0	0	0	1,331	0	3,993
Small Commercial Demand Response	Devices	0	9	0	6	0	33	0	33
Small Commercial Demand Response (IHD)	Devices	0	0	0		0		0	0
Demand Response 3	Facilities	5	4	536	531	20,936	7,718	0	28,654
Business Program Total				2,054	2,762	6,520,199	11,560,119	3,547	59,937,028
Industrial Programs									
Process & System Upgrades	Projects	0	0	0	0	0	0	0	0
Monitoring & Targeting	Projects	0	0	0	0	0	0	0	0
Energy Manager	Projects	0	3	0	60	0	479,921	60	1,439,764
Retrofit	Projects	15		70		402,527		70	1,610,107
Demand Response 3	Facilities	6	7	3,498	6,445	205,346	155,311	0	360,657
Industrial Program Total				3,568	6,505	607,873	635,233	130	3,410,528
Home Assistance Program									
Home Assistance Program	Homes	0	235	0	24	0	286,839	24	860,516
Home Assistance Program				0	24	0	286,839	24	860,516
Pre-2011 Programs									
Electricity Retrofit Incentive Program	Projects	118	0	3,066	0	17,700,219	0	3,066	70,800,874
High Performance New Construction	Projects	7	3	242	146	1,244,589	582,164	389	6,724,846
Toronto Comprehensive	Projects	0	0	0	0	0	0	0	0
Multi-family 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				3,308	146	18,944,807	582,164	3,455	77,525,721
Other									
Program Enabled Savings	Projects	0	0	0	0	0	0	0	0
Time-of-Use Savings	Homes								
Other Total				0	0	0	0	0	0
Adjustments to Previous				193	193	2,151,259	191	8,600,509	
Energy Efficiency Total				6,896	3,730	32,175,331	16,587,289	10,414	177,702,347
Demand Response Total				5,128	9,681	229,113	176,712	0	405,825
OPA-Contracted LDC				12,023	13,604	32,404,444	18,915,260	10,605	186,708,680
Activity & savings for Demand Response resources for each year and quarter represent the savings from all active facilities or devices contracted since January 1, 2011.		Due to the limited timeframe of data, which didn't include the summer months, 2012 IHD results have been deemed inconclusive. The IHD line item on the 2012 annual report will be left blank. Once a full year of data is available (2013 evaluation), and the savings are quantified, 2012 results will be updated to reflect the quantified savings.				Full OEB Target: % of Full OEB Target Achieved to Date (Scenario 1):		17.6%	66.3%
Other Total				0	0	0	0	0	0
Adjusted Total				12,023	13,604	32,404,444	18,915,260	60,360	281,420,000

