

September 30, 2015

**VIA RESS AND COURIER**

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

Dear Ms. Walli,

**Re: Horizon Utilities Corporation – 2014 Conservation and Demand Management Annual Report (EB-2010-0215)**

Horizon Utilities Corporation (“Horizon Utilities”) respectfully submits its 2014 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. Two paper copies of this submission will be sent to the attention of the Board Secretary via courier.

Sincerely,



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



**Horizon Utilities Corporation**

**Conservation and Demand Management  
2014 Annual Report**

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

**Submitted on September 30, 2015**

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## Executive Summary

Horizon Utilities Corporation ("Horizon Utilities") is submitting its Conservation and Demand Management ("CDM") 2014 Annual Report (the "Annual Report") to the Ontario Energy Board ("OEB" or the "Board"), in accordance with the filing requirements specified in the OEB's *Conservation and Demand Management Code for Electricity Distributors* (the "Code") (EB-2010-0215), Appendix C, Annual Report Template. This is the final report for the period 2011-2014; this report includes Horizon Utilities' CDM activities for the period of January 1, 2014 to December 31, 2014. The Annual Report provides net peak demand and net energy savings achieved for 2011, 2012, 2013, and 2014. It also includes discussion regarding: the current and future CDM framework; CDM program activities; successes; and challenges.

The OEB amended the electricity distribution licences of all Ontario local distribution companies ("LDCs") on November 12, 2010 to include CDM targets as a condition of licence. Horizon Utilities' peak demand savings target was set at 60.36 MW; its energy savings target was set at 281.42 GWh.

Horizon Utilities filed its CDM Strategy with the OEB on November 1, 2010 which specified that it intended to achieve its CDM targets through Board-Approved and OPA-Contracted Province-Wide programs. Subsequently, on September 30, 2013 Horizon Utilities filed its 2012 CDM Annual Report which included modifications to its CDM Strategy. Horizon Utilities advised the OEB that it would not be applying for any Board-Approved CDM Programs during the balance of the 2011-2014 term.

Horizon Utilities has filed annual reports with the OEB each year (2012-2014) for the prior year's results. This final report includes the results provided by the Independent Electricity System Operator ("IESO") on Time-of-Use ("TOU") pricing. The OEB's *Guidelines for Electricity Distributor Conservation and Demand Management*, released April 26, 2012, identified that the impact of TOU would be deemed a Board-Approved CDM Program. The IESO, formerly the Ontario Power Authority ("OPA"), has provided measurement and verification on TOU in the IESO's Horizon Utilities Corporation 2011 - 2014 Final Results Report.

Horizon Utilities contracted with the OPA to deliver a portfolio of OPA-Contracted Province-Wide CDM Programs to all customer segments; residential, commercial, institutional, industrial and low income in 2011 for the 2011 - 2014 term. Horizon Utilities is pleased to report that it achieved 302.50 GWh of net cumulative energy savings, exceeding its target by 107.49%; it achieved 48.78 MW or 80.82% of its net incremental peak demand savings target. A summary of Horizon Utilities' CDM achievements follows in Table 1. As per the illustration on page 3 of the IESO Horizon Utilities Corporation 2011 - 2014 Final Results report, Horizon Utilities is one of 13 LDCs to achieve such a result in demand savings; it is one of 41 LDCs to achieve this level of energy savings.

**Table 1 - Verified Net Peak Demand and Cumulative Net Energy Reduction**

	<b>2011 Verified</b>	<b>2012 Verified</b>	<b>2013 Verified</b>	<b>2014 Verified</b>	<b>2014 Verified % of 2014 CDM Target</b>	<b>CDM Target</b>
Net Peak Demand Savings (MW)	6.80	10.60	16.10	48.78	80.82%	60.36
Cumulative Net Energy Savings (GWh)	128.50	186.70	240.90	302.50	107.49%	281.42

The 2014 verified CDM results filed in this Annual Report show that there is a shortfall of approximately 11.56 MW versus Horizon Utilities' 2011-2014 peak demand reduction target. Horizon Utilities achieved 107.49% of the 2011-2014 energy savings target. Although the verified peak demand savings are below 100% of the assigned target, Horizon Utilities achieved demand savings above the OEB minimum threshold to be eligible to earn an OEB incentive.

***Reasons for the Shortfall***

Horizon Utilities over-achieved on its energy target; it had a minor shortfall on its peak demand target, having achieved 80.82%. Horizon Utilities collaborated with other LDCs, the OPA and the Electrical Distributors Association ("EDA") to improve program participation and CDM savings. Horizon Utilities' shortfall of 12.84 MW in peak demand savings compared to target can be attributed to the following challenges:

- The Industrial Program Process and Systems Upgrades Initiative ("PSUI") Capital Incentive Initiative received customer interest but produced no CDM results for Horizon Utilities due to the delays experienced in the approval process of two very large load displacement generation projects. These projects represented a contribution of approximately 10.6 MW or 17.56% and 84 GWh annually to Horizon Utilities' CDM target;
- Horizon Utilities contracted with the OPA and Simple Energy to deliver a Social Benchmarking pilot project initiative called "Take Charge, Save Energy, Earn Rewards" ("Take Charge") in October of 2014. CDM savings achieved in 2014 from Take Charge will not be available until the Evaluation Measurement and Verification ("EM&V") process is complete in 2015. Horizon Utilities anticipates that persistent energy savings realized from the Take Charge pilot project will be counted toward its 2015-2020 energy savings target. The Social Benchmarking pilot project was estimated to contribute 2.2 MW or 3.64% in peak demand savings and 14 GWh in energy savings to the CDM target. Delays in the timing of the Social Benchmarking pilot project implementation will shift any persistent energy savings into the Conservation First Framework; the 2.20 MW of estimated peak demand savings will not be applied to the new Conservation First energy target;
- Consumer program allocation methodology used by the OPA only allocates 4.0% of the provincial results to Horizon Utilities, based on OEB Yearbook Data for 2008 and 2009

when its target was 4.5% of provincial demand and 4.7% of energy savings, respectively. Based on achieved CDM savings from all programs, Horizon Utilities should have been allocated credit for 5.3% of provincial demand and 4.6% of energy savings. Based on achieved CDM savings from consumer programs only (excluding low income), Horizon Utilities achieved 4.3% of provincial demand and 4.5% of energy savings. Using Horizon Utilities' share of the provincial demand target (4.5%) as the allocation methodology for the consumer programs would have resulted in another 85 kW or 0.1% of peak demand savings should have been allocated to Horizon Utilities;