Table 5: Verified Results due to Errors or Omissions

Table 5: Adjustments to Horizon Utilities Corporation Verified Results due to Errors or Omissions (Scenario 1)									
Initiative	Unit	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 ...)		Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)		Program-to-Date	Verified Progress
		2011	2012	2011	2012	2011	2012	2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
Consumer Program									
Appliance Retirement	Appliances	0		0		0		0	0
Appliance Exchange	Appliances	0		0		0		0	0
HVAC Incentives	Equipment	-1,069		-298		-545,322		-298	-2,181,290
Conservation Instant Coupon Booklet	Items	332		1		11,144		1	44,577
91-Annual Retailer Event	Items	3,308		4		88,271		4	353,085
Retailer Co-op	Items	0		0		0		0	0
Residential Demand Response (switch/pstat)*	Devices	0		0		0		0	0
Residential Demand Response (IHD)	Devices	0		0		0		0	0
Residential New Construction	Homes	0		0		0		0	0
Consumer Program Total				-293		-445,907		-293	-1,783,628
Business Program									
Retrofit	Projects	16		112		615,841		112	2,463,364
Direct Install Lighting	Projects	22		28		60,847		26	238,860
Building Commissioning	Buildings	0		0		0		0	0
New Construction	Buildings	0		0		0		0	0
Energy Audit	Audits	10		52		251,763		52	1,07,50
Small Commercial Demand Response (switch/pstat)*	Devices	0		0		0		0	0
Small Commercial Demand Response (IHD)	Devices	0		0		0		0	0
Demand Response 3*	Facilities	0		0		0		0	0
Business Program Total				191		928,450		189	3,709,274
Industrial Program									
Process & System Upgrades	Projects	0		0		0		0	0
Monitoring & Targeting	Projects	0		0		0		0	0
Energy Manager	Projects	0		0		0		0	0
Retrofit	Projects	0		0		0		0	0
Demand Response 3*	Facilities	0		0		0		0	0
Industrial Program Total				0		0		0	0
Home Assistance Program									
Home Assistance Program	Homes	0		0		0		0	0
Home Assistance Program				0		0		0	0
Pre-2011 Programs completed									
Electricity Retrofit Incentive Program	Projects	0		0		0		0	0
High Performance New Construction	Projects	1		295		1,668,716		295	6,674,862
Toronto Comprehensive	Projects	0		0		0		0	0
Multifamily Energy Efficiency Rebates	Projects	0		0		0		0	0
LDC Custom Programs	Projects	0		0		0		0	0
Pre-2011 Programs completed				295		1,668,716		295	6,674,862
Other									
Program Enabled Savings	Projects	0		0		0		0	0
Time-of-Use Savings	Homes								
Other Total				0		0		0	0
Adjustments to Previous Year's				193		2,151,259		191	8,600,509

* Activity & savings for Demand Response resources for each year and quarter represent the savings from all active facilities or devices contracted since January 1, 2011.

4.2 Evaluation

Consumer Programs

Bi-Annual Coupons

- 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:
 - 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

- 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
 - Sizeable increase (17.5%) in savings for freezers

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.

Peaksaver PLUS®

- 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 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 (EBC)

- 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 in 1.4 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 in 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 6: 2012 Spending

Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
Consumer Program					
Appliance Retirement	213,025				213,025
Appliance Exchange	12,483				12,483
HVAC Incentives	66,304				66,304
Conservation Instant Coupon Booklet	0.00				0.00
Bi-Annual Retailer Event	17,840				17,840
Retailer Co-op	0.00				0.00
Residential Demand Response	677,460	852,976			1,530,437
New Construction Program	728				728
Business Program					
Efficiency: Equipment Replacement	739,311		2,380,780		3,120,091
Direct Installed Lighting	44,966	170,720	719,714		935,400
Existing Building Commissioning Incentive	61,320				61,320
New Construction and Major Renovation Initiative	101,251				101,251
Energy Audit	44,113				44,113
Small Commercial Demand Response (part of the Residential program schedule)					
Demand Response 3 (part of the Industrial program schedule)					

Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
Industrial Program					
Process & System Upgrades					
a) preliminary engineering study	21,775				21,775
b) detailed engineering study	35,651				35,651
c) program incentive	65,877				65,877
Monitoring & Targeting	14,590				14,590
Energy Manager				217,884	217,884
Key Account Manager ("KAM")				438,597	438,597
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)					
Demand Response 3	9,923				9,923
Home Assistance Program					
Home Assistance Program	232,053				232,053
Pre 2011 Programs					
Electricity Retrofit Incentive Program					
High Performance New Construction					
Toronto Comprehensive					
Multifamily Energy Efficiency Rebates					
Data Centre Incentive Program					
EnWin Green Suites					
Initiatives Not In Market					
Midstream Electronics					
Midstream Pool Equipment					
Demand Service Space Cooling					
Demand Response 1 (Commercial)					
Demand Response 1 (Industrial)					

Home Energy Audit Tool					
TOTAL Province-wide CDM PROGRAMS	2,358,668	1,023,696	3,100,493	656,481	7,139,339

Table 7: Cumulative Spending (2011-2014)

Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
Consumer Program					
Appliance Retirement	366,775				366,775
Appliance Exchange	27,204				27,204
HVAC Incentives	102,337				102,337
Conservation Instant Coupon Booklet	67,469				67,469
Bi-Annual Retailer Event	62,076				62,076
Retailer Co-op	0				366,775
Residential Demand Response	1,163,519	1,508,338	51,050		2,722,907
New Construction Program	29,175.				29,175.
Business Program					
Efficiency: Equipment Replacement	932,119		2,620,814		3,552,933
Direct Installed Lighting	244,204	311,520	1,341,097		1,896,821
Existing Building Commissioning Incentive	105,676				105,676
New Construction and Major Renovation Initiative	138,168				138,168
Energy Audit	85,849				85,849
Small Commercial Demand Response (part of the Residential program schedule)					
Demand Response 3 (part of the Industrial program schedule)					

Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
Industrial Program					
Process & System Upgrades					
a) preliminary engineering study	24,914				24,914
b) detailed engineering study	39,253				39,253
c) program incentive	86,294				86,294
Monitoring & Targeting	19,956				19,956
Energy Manager				217,884	217,884
Key Account Manager ("KAM")				567,839	567,839
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)					
Demand Response 3	25,106				25,106
Home Assistance Program					
Home Assistance Program	253,378				253,378
Pre 2011 Programs					
Electricity Retrofit Incentive Program	376,433		3,883,072		4,259,505
High Performance New Construction					
Toronto Comprehensive					
Multifamily Energy Efficiency Rebates					
Data Centre Incentive Program					
EnWin Green Suites					
Initiatives Not In Market					
Midstream Electronics					
Midstream Pool Equipment					
Demand Service Space Cooling					
Demand Response 1 (Commercial)					

Demand Response 1 (Industrial)					
Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
Home Energy Audit Tool					
TOTAL Province-wide CDM PROGRAMS	4,149,905	1,819,858	7,896,033	785,723	14,651,519

4.4 Additional Comments

The Industrial Program PSUI Capital Incentive initiative has been a disappointment for Horizon Utilities due to the delays experienced in the approval process of two very large load displacement generation projects representing approximately 10.6 MW and 84,000,000 kWh annually to Horizon Utilities' CDM target. Customers expressed interest in the PSUI capital incentives and proceeded to investigate the opportunity to receive capital incentive funding through the OPA by initiating detailed engineering studies and investigating connection requirements and limitations.

The delays in review of these projects will postpone completion dates outside of Horizon Utilities' 2014 CDM target deadline.

Overall, 2012 was a capability building year for Horizon Utilities and the results to target are below Horizon Utilities' expectations.

The conversion of street lighting to LED technology is planned but not to be completed by 2014. This was identified in Horizon Utilities' CDM strategy as a potential Board-Approved program but will most likely be carried out through incentives provided by the Retrofit program.

Timely and Accurate Reporting:

Timely, accurate and transparent reporting of customer participation and CDM results achieved are critical to Horizon Utilities' efforts to manage CDM marketing campaigns. Further, several program initiatives such as the Appliance Retirement, and DR3 initiatives do not have transparent participant information flowing back to the LDC in order to allow more concentrated outreach and promotion to non-participants.

2011 CDM Savings Adjustments:

There were positive adjustments to the 2011 program initiatives resulting in another 191 kW and 8,600,509 kWh to target. However there were negative adjustments to participant numbers for the HVAC incentives. The **peaksaver PLUS**[®] initiative underwent the evaluation, measurement and verification process resulting in a decrease in the attributed demand savings in for residential central air conditioning systems from .56 kW to .50 kW per participant and the removal of any savings associated with the in home displays.

Sales Cycle:

The sales cycle around Industrial Program Initiatives is longer than the ERII. Horizon Utilities is working collaboratively with eight other LDCs to share 3 Key Account Managers that are working with large industrial customers. Reports from these Key Account Managers indicate that the industrial customers see the "OPA Customer Waiver Agreement" as a barrier to participation in all initiatives such as the Roving Energy

Manager and PSUI, all of which impact Horizon Utilities' efforts in reaching its CDM targets.

5 Combined CDM Reporting Elements

5.1 Progress towards CDM Targets

Horizon Utilities is on pace to achieve the cumulative energy savings target, but will be challenged to achieve the demand savings target by 2014 based on the program-to-date Scenario 1 results reported. The impact of the ex-ante demand response program results under scenario 2 and TOU demand savings are not factored into Table 8 below. Even with the demand response ex-ante results and TOU demand savings contributions, Horizon Utilities forecasts the demand savings target will not be achieved. The following tables are an illustration of the progress to date on the assigned targets and variance that exists as of the end of 2012.

Table 8: Net Peak Demand Savings (Scenario 1) at the End User Level (MW)

Implementation Period	Annual			
	2011	2012	2013	2014
2011 - Verified	12.0	6.9	6.9	6.8
2012 - Verified		13.6	3.9	3.8
2013				
2014				
Verified Net Annual Peak Demand Savings Persisting in 2014:				10.6
Horizon Utilities Corporation 2014 Annual CDM Capacity Target				60.4
Verified Portion of Peak Demand Savings Target Achieved in 2014(%):				17.6%

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

Implementation Period	Annual				Cumulative
	2011	2012	2013	2014	2011-2014
2011 - Verified	32.4	32.2	32.1	31.8	128.5
2012 - Verified		18.9	18.7	18.5	58.2
2013					
2014					
Verified Net Cumulative Energy Savings 2011-2014:					186.7
Horizon Utilities Corporation 2011-2014 Annual CDM Energy Target					281.4
Verified Portion of Cumulative Energy Target Achieved (%):					66.3%

5.2 Variance from Strategy

As per the original strategy of forecasted CDM Savings filed November 2010, illustrated below in Table 10 Horizon Utilities was to achieve 34.2 MW in demand and 200.5 GWh of energy savings by end of 2012. Results to date indicate Horizon Utilities has achieved 20.3 MW in demand (Scenario 2) and 186.7 GWh of energy savings.

Table 10

	2011	2012	2013	2014	Estimated Total 2011-2014
Annual Incremental Peak (MW) Savings	17.1	17.1	18.2	8	60.4
Annual Energy (GWh) Savings	92	108.5	119.5	73	393

The following activities which have not been completed and are not represented are the major contributors to the listed variance;

- TOU rates are estimated to provide 8 MW to Horizon Utilities demand target, based on Horizon Utilities percentage of residential and small commercial customers billed on TOU rates.
- A pre-2011 ERIP project from the Large User Class due to be constructed in 2011 would have contributed an additional 9.1 MW and 72 GWh of annual energy savings. A waiver was granted in 2011 to allow the customer to re-apply under PSUI capital incentives but due to economic down turn the process specific to the project is not operational and the load displacement generator has yet to be constructed.
- Board-Approved program projects such as LED roadway lighting are not proceeding as planned. Based upon consultation with the City of Hamilton and the City of St. Catharines, Horizon Utilities anticipated that LED roadway lighting conversion would have commenced by this point, however each municipality have no definitive plans to do this work and this project has not materialized. This project has an estimated technical potential of 1.1 MW of off peak demand savings and 4.6 GWh of annual incremental energy savings.

The current status and forecast of Horizon Utilities CDM results are found in Table 1. Currently there is a variance of 13.9 MW under Scenario 2 and 13.8 GWh to the original strategy filed November 1, 2010. Horizon Utilities recognizes this variance in cumulative GWh is expected to increase substantially due to the pre-2011 activities being postponed. Therefore as part of Horizon Utilities' strategy modifications re-forecasted CDM results are included as per Table 1 of this report.

5.3 Outlook to 2014 and Strategy Modifications

Horizon Utilities original 2012 strategy forecast is illustrated in Table 10 above. The results provided were annual incremental MW and GWh, which, when added, provided the Estimated Total 2011 – 2014.