- The IESO allocation methodology for demand savings per Horizon Utilities' Residential and Small Commercial Demand Response Initiative ("*peaksaver* PLUS®") participant was 0.35 kW/participant as compared to the provincial average of 0.49 kW/participant. Expected increased demand savings from the acquisition of new Horizon Utilities' *peaksaver* PLUS participants was negatively offset by the IESO allocation methodology used for calculating the demand savings for Horizon Utilities *peaksaver* PLUS participants. Another 1,716 kW or 2.84% to the Horizon Utilities peak demand target could have been realized if the IESO used the provincial average demand savings/participant as the allocation methodology for Horizon Utilities *peaksaver* PLUS participants;
- Less than expected peak demand savings were realized from TOU Pricing; and
- Connection constraints at Hydro One Networks Inc.'s ("Hydro One") transformer stations were a deterrent for behind the meter load displacement generation projects that would otherwise have been a significant contribution to the demand and cumulative energy targets.

Despite the challenges identified above, Horizon Utilities is satisfied with the IESO's Horizon Utilities Corporation 2011-2014 Final Results Report. Horizon Utilities does not intend to challenge the results reported or make claim for additional demand or energy savings.

Horizon Utilities' success in meeting its peak demand savings threshold was attributed to focus on increased customer participation in: the Equipment Replacement Incentive Initiative previously known as the ERII Program ("RETROFIT PROGRAM"); *peaksaver* PLUS; and the Demand Response 3 Initiative ("DR3") throughout the 2011-2014 framework. Further, in 2014, Horizon Utilities leveraged its Energy Mapping pilot to segment its customer base utilizing energy profiles. Horizon Utilities used energy mapping best practices from the pilot project to take a tactical approach to its customer engagement strategy. By working with local suppliers and contractors, Horizon Utilities was able to increase customer participation.

## Background

On March 31, 2010, the Minister of Energy and Infrastructure of Ontario, under the guidance of sections 27.1 and 27.2 of the *Ontario Energy Board Act, 1998*, directed the OEB to establish CDM targets to be met by LDCs. Accordingly, on November 12, 2010, the OEB amended the distribution license of Horizon Utilities to include, as a condition of its license, the requirement 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 CDM 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 an overview of Horizon Utilities' approach to achieve its CDM targets.

The Code also requires a distributor to file annual reports with the OEB. This is Horizon Utilities' final Annual Report filed under the 2011–2014 CDM framework. It has been prepared in accordance with the Code requirements and covers the period from January 1, 2014 to December 31, 2014.

Horizon Utilities submitted its 2011 Annual Report on September 30, 2012 which summarized Horizon Utilities' CDM activities; successes; and challenges for the January 1, 2011 to December 31, 2011 period. The OEB's 2011 CDM Results report identified the delay in the full suite of CDM Programs being made available by the OPA and that the absence of some programs negatively impacted the final 2011 results for LDCs. This issue was also identified in the Environmental Commissioner's Report: "Restoring Balance – A Review of the First Three Years of the Green Energy Act" Annual Energy Conservation Progress Report 2011 Volumes I & II.

On December 21, 2012, the Minister of Energy directed the OPA to fund CDM programs which met the definition and criteria for OPA-Contracted Province-Wide CDM Programs for an additional one-year transitional period from January 1, 2015 to December 31, 2015 to provide assurance to customers that programs will continue and incentives will be paid accordingly.

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

Horizon Utilities submitted its 2012 Annual Report on September 30, 2013 which summarized the CDM activities undertaken by Horizon Utilities for the January 1, 2012 to December 31, 2012 period.

The OEB's Conservation and Demand Management Report – 2012 Results (EB-2010-0215) identified that the majority of LDCs achieved close to 20% of their net peak demand (kW) target from their 2012 results.

According to the OEB's Conservation and Demand Management Report - 2013 Results (EB-2010-0215), LDCs collectively achieved approximately 85.7% of the provincial energy savings

(kWh) target and 48% of the demand target under Scenario 2 and only 27% under Scenario 1. It was estimated that each year LDCs needed to achieve a minimum of 10% of their target in order to meet their respective overall targets. To meet the provincial energy target of 6,000 GWh, another 14.3% of incremental energy savings would be required in 2014. The OEB released a letter on December 17, 2014, stating no compliance actions will be carried out against LDCs that do not meet their peak demand savings targets. This direction was given based on the 2013 Long Term Energy Plan, which assigned responsibility to the IESO to evolve existing demand response programs in Ontario.

The IESO released the Horizon Utilities Corporation 2011 - 2014 Final Results Report on September 1, 2015. This report included the allocated peak demand savings associated with TOU Pricing. The methodology for allocating the TOU results was not provided in the IESO's Horizon Utilities Corporation 2011 - 2014 Final Results Report. The IESO allocated 4.5% of the provincial peak demand savings for TOU Pricing to Horizon Utilities which is the same Horizon Utilities portion of the provincial peak demand target.



## **1 Conservation Framework**

### **1.1 2011-2014 Framework**

Ontario's 2011 - 2014 CDM Framework was a key step towards creating a culture of conservation in the province. The Ontario government (the "Government") Directive to the OEB to establish CDM targets for 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 addresses local distribution and transmission supply constraints. The 2011-2014 CDM Framework was intended to enable customers to benefit from a suite of both Board-approved and OPA-Contracted Province-Wide and provide a portfolio that would meet both broad and specific customer needs.

Building on the success of the OPA-Contracted Province-Wide programs implemented in 2011-2014, Horizon Utilities is transitioning into 2015 with active channel partner and customer engagement.

## **1.2 Conservation First 2015 - 2020 Framework**

Horizon Utilities is supportive of the Government's renewed commitment to energy conservation in Ontario. Horizon Utilities is committed to working with the Government; IESO; natural gas utilities and other stakeholders to develop and implement energy savings programs for the Conservation First Framework in the province.

The Ministerial Directive dated March 31, 2014 specified the long-term commitment for CDM funding and the confirmation of the role of LDCs, allowing LDCs to maintain current program infrastructure, including LDC staff and third party contracts as required.

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

A unified transition of all LDCs into the Conservation First Framework with the same start date was not expected or accomplished under the 2015 -2020 Energy Conservation Agreement structure. As a result, LDCs were provided with transitional funding from the OPA to ensure customers had access to continued conservation programs with a seamless transition between frameworks.

The IESO granted conditional approval of the Horizon Utilities' and Erie Thames Powerlines Corporation's joint plan on May 29, 2015. Horizon Utilities began its transition of some program initiatives into the Conservation First Framework, effective July 1, 2015. Currently, Horizon Utilities is implementing some program initiatives under the Amending Agreement funding framework and the balance under Conservation First funding until December 31, 2015. On January 1, 2016, Horizon Utilities will be transitioning all of its CDM program initiatives to the Conservation First Framework.

## **2 Board-Approved CDM Program**

### **2.1 Introduction**

In its Decision and Order dated November 12 2010 (EB-2010-0215 & EB-2010-0216), the OEB ordered that, *"in order 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"*.

The implementation of TOU Pricing was deemed a Board-Approved CDM program that was offered in Horizon Utilities' service area.

## 2.2 TOU Pricing

### 2.2.1 Background

In its April 26, 2012 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 established TOU prices and has made the implementation of this pricing mechanism mandatory for LDCs. On this basis, the OEB determined that LDCs did 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”).

The OEB stated in the April 26, 2012 CDM Guidelines that verified CDM savings from TOU Pricing will be determined by the OPA’s EM&V Protocols. The Board is of the view that any evaluations of savings from TOU Pricing should be conducted by the OPA for the province, and then allocated to LDCs.

The OPA retained the Brattle Group as the evaluation contractor; it has been working with an expert panel convened to provide ongoing advice on methodology, data collection, models, and savings allocation. Evaluations of peak demand savings through TOU Pricing were conducted during 2012 - 2014 with five LDCs – Hydro One Networks Inc., Toronto Hydro-Electric System Limited, Hydro Ottawa Limited, Thunder Bay Hydro Electricity Distribution Inc. and Newmarket-Tay Power Distribution Inc. Preliminary results were issued to the participating LDCs involved in the “Impact Evaluation of Ontario’s Time of Use Rates – First Year Analysis” prepared by the Brattle Group on November 26, 2013. The results demonstrated load shifting behaviours from the residential customer class. Three additional LDCs, Cambridge and North Dumfries Hydro Inc., PowerStream Inc. and Greater Sudbury Hydro Inc., were added to the study in 2014. Preliminary results from this study was issued to the participating LDCs in September 2014. The IESO’s Horizon Utilities Corporation 2011 - 2014 Final Results Report included 4.5% of allocated provincial peak demand savings from TOU rates to Horizon Utilities. The allocation methodology for TOU was not included in the IESO’s Horizon Utilities Corporation 2011 - 2014 Final Results Report. However, based on the allocation of 4.5% aligns to Horizon Utilities’ proportion of the provincial demand target.

### 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. Peak demand reductions are expected; 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. This was also to ensure that Smart Meters, funded through electricity distribution rates, 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:

<b>RPP TOU Effective Date</b>	<b>Pricing (cents/kWh)</b>		
	<b>On Peak</b>	<b>Mid Peak</b>	<b>Off Peak</b>
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
1-Nov-13	12.9	10.9	7.2
1-May-14	13.5	11.2	7.5
1-Nov-14	14.0	11.4	7.7

**Delivery:** The OEB set the TOU pricing. Horizon Utilities installed and maintained the Smart Meters; it converted customers to TOU billing. Customers received education materials on Smart Meters at the time of installation. Customers were advised of new TOU pricing in advance of rate changes.

**Initiative Activities/Progress:** Horizon Utilities began transitioning its RPP customers to TOU billing in December, 2009. As of December 2014, Horizon Utilities has 238,234 customers (219,818 residential and 18,416 General Service <50 kW) billed on TOU pricing. Horizon Utilities is considered to have completed its TOU transition.

### **2.3 Horizon Utilities' Application with the OEB**

Horizon Utilities did not submit a CDM program application for a proposed Board-Approved CDM Program to the OEB in 2014.

### **2.4 Horizon Utilities' Application with the OPA's Conservation Fund**

In 2005, the OPA introduced the Conservation Fund to help meet LDCs' interest in the development and launch of new local, regional and OPA-Contracted Province-Wide initiatives. The Conservation Fund's LDC Program Innovation Stream fast-tracked program design and the launch of successfully piloted initiatives prior to full scale deployment. By driving program innovation through the Conservation Fund, LDCs have the opportunity to realize both additional savings through the piloting and implementation of initiatives not currently addressed by the OPA-Contracted Province-Wide programs and the means to test concepts for future local or IESO-Contracted Province-Wide programs post 2014.

According to the IESO, three pilots have been contracted and are underway with Toronto Hydro-Electric System Limited and Niagara Peninsula Energy Inc. Ten others are in various stages of the contracting and development process. One of the key projects completed through the Conservation Fund is Horizon Utilities' Energy Mapping project (the "Energy Mapping project"). The Energy Mapping project was designed to provide Horizon Utilities with advanced data analytical capacity for the purpose of marketing conservation initiatives. Combining consumption, demographic, building structure and geospatial data, Horizon Utilities developed a robust database that facilitates the effective segmentation of marketing messages. Leveraging the database, Horizon Utilities developed residential market segments and marketing materials that align to the values of each customer segment. For commercial customers, Horizon Utilities provided direct information about conservation incentives to industries or building types that would benefit most from the implementation of energy efficient measures. On December 15, 2014, Horizon Utilities submitted its "Best Practices Manual Energy Mapping for Delivery of Conservation and Demand Management Programs" to the OPA as its final obligation for the Energy Mapping project.

In 2014, building on LDCs' interest in behaviour-based CDM programs for the residential sector, the OPA, in collaboration with Horizon Utilities and two other LDCs, completed the procurement of three Social Benchmarking pilot projects through the OPA Conservation Fund. Horizon Utilities launched its Take Charge Social Benchmarking pilot project on October 24, 2014. Horizon Utilities engaged 50,000 customers by sending out email invitations to join the Take Charge pilot project. Take Charge is estimated to achieve 2 MW in demand and 10 GWh in energy savings annually. Since this pilot was launched in late October 2014, the opportunity for any material savings to target was greatly diminished particularly since the 2014 summer peak has elapsed. Horizon Utilities anticipates that the EM&V process for the Take Charge pilot will commence after the pilot project concludes on October 24, 2015 and that any persistent energy savings would be applied to Horizon Utilities' Conservation First energy savings target. This social benchmarking pilot tested behavioural science methodology and gamification elements using rewards to entice customers to reduce energy use and demand.