Since the filing of the Horizon Utilities' CDM Strategy on November 1, 2010, and its addendum of February 16, 2011, it was apparent that duplication of Horizon Utilities

original listing of potential Board-Approved programs would be a barrier to a successful application. Horizon Utilities strategy shifted to use the OPA programs to deliver CDM savings on our listing of potential Board-Approved programs. Horizon Utilities would report in Table 11 below the status for the following initiatives once planned under potential Board-Approved programs now being pursued under modified OPA program initiatives. In the case of Generation Conservation the program design was not able to meet the cost effectiveness criteria under Section 8 of the CDM Guideline EB-2012-0003 as the CDM savings were not quantifiable.

Table 11

Program Name	Status (Active/Inactive)	Equivalent OPA Program Initiative or Schedule	Expected Year of Implementation	Estimated Participants	Estimated Peak Demand (kW)	Estimated Energy consumption Reduction (MWh)
Residential Customer Energy Use Benchmarking	Active	Pilot project with OPA	4th Qtr 2013 - 1st Qtr 2014	25,000	2.2	14,000
Monitoring and Targeting	Active	Monitoring and Targeting Modified Schedule D-2	2012	10	1000	4,300
LED Lighting	Active	Pilot projects through ER11 Schedule C2	2014	3	0	4,625
Small Commercial Demand Response	Inactive	Residential Demand Response modified Schedule B-3	4th Qtr 2013	200	0.112	0.237
Residential Hot Water Program	Active	Residential and Small Commercial Demand Response modified Schedule B-3	2013	100	0.2	22.792
Generation Conservation	Cancelled	None				

6 Conclusion

As of the end of 2012, Horizon Utilities has achieved 20.3 MW in peak demand savings under scenario 2 and 186.7 GWh in energy savings, which represents 33.6% and 66.5% of Horizon Utilities 2014 target, respectively. Incrementally Horizon Utilities added net Savings of 13.4 MW in demand and 16.8 GWh of annual energy savings, excluding adjustments to previous year's verified results, toward the CDM target. These results are representative of a considerable effort expended by Horizon Utilities, in cooperation with other LDCs, customers, channel partners and stakeholders, to overcome many operational and structural issues that limit 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, Horizon Utilities anticipates 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, Horizon Utilities expects to meet its consumption target but will be challenged to meet its demand savings target. Horizon Utilities expects to achieve 89% of its demand target by the end of 2014.

Looking ahead, there is limited opportunity to make valuable changes to the current program portfolios and have these changes reflected in Horizon Utilities' 2014 results. Timing of the OPA review and approvals for large scale industrial load displacement projects, identification and overcoming connection constraints have hampered Horizon Utilities' ability to meet and or exceed its targets by 2014. Continued work with the OPA to review and approve these projects will ensure these projects meet a 2015 construction timeline in order to receive PSUI incentives and contribute to objectives of the Ontario Long Term Energy Plan. Horizon Utilities and the OPA can build on the strengths and key successes of the 2011-2014 programs to launch new programs which will meet the future needs of the industry and consumers.

Appendix A: Initiative Descriptions 2011 – 2014

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 located in Ontario.

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: The OPA centrally contracts for province-wide marketing, call centre, appliance pick-up and decommissioning process. The LDC provides local marketing and coordination with municipal pick-up, where available.

Additional detail is available:

Schedule B-1, Exhibit D [http://www.poHorizon Utilities
rauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contra
cts/pdfs/Schedule%20B-1%20Residential%20Program.pdf](http://www.poHorizonUtilitiesrauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf) and

saveONenergy Horizon Utilities website

<https://saveonenergy.ca/Consumer/Programs/Appliance-Retirement.aspx>

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 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.

Additional detail is available:

Schedule B-1, Exhibit C [http://www.poHorizon Utilities
rauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contra
cts/pdfs/Schedule%20B-1%20Residential%20Program.pdf](http://www.poHorizonUtilitiesrauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf) and
saveONenergy website <https://saveonenergy.ca/Consumer.aspx>

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: The OPA contracts centrally for delivery of the program and LDCs are encouraged to convince local contractors to participate in the initiative.