### 3 OPA-Contracted Province-Wide CDM Programs

#### 3.1 Introduction

Effective February 25, 2011, Horizon Utilities entered into an agreement with the OPA to deliver CDM programs extending from January 1, 2011 to December 31, 2014.

Table 2 below identifies the program initiatives for which Horizon Utilities contracted with the OPA and the associated implementation dates of each initiative.

**Table 2 – Program Initiatives Contracted with the OPA**

Initiative	Schedule	Date Schedule Posted	Customer Class	In-Market Date for Horizon Utilities
<b>Residential Programs</b>				
Appliance Retirement	Schedule B-1, Exhibit D	January 26, 2011	All residential rate classes	January 26, 2011
Appliance Exchange	Schedule B-1, Exhibit E	January 26, 2011	All residential rate classes	January 26, 2011
HVAC Incentives	Schedule B-1, Exhibit B	January 26, 2011	All residential rate classes	January 26, 2011
Conservation Instant Coupon Booklet	Schedule B-1, Exhibit A	January 26, 2011	All residential rate classes	January 26, 2011
Bi-Annual Retailer Event	Schedule B-1, Exhibit C	January 26, 2011	All residential rate classes	January 26, 2011
Retailer Co-op	n/a	n/a	All residential rate classes	n/a
Residential Demand Response	Schedule B-3	August 22, 2011	All general service classes	June 20, 2012
New Construction Program	Schedule B-2	January 26, 2011	All residential rate classes	July 1, 2013
Home Assistance Program	Schedule E-1	May 9, 2011	All residential rate classes	June 20, 2012
<b>Commercial &amp; Institutional Programs</b>				
Efficiency: Equipment Replacement	Schedule C-2	January 26, 2011	All general service classes	January 26, 2011 using a paper based application
Direct Install Lighting	Schedule C-3	January 26, 2011	General Service < 50 kW	January 1, 2011
Existing Building Commissioning Incentive	Schedule C-6	February 2011	All general service classes	July 5, 2012
New Construction and Major Renovation Initiative	Schedule C-4	February 2011	All general service classes	February 1, 2011

Energy Audit	Schedule C-1	January 26, 2011	All general service classes	April 2011
Commercial Demand Response (part of the Residential program schedule)	Schedule B-3	January 26, 2011	General Service <50 kW	
Demand Response 3 (part of the Industrial program schedule)	Schedule D-6	May 31, 2011	General Service 50 kW & above	January 1, 2011
<b>Industrial Programs</b>				
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 ("KAM")	Schedule D-4	May 31, 2011	General Service 50 kW & above	August 2011
Efficiency: Equipment Replacement Incentive (part of the Commercial and Institutional program schedule)	Schedule C-2	May 31, 2011	General Service 50 kW & above	January 26, 2011
Demand Response 3	Schedule D-6	May 31, 2011	General Service 50 kW & above	January 1, 2011
<b>Pre-2011 Programs completed in 2011</b>				
Electricity Retrofit Incentive Program	Schedule B-2 - A	April 10, 2012	All general service classes	January 1, 2011
High Performance New Construction	n/a	n/a	All general service classes	January 1, 2011
Multi-family Energy Efficiency Rebates	n/a	n/a	All general service classes	n/a



As noted in Table 3 below, several program initiatives were either no longer available to customers or were not launched in 2014.

**Table 3 – Province-Wide Programs Not in Market**

<b>Not in Market</b>	<b>Objective</b>	<b>Status</b>
<b>Residential Program</b>		
Midstream Electronics	Encourages 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 Equipment	Encourage pool installers to sell and install efficient pool pump equipment in residential in-ground pools.	Never launched and removed from Schedule in Q2, 2013.
Home Energy Audit Tool	This is a provincial online audit tool to engage customers in conservation and help drive customer participation to CDM programs.	Never launched and removed from Schedule in Q2, 2013.
<b>Commercial &amp; Institutional Program</b>		
Direct Service Space Cooling	Offers 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 was no plan 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.
<b>Industrial Program</b>		
DR1	As above	No customer uptake for this initiative. Removed in Q4, 2012.

The Master CDM Program Agreement included program change management provisions in Article 3. Collaboration between the OPA and the LDCs commenced in 2011, and continued through 2014, as the change management process was implemented to enhance the saveONenergy program suite of initiatives. The change management process allowed for modifications to the Master Service Agreement and initiative Schedules. The program enhancements gave LDCs additional tools and greater flexibility to deliver programs in a way that met the needs of customers and further drove participation in the initiatives.

## 3.2 Program Descriptions

OPA-Contracted Province-Wide CDM Program details are available 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 ("CONSUMER") PROGRAM

**Description:** Provided residential customers with program initiatives and tools that help to understand and manage the amount of energy that is used throughout Horizon Utilities customers' entire homes as well as help the environment.

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

#### **Discussion:**

Light Emitting Diode ("LED") technology continued to play a role in retail-based Residential Program initiatives and resulted in significant energy savings in 2014. The LED coupons offered through the Coupons Initiative and Bi-Annual Retailer Event Initiative ("COUPONS") were the most-redeemed coupons, and led this program to exceed the HVAC Incentives Initiative ("Heating and Cooling Incentive") as the greatest contributor to energy savings.

The COUPONS program received a large boost with the 2014 OPA mail-out of coupon books to residential customers. Although LDC-specific coded coupons were available in 2014, the uptake will not be realized until 2015. The *peaksaver* PLUS program continued to achieve peak demand savings however adopting newer technologies will be key for this program initiative as it moves to an energy efficiency (kWh) program framework. Unfortunately, there were no savings associated with the In-Home Energy Display ("IHD") attributed to LDCs in the IESO's 2014 verified results. The Appliance Retirement and Appliance Exchange program initiatives continued to contribute to the energy savings of the Residential Program portfolio.

The Residential Program was predominately a carryover of initiatives from previous years. As many of these initiatives have been in the market for numerous years offering the same customer incentives, work to revitalize and increase the effectiveness and breadth of the initiatives is necessary. New initiatives within the residential marketplace need to be identified, developed and offered to customers. For this reason, Horizon Utilities launched a Social Benchmarking Pilot on October 24, 2014. The pilot was closely monitored to understand its effect on the residential market and potential change to the electricity market. Customer interest continued to build during the pilot phase.

#### **3.2.1.1 Appliance Retirement Initiative ("Fridge and Freezer Pickup") (Schedule B-1, Exhibit D)**

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

The following illustrates the initiative activities and progress achieved in 2014:

**Participation / Activity:**

- Total province-wide appliances uptake/participation was 22,563 units, of which Horizon Utilities contributed 604 units or 2.7% to the provincial results.

**Net Savings:**

- The incremental peak demand savings were 39 kW and the incremental energy savings were 263,320 kWh.

**Contribution to Targets:**

- The total program-to-date verified net peak demand savings contributed 360 kW to the 2014 demand target.
- The 2011-2014 net cumulative energy savings was 7,970,691 kWh.

**Marketing & Promotional Tactics Used:**

In 2014, Horizon Utilities provided marketing support for this initiative through:

- Bill insert to 200,000 customers.
- Promoted at 16 community events (see Appendix C for event listing).
- Horizon Utilities' Website promotion and awareness activity year round.

**Additional Comments:**

- Due to the duration of the Appliance Retirement Initiative (also known as the Fridge and Freezer Pickup initiative), and the revised eligibility requirements of a minimum of 20 years old (previous requirement of a refrigerator being 15 years old) this initiative appears to have reached market saturation. In addition, the OPA determined that it was not a cost effective program initiative. The program initiative closed as of December 31, 2014, however there were still scheduled pick-ups to be completed in early 2015. The savings for these pick-ups are expected to count towards the Conservation First Framework. It was requested in early 2015 that the program initiative return to support the needs of a few LDCs who requested the program initiative stay in market.
- Better relationships with retailers will play a large role in revitalizing this program initiative. Retailers are essential to capture replacement appliances and have them decommissioned after a sale has been finalized. These are engaged customers who require minimal encouragement to sign up.
- 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 has approached market saturation as appliances have a natural life cycle. The number of eligible appliances retired by Horizon Utilities' customers in 2013 declined by 48% over 2012, which was on pace with the overall provincial results which declined by 39%. In 2014, participation dropped again, down to 604, or 88% lower than the program initiative's best year (2009).

- Historical results for the appliance retirement program initiative since 2006 are as follows:

<b>Year</b>	<b>Pickups</b>
2006	1449
2007	1875
2008	3824
2009	4900
2010	2972
2011	3034
2012	1671
2013	878
2014	604
<b>Total</b>	<b>21207</b>

- Participation rates in this initiative have been responsive to province-wide advertising by the OPA, supported by LDCs. In 2013 and 2014, however, the OPA provided no mass media advertising support for this initiative.
- The IESO can make the availability of customer participation information more accessible on this program initiative by including it in the LDC portal. This data would be useful in determining past participants in order to gauge marketing tactics to new potential participants.
- The IESO and Residential Working Group should 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 initiative. The Residential Program 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 program initiatives 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 IESO and Horizon Utilities continue to establish partnerships with independent retailers and municipalities. Horizon Utilities' experience with offering the service provider Just Junk a "referral fee" to attract participants was an example of such a partnership.

### **3.2.1.2 Appliance Exchange Initiative (Schedule B-1, Exhibit E)**

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

The following illustrates the initiative activities and progress achieved in 2014:

#### **Participation / Activity:**

- Total province-wide Appliance Exchange uptake/participation was 5,685.
- Horizon Utilities' uptake/participation for the Appliance Exchange initiative was 203 units, or 3.6% of the provincial results.

### **Net Savings:**

- The incremental peak demand savings was 42 kW and the incremental energy savings was 74,996 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 was 104 kW.
- The program-to-date 2011-2014 net cumulative energy savings was 382,515 kWh.

### **Marketing & Promotional Tactics Used:**

In 2014, Horizon Utilities provided marketing support for this initiative through:

- Horizon Utilities' Website promotion and awareness activity year round generating 477 page views with forty seconds average time on page.
- Promotion at 16 retail events.

### **Additional Comments:**

- This initiative's eligible measures and incentive amounts are influenced by the retail partner with no direct involvement from the LDCs. The restrictive, limited and sometimes non-participation of local stores can diminish the savings potential for this initiative.
- Canadian Tire was the only retailer participant in the Appliance Exchange initiative in 2014.
- EM&V results indicated that the value of savings for retired room air conditioners ("ACs") has dropped resulting in the retail participant not accepting window ACs during the Spring or Fall 2013 events. Only dehumidifiers were accepted in 2014.
- Notification regarding retailer participation and eligible measures continues to be delayed. Improved communications will aid in appropriate resource allocation and marketing of the initiative.
- **ENERGY STAR®** requirements continued to increase for new units, increasing the energy savings value of exchanging an old unit.
- The initiative appears to require more promotion from retailers and LDCs. Participation has plateaued in the last 2 years.
- As the in-store events are limited to twice per year, it would be helpful to provide consumers with an in-store coupon incentive, for products that can be purchased and contribute towards Horizon Utilities' savings.
- 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.

#### **3.2.1.3 HVAC Incentives Initiative (HEATING AND COOLING INCENTIVE) (Schedule B-1, Exhibit B)**

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

The following illustrates the initiative activities and progress achieved in 2014:

**Participation / Activity:**

- Total province-wide HEATING & COOLING INCENTIVE program (also known as the HVAC Incentives Initiative) uptake/participation was 113,002 units, of which Horizon Utilities contributed 5,772, or 5.1% of the provincial results.

**Net Savings:**

- The incremental peak demand savings was 1,109 kW and the incremental energy savings was 2,035,819 kWh.

**Contribution to Targets:**

- The program-to-date net peak demand savings that contributes to the 2014 demand target was 4,642 kW.
- The program-to-date 2011-2014 net cumulative energy savings was 21,235,870 kWh.