Additional detail is available:

Schedule B-1, Exhibit B [http://www.poHorizon Utilities
rauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contra
cts/pdfs/Schedule%20B-1%20Residential%20Program.pdf](http://www.poHorizonUtilitiesrauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contra) and
saveONenergy website <https://saveonenergy.ca/Consumer.aspx>

CONSERVATION INSTANT COUPON INITIATIVE (Exhibit A)

Coupons should not be deleted, only with reference to the Coupon Booklet

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

Description: This initiative provides customers with year round coupons. The coupons offer instant rebates towards the purchase of a variety of low cost, easy to install energy

efficient measures and can be redeemed at participating retailers. Booklets were directly mailed to customers and were also available at point-of-purchase. Downloadable coupons were also available at www.saveoneenergy.ca.

Targeted End Uses: ENERGY STAR® qualified Standard Compact Fluorescent Lights (“CFLs”), ENERGY STAR® qualified Light Fixtures lighting control products, weather stripping, hot water pipe wrap, electric water heater blanket, heavy duty plug-in timers, advanced power bars, clothesline, and baseboard programmable thermostats

Delivery: The OPA contracts centrally for the distribution of the coupon booklets across Ontario. LDCs distribute coupons at local events. The OPA enters into agreements with retailers to honour the coupons.

Additional detail is available:

Schedule B-1, Exhibit A [http://www.poHorizon Utilities authority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf](http://www.poHorizonUtilitiesauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf) and

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

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: Same as the Conservation Instant Coupon Booklet 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.

Additional detail is available:

Schedule B-1, Exhibit C [http://www.poHorizon Utilities authority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf](http://www.poHorizonUtilitiesauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf) and

saveONenergy Horizon Utilities website <https://saveonenergy.ca/Consumer.aspx>

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 in their regular purchasing habits other than the traditional Bi-Annual Coupon Events.

Description: The Retailer Co-op Initiative provides LDCs with the opportunity to work with retailers in their service territory by holding special events at retail locations. These events are typically special promotions that encourage customers to purchase energy efficiency measures outside of the traditional Bi-Annual Coupon Events.

Targeted End Uses:

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.

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 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” switches, ECM motors, ENERGY STAR® qualified central a/c, lighting control products, lighting fixtures, and EnerGuide 83 whole home and EnerGuide 85 whole homes

Delivery: Local engagement of builders will be the responsibility of the LDC with broader marketing support across many service territories being provided by the OPA.

Additional detail is available:

Schedule B-1, Exhibit C

http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-2%20New%20Construction%20Program.pdf and

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

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, increase consumer awareness of the importance of reducing summer demand and provide consumers with their current electricity consumption and associated costs.

Description: In *peaksaver PLUS*[®], participants are eligible to receive a free programmable thermostat or switch, including installation. Participants also receive access to price and near real-time consumption information on an In-Home Energy Display (“IHD”). Participants of the original *peaksaver*[®] program are able to enroll in *peaksaver PLUS*[®] and will receive an In-Home Energy Display. Horizon Utilities are given the choice to continue to offer the standard load control program (programmable thermostat or switch with a \$25 bill credit) for the first 8 months of 2011 (referred to as *peaksaver*[®] extension). After August 2011, the *peaksaver*[®] extension ended and the program (including marketing) ceased until new IHD products were available.

Targeted End Uses: Central air conditioning, water heaters and pool pumps

Delivery: LDCs recruit customers and procure technology

Additional detail is available:

Schedule B-1, Exhibit C

http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/SCHEM_2011_ResDR_B_3_110727%28MJB%29v15_redacted.pdf and

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

C&I Program

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

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

Initiative Frequency: Year round

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

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

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

Delivery: LDC delivered.

Additional detail is available:

Schedule C-2

http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20C-2%20ERII%20Initiative.pdf and

saveONenergy website <https://saveonenergy.ca/Business/Program-Overviews/Retrofit-for-Commercial.aspx>

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 \$1,000 500 to eligible owners and tenants of commercial, institutional and agricultural facilities and multi-family buildings, for the purpose of achieving electricity savings and peak demand savings.