**Marketing & Promotional Tactics Used:**

In 2014, Horizon Utilities provided marketing support for this initiative through:

- Bill insert to 200,000 customers.
- Promotion on outer bill envelope which totaled over 2.2 million.
- Promoted at 16 community events (see Appendix C for event listing).
- Collateral material hand-outs were consistent throughout the year.
- Horizon Utilities' Website promotion and awareness activity year round generating 1,247 page views with one minute and forty seconds average time on page.

**Additional Comments:**

- The program initiative continued to see steady participation, with similar results each year from 2011-2013. 2014 participation was 14.78% higher than 2011 levels, making it the strongest year with 5,772 participants.
- Incentive levels appear to be insufficient to prompt participants to upgrade HVAC equipment prior to end of useful life. An Air Miles® incentive was introduced in 2013 to try to increase the related uptake for this program initiative. The Air Miles incentive was discontinued in 2014 due to lack of interest.
- Provincially, electronically commuted motor ("ECM") unit installs under the program initiative rose by 12%, and the 2nd tier AC incentive saw an increased uptake of 37% (1st tier AC incentive uptake fell 3%).
- The number of provincial participants only upgrading central air conditioners ("Macs") increased 44%. This is a concern because peak demand savings will no longer be considered in 2015,

and ECMs represent the vast bulk of the savings earned by the program initiative. The IESO should consider whether CAC incentives are still relevant by themselves.

- Two-thirds of all HVAC installs in the province in 2014 claimed the HVAC incentive, according to primary research by the IESO. This agrees with a simple estimate based on Horizon Utilities' numbers (130,000 homes with forced air systems divided by 15; assuming all homes replace their furnace every 15 years) multiplied by 2/3 = 5,777.
- Contractors and bill inserts continue to be the best methods for notifying customers about the program initiative. A consumer survey identified that 50% of participants found out about the initiative through one of these two methods.
- There are cases where non-participating contractors are offering their own incentives (by discounting their installations to match the value of the OPA incentive) to make the sale. As this occurs outside of the initiative, these installations should be attributed to the appropriate LDC. The Residential Working Group in 2015 will consider stipends for contractors to encourage participation in the program initiative - as well as better highlighting of participating contractors.
- Branding needs to be extended to Heating Refrigeration Air Conditioning Institute ("HRAI") contractors on advertising to promote and encourage customers to be more effective in leveraging the saveONenergy<sup>OM</sup> HEATING & COOLING INCENTIVE.
- 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.

#### **3.2.1.4 Coupon Initiative (Schedule B-1, Exhibit A)**

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

The following illustrates the Coupon Initiative activities and progress achieved in 2014:

##### **Participation / Activity:**

- Total province-wide coupons uptake/participation was 1,208,108 units of which Horizon Utilities was allocated 42,295 or 3.5% to the provincial results.

##### **Net Savings:**

- The incremental peak demand savings was 86 kW and the incremental energy savings was 1,153,159 kWh.

##### **Contribution to Targets:**

- The program-to-date net peak demand savings that contributes to the 2014 demand target was 167 kW.
- The program-to-date 2011-2014 net cumulative energy savings was 5,233,609 kWh.

##### **Marketing & Promotional Tactics Used:**

- Promoted at 16 community events (see Appendix C for event listing).
- Horizon Utilities' Website promotion and awareness activity year round generating 1,244 page views with one minute and thirty five seconds average time on page.

#### **Additional Comments:**

- The timeframe for retailer submission of redeemed coupons vary from retailer to retailer and in some cases has been lengthy. The delays and incomplete results associated with reporting limits the ability to react and respond to initiative performance or changes in consumer behaviour.
- The product list could be distinctive from the Bi-Annual Retailer Event Initiative in order to gain more consumer interest and uptake.
- Coupon booklets were not printed and mailed in 2014 and thus were not widely available to consumers unless they chose to download and print them. In addition, consumers may not have been aware of the online coupons. As such, this initiative may benefit from provincial marketing as a substitute to distribution.
- Coupons were listed on the Horizon Utilities' website in a single downloadable PDF file. This required the customer to download the entire set of coupons, then make copies of just the coupons they wanted multiples of. This was a cumbersome process for the customer that was improved at the end of 2014. The improvements included splitting each coupon into its own downloadable file, while also providing a version of each file that featured 2 copies of the coupon on a single sheet, to allow easy printing and copying of specific coupons. The most popular coupons required the customer to present multiple copies (LED coupon allowed 5 coupons per customer) of the coupon to receive multiple discounts.
- Program initiative evolution, including new products and review of incentive pricing for the coupon initiatives, should be a regular activity to ensure continued consumer interest.
- In 2013, LDCs were provided with 3 custom-coded coupons to provide 100% allocation to that LDC. In 2014, all coupons were provided with LDC custom coding for the ability to push specific coupons based on localized needs. The top 4 coupons (general and specialty CFL and general and specialty LED coupons) generated 95% of the redemptions in 2014, so the LDC coding on the remaining coupons should provide minimal impact.
- Consumer experience varies among retailers offering coupon discounts and this can limit redemptions. For example, a particular high volume 'participating retailer' does not accept point of sale coupons and have their own procedure, whereas some retailers historically have had lengthy coupon redemption processes. In addition, some retailers have static lists of eligible products and will not discount eligible products unless it's on the list.
- The saveONenergy program initiatives would benefit from specific end cap displays, aisle product stands and product-specific areas. Having products scattered throughout different retail shelving weakens the impact.
- A conservation coupon booklet could be used all year to encourage customer participation and in-store retailer visits.

#### **3.2.1.5 Bi-Annual Retailer Event Initiative (Schedule B-1, Exhibit C)**



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

The following illustrates the Bi-Annual Retailer Event Initiative activities and progress achieved in 2014:

#### **Participation / Activity:**

- Total province-wide Bi-Annual Retailer Event uptake/participation was 4,824,751 units.
- The IESO allocated Horizon Utilities' participation results for the Bi-Annual Retailer Event. The result was 195,057 units, or 4.0% to the provincial results.

#### **Net Savings:**

- The incremental peak demand savings was 325 kW and the incremental energy savings was 4,968,775 kWh.

#### **Contribution to Targets:**

- The program-to-date net peak demand savings that contributed to the 2014 demand target was 505 kW.
- The program-to-date 2011-2014 net cumulative energy savings was 14,711,564 kWh.

#### **Marketing & Promotional Tactics Used:**

In 2014, Horizon Utilities provided marketing support for this initiative through:

- Horizon Utilities' Website promotion and awareness activity year round.
- Promoted at 16 community events (see Appendix C for event listing).

#### **Additional Comments:**

- The large increase in participation in 2014 can be partly attributed to a province-wide mailing campaign executed by the OPA, combined with the surging popularity of LED lamps combined with falling prices. The \$5 coupon is expected to be lowered in value in 2016 as prices continue to fall.
- Spillover for 2014 was 94%, which led to a Net-To-Gross Ratio of 1.75 for the program initiative.
- The top 4 coupons (general and specialty CFL and general and specialty LED coupons) generated 95% of the redemptions in 2014.
- This initiative design is strongly influenced by the retail participant relationship with the OPA.
- Horizon Utilities' events teams work with local retail outlets to educate customers, store staff, and help drive product sales. In some cases, assistance with in-store setup and logistics is required.
- Limited engagement of local retailers can restrict the savings potential for this initiative.
- The product list has changed very little over the past five years.

- Program initiative evolution, including new products (for example, LED lighting) and review of incentive pricing, must be a regular activity to ensure continued consumer interest.
- The product list could be distinctive from the Coupon Initiative in order to gain more consumer interest and uptake.
- This initiative may benefit from a more exclusive relationship with a retailer appropriate to the initiative . There should be a value proposition for both the retailer and LDC.
- Some retailers have been rejecting coupons on qualified products as store name is 'not on the list', resulting in reduced participation.
- The Bi-Annual Retailer Event Initiative may not individually present a value for the significant investment of LDC resources to undertake these types of events and should be backed by other residential program initiatives that offer more variety and value to customers.
- 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.

#### **3.2.1.6 Retailer Co-op**

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

The following illustrates the progress achieved in 2014:

- There was no participation by Horizon Utilities' customers in 2014.

##### **Additional Comments:**

- This initiative was not in market in 2014 and produced no net incremental peak demand savings or net incremental energy savings for Horizon Utilities.

##### **Additional Comments:**

- This was a retailer initiative with extremely limited direct benefit to the LDCs.

#### **3.2.1.7 Residential New Construction Initiative ("NEW HOME CONSTRUCTION program" (Schedule B-2)**

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

The following illustrates the initiative activities and progress achieved in 2014:

##### **Participation / Activity:**

- There was no participation by Horizon Utilities' customers in the NEW HOME CONSTRUCTION program; the province-wide results to-date were only 2,694 participants.

##### **Net Savings:**

- None.

**Contribution to Targets:**

- None.

**Marketing & Promotional Tactics Used:**

In 2014, Horizon Utilities provided marketing support for this initiative through:

- Horizon Utilities' agreement with a provider who was tasked with reaching out to builders, explaining the program initiative and generating applications. No final applications were received in 2014.
- Horizon Utilities' Website promotion and awareness activity year round generating over 336 page views with one minute and twenty seven seconds average time on page.

**Additional Comments:**

- This initiative provides incentives to home builders for incorporating energy efficiency into their buildings. To support this, LDCs need to provide education to the consumers regarding the importance of choosing the energy efficient builder upgrade options without an immediate benefit to the consumer.
- In 2012, the application process was streamlined. However, it continues to be too cumbersome for builders. This, combined with limited return, has resulted in this initiative continuing to under-achieve.
- Administrative requirements, in particular individual home modeling, must align with perceived stakeholder payback.
- The addition of LED light fixtures, application process improvement and moving the incentive from the builder to the home-owner may increase participation.
- This initiative may benefit from collaboration with the natural gas program.

**3.2.1.8 *peaksaver PLUS Initiative (Schedule B-3)***

**Initiative Activities/Progress:**

The following illustrates the initiative activities and progress achieved in 2014:

**Participation / Activity:**

- The 2014 province-wide *peaksaver PLUS* new participation was 69,648 thermostats and 54,920 IHD.
- Horizon Utilities' 2014 new participation for *peaksaver PLUS* was 2,979 programmable thermostats and 3,110 IHDs to residential consumers, or 4.3% of the provincial thermostat total. Horizon Utilities' IHD total was 5.7% of the provincial total for the year.
- Total province-wide *peaksaver PLUS* participation (program-to-date) was 241,381 thermostats at the end of 2014. Horizon Utilities' portion of the total was 12,539 thermostats, or 5.2%.

**Net Savings:**

- Horizon Utilities' incremental peak demand savings was 719 kW and the incremental energy savings was 1,510 kWh.

**Contribution to Targets:**

- The program-to-date net peak demand savings that contributes to the 2014 demand target was 4,457 kW for Horizon Utilities.
- The program-to-date net cumulative energy savings was 29,144 kWh.

**Marketing & Promotional Tactics Used:**

In 2014, Horizon Utilities provided marketing support for this initiative through:

- Direct mail campaigns leveraged its energy mapping database to better understand the needs of its residential customers in relation to *peaksaver* PLUS
- Identification of specific demographic groups that showed a higher propensity to participate in *peaksaver* PLUS than other groups were selected.
- This data prompted us to review the values most associated with the primary demographic groups in Horizon Utilities' territory. By adjusting the messaging in the direct mail efforts, to better align to the values of primary demographic groups, increased market penetration into market segments who have not traditionally participated in *peaksaver* PLUS was experienced.
- Several outbound calling campaigns followed direct mailings, targeting almost 15,000 customers. Again using targeted customers, the campaigns met with better results than the mail campaigns did. In terms of marketing costs, cost of acquisition went from over \$100/sign-up with direct mail to under \$80/sign-up with calling.
- Survey results and customer feedback indicated that program initiative awareness was high, but customers had questions about the initiative. Thus, it was decided that outbound calling should be the focus from here on, in order to give the customer a chance to have all questions answered before signing up to the program initiative.
- Promoted at 16 community events (see Appendix C for event listing).
- Horizon Utilities' Website promotion and awareness activity year round generating over 5,900 page views.
- Bill statement inserts for 200,000 customers.
- Advertisements in local newspapers, reaching a combined circulation of 160,000.