Description: DIL initiative targets customers in the General Service < 50kW category. This initiative offers turnkey lighting and electric hot water heater measures with a value up to \$1,000 500 at no cost to qualifying small businesses. In addition, standard prescriptive incentives are available for eligible equipment beyond the initial \$1,000 500 limit.

Target End Uses: Commercial, institutional and agricultural facilities lighting

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

Additional detail is available:

Schedule C-3

<http://www.powerauthority.on.ca/sites/default/files/page/Schedule%20C-3%20Direct%20Install%20Initiative%20-%20redacted.pdf> and

saveONenergy website <https://saveonenergy.ca/Business.aspx>

EXISTING BUILDING COMMISSIONING INCENTIVE INITIATIVE (Schedule C-6)

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

Initiative Frequency: Year round June to September

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

Description: This Initiative offers participants incentives for the following:

- Scoping study phase
- Investigation phase
- Implementation phase
- Hand off/completion phase

Targeted End Uses: Chilled water systems for space cooling

Delivery: LDC delivered.

Additional detail is available:

Schedule C-6

http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20C-6%20Commissioning%20Initiative.pdf and

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

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 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: HPNC 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: Building modeling, lighting, space cooling, ventilation and other Measures

Delivery: LDC delivers to customers and design decision makers.

Additional detail is available:

Schedule C-4

<http://www.powerauthority.on.ca/sites/default/files/page/ScheduleC-4NewConstructionInitiativeV2.pdf> and

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

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 with incentives for the completion of energy audits of electricity consuming equipment located in the facility. Energy audits include development of energy baselines, usage assessments and performance monitoring and reporting.

Targeted End Uses: Various

Delivery: LDC delivered.

Additional detail is available:

Schedule C-1

http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20C-1%20Energy%20Audit%20Initiative.pdf and

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

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 LDCs' customers capital incentives and enabling initiatives to assist with the implementation of large projects and project portfolios
- Implement system optimization project in systems which are intrinsically complex and capital intensive; and
- Increase the capability of distribution customers to implement energy management and system optimization projects

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

- a) \$200/MWh of annualized electricity savings
- b) 70% of projects cost
- c) A one year payback

Targeted End Uses: Process and systems

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

Additional detail is available:

- Schedule D-1
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20D-1%20Process%20and%20Systems%20Upgrades%20Initiative.pdf and
saveONenergy website <https://saveonenergy.ca/Business.aspx>

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 sustain 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: Industrial processes requiring monitoring capability

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

Additional detail is available:

- Schedule D-2
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20D-2%20Monitoring%20and%20Targeting%20Initiative.pdf and saveONenergy website <https://saveonenergy.ca/Business.aspx>

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 with 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 demand savings to achieve 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: Industrial process or manufacturing equipment, non-lighting electrical equipment

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

Additional detail is available:

- Schedule D-3
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20D-3%20Energy%20Manager%20Initiative%202011-2014.pdf and
saveONenergy website <https://saveonenergy.ca/Business.aspx>

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. 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.

Description:

Targeted End Uses: Industrial process or manufacturing equipment, non-lighting electrical equipment

Delivery: LDC Delivered

Additional detail is available:

- Schedule D-4
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/projects_programs/pdfs/PSUI%20Initiative%20Schedule%20D-4.Key%20Account%20Manager.20110322.pdf

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”) payment for service to DR3 participants to compensate them for making available electricity demand response during a demand response event.

Description: 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. DR3 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 energy payments for the actual energy 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: To respond to Demand Response requests for peak energy reduction.

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

Additional detail is available:

Schedule D-6

http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20D-6%20Demand%20Response%203%202011-2014.pdf and

saveONenergy website <https://saveonenergy.ca/Business.aspx>

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

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

Description: The HOME ASSISTANCE PROGRAM is a turnkey program 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 program is designed to coordinate efforts with gas utilities.

Targeted End Uses: Energy Saving light bulbs, power bars, refrigerators and other appliances such as room air conditioners. For electrically heated homes a programmable thermostat, weather stripping and insulation.

Delivery: LDC delivered.

Additional detail is available:

SaveONenergy website <https://saveonenergy.ca/Consumer/Home-Assistance.aspx>

Schedule E

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

Appendix B: Pre-2011 Program Descriptions

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)

Appendix C: Community Events

Event Interactions 2012								
Date 2012	Event	Interactions	Customer Surveys	Peaksaver +	Fridge	All Program Brochure	Coupon/ Checklist Brochure	Premium give-a-ways
3/1	Lowes - Week 1	350	0	9	30	75	80	92
3/1-3/3	Ideal Home Show	625	310	142	21	220	0	300
3/9-3/11	Hamilton Home Show	1500	313	150	48	350	120	400
4/5-4/7	St. Catharines Spring Home Show	590	153	54	21	120	80	300
4/7	Canadian Tire – Louth St	150	0	0	10	40	35	60
4/7	Home Depot – Centennial Pkwy	225	0	0	25	66	45	98
4/7	Home Depot – YMCA Dr	185	0	0	10	35	45	55
4/7	Lowes – Week 2	200	2	2	15	75	80	65
4/14	Home Depot – Valley Park	175	0	0	10	25	30	48
4/14	Home Depot – YMCA Dr	225	0	0	25	55	35	70
4/14	Lowes – Week 3	250	5	5	10	70	75	58
4/21	Earth Day – Princess Point	25	0	0	0	10	15	20
4/22	Earth Day – Fairview Mall	120	18	12	0	40	35	100
4/23	MTO – St. Catharines	115	12	8	1	60	40	100
5/5	City of Hamilton Rain Barrel Sale	69	30	12	5	65	0	37
5/10	Public Works – Safety Week	95	0	0	0	45	0	80
5/12	Niagara Folk-Art Festival	71	42	6	4	54	0	42
5/13	Niagara Folk-Art Festival	51	30	5	2	25	0	30
6/9	Rain Barrel Sale	75	52	40	11	86	0	75
6/16	Canadian Tire Exchange Event - Hamilton	56	20	15	0	43	0	35
6/16	Canadian Tire Exchange Event – St. Catharines	54	31	17	4	45	0	32
6/17	Canadian	33	13	9	3	26	0	13

Horizon Utilities Corporation 2012 CDM Annual Report

Event Interactions 2012								
Date 2012	Event	Interactions	Customer Surveys	Peaksaver +	Fridge	All Program Brochure	Coupon/ Checklist Brochure	Premium give-a-ways
	Tire Exchange Event - Hamilton							
6/17	Canadian Tire Exchange Event – St. Catharines	33	18	8	1	29	0	18
7/1	Hamilton Canada Day	75	25	13	2	195	0	39
8/3	Rotary Ribfest	92	35	17	4	500	0	130
8/4	Rotary Ribfest	80	25	7	0	434	0	119
8/5	Rotary Ribfest	10	12	11	2	64	0	82
8/6	Rotary Ribfest	47	33	19	3	273	0	89
9/7-9/9	St. Catharines Fall Home Show	400	100	40	27	200	150	150
9/29	saveONenergy Coupon Event	43	26	10	4	113	17	34
10/12	Ideal Home and Garden Show	64	18	10	1	57	3	22
10/13	Ideal Home and Garden Show	95	42	28	10	112	8	45
10/13	saveONenergy Coupon Event – Lowes Hamilton	37	19	19	0	49	21	24
10/14	Ideal Home and Garden Show	117	50	40	7	130	5	57
10/20	saveONenergy Coupon Event – Lowes Hamilton	62	26	24	3	106	17	30
10/27	saveONenergy Coupon Event – Canadian Tire St. Catharines	25	13	12	0	35	4	16
Total		6419	1473	744	319	3927	940	2965