### Additional Comments:

- 2014 saw the product offering for *peaksaver* PLUS become stale. The thermostat device and in-home energy display became overshadowed by products that customers were willing to pay for instead of receiving *peaksaver* PLUS for free. Wi-Fi thermostats, the initial smart thermostats (primarily Nest in 2014) and competing educational tools eroded the market for the program initiative. In 2014, the Utility Pro thermostat was deemed to be end-of-life, and although Honeywell made a play to introduce a Wi-Fi head end that could be used with *peaksaver* PLUS, the setup and subscription costs were prohibitive to the LDCs and the OPA and the move failed.
- Energy retailers also began offering (selling and sometimes giving away) thermostats to customers who signed up with their programs. 229 former *peaksaver* PLUS customers moved over to one particular retailer in the Horizon Utilities' territory.
- *peaksaver* PLUS underwent the evaluation, measurement and verification process resulting in a decrease in the attributed peak demand savings in for residential central air conditioning systems in Horizon Utilities' territory. In 2012, the total peak demand savings for *peaksaver* PLUS was 2,699 kW with 5,393 customers participating, providing a contribution of .50 kW per participant. In 2013, the total peak demand savings for *peaksaver* PLUS was 3,738 kW with 9,560 customers participating, providing a contribution of 0.39 kW per participant. The 2013/14 results demonstrate that the net contribution per device is lower for Horizon Utilities than the province as illustrated below.

	2011	2012	2013	2014
Horizon Utilities' allocated kW Savings / RDR control device	1	0.5	0.39	0.36
Provincial average kW Savings / RDR control device	1	0.5	0.54	0.49
Difference kW / RDR control device	0	0	0.15	0.13

As shown below, this change in allocated peak demand savings per participant represents a decrease in net peak demand savings of 1,434 kW or 2% of the Horizon Utilities' demand target for 2013. A similar shortfall was seen in 2014.

	2013	2014
Total Number of installed devices 2011 – 2014	9,560	12,539
Current Horizon Utilities' contribution based on 0.36 kW/participant	3,728	4,514
Horizon Utilities' contribution based on Provincial Average of 0.49 kW/participant	5,162	6,144
Current kW Loss to Horizon Utilities' Demand Target (kW)	-1,434	-1,630
% to Horizon Utilities' Demand Target	-2%	-2.7%

- Despite these results, Horizon Utilities is working with the IESO to investigate further how this decrease in allocated peak demand savings per participant has been determined. Also to

determine if anything further can be done to improve the demand response capacity going forward.

- IESO determined that the IHD offered in the program initiative contributed no claimable energy savings. The Residential Working Group should consider removing the IHD from the initiative, as well as other program initiative changes such as 'bring your own device' and contractor incentives.
- In 2014, there were more options available in terms of IHD products, including IHDs that were able to communicate directly with smart meters. Horizon Utilities continued to use the Blueline IHD originally selected, which uses a collar installed externally to the meter in order to communicate meter data to the hand-held IHD device.
- Given different LDC customer preferences and needs each LDC is positioning the initiative slightly differently. While a thermostat has a high marketability, it also carries a higher maintenance liability due to no-heat and no-AC calls. A switch with an independent IHD is less likely to prompt customer maintenance calls but also has a much lower marketability.
- In a few cases customers did not want the IHD due to performance limitations of the device to communicate over a long distance between the electrical meter and the dwelling. Currently the Blue Line IHD product does not adapt to statutory holidays for off-peak energy pricing.
- Horizon Utilities approved the use of an IHD provided by Efergy in cases where the range of the IHD supplied by Blue Line Innovations was a problem for the customer, as the Efergy unit has shown to have a better effective range. The Efergy IHD also reportedly has better battery performance, and its collar design is less likely to lead to signal loss due to collar mis-alignment.

### 3.2.2 COMMERCIAL AND INSTITUTIONAL ("C&I" or BUSINESS) PROGRAM

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

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

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

#### **Discussion:**

The C&I Program was comprised of three initiatives that were continuations of previous initiatives, and two new initiatives. Similar to many of the initiatives in the Residential Program, customer interest in participating in the C&I Program was largely driven by supply channel partners such as commercial lighting contractors, commercial heating, ventilation, air conditioning and refrigeration ("HVACR") contractors, and other parties.

The most important of the C&I Program initiatives with respect to the provision of demand and energy savings were the Efficiency: RETROFIT PROGRAM and the Direct Install Lighting and Water Heating Initiative (the "SMALL BUSINESS LIGHTING" program or "SBL", also known as the "Direct Install Lighting Program"). Both were continuations of earlier programs that were refined over time, particularly to increase the incentives available.

Participants in SBL, for which business customers in the General Service < 50 kW category were eligible, received more energy-efficient lighting and other products at no cost to a maximum of \$1,500 (previously \$1,000). Horizon Utilities experienced very strong participation in the previous version of this initiative, the "Power Savings Blitz", and completed over 5,700 projects prior to 2011. As participation in SBL or Power Savings Blitz was restricted to only once per eligible facility, Horizon Utilities experienced lower participation rates in 2011 to 2013 versus the provincial average; although the participation rate more than doubled in 2014 versus 2013 as a result of marketing/outreach campaigns directed at businesses that had not yet participated.

While the RETROFIT PROGRAM was targeted at all sizes and types of business customers and for almost any energy efficient product or measure, most applications for this initiative involved lighting replacement projects. Including 118 projects completed in 2011 under the previous version of this initiative, the Electricity Retrofit Incentive Program ("ERIP"), 1,299 eligible equipment replacement/upgrade projects were completed by customers of Horizon Utilities as of December

31, 2014. Horizon Utilities' participation rates for the RETROFIT PROGRAM were approximately three projects completed for every five General Service Customers >50 kW.

Horizon Utilities undertook a number of steps to improve its results for the RETROFIT PROGRAM throughout 2011 to 2014. Horizon Utilities implemented a channel partner engagement program through the Channel Partner Supervisor, offering training sessions and support for equipment manufacturers, distributors and contractors. This resulted in an increase in new project applications overall, improved quality in the applications (i.e. applications were correctly completed upon submission, allowing for the approval process to proceed more quickly), and an increase in the number of non-lighting applications. Horizon Utilities also refined its sales and marketing approaches to business customers and developed new campaigns; for example, offering a free energy assessment to help identify opportunities to reduce electricity usage. As a result, the number of new RETROFIT PROGRAM project applications increased by about 20% in 2013 versus 2012 and almost 70% in 2014 versus 2013; while the proportion of applications that were deemed to be ineligible or were otherwise canceled decreased by about 40% from 2012 to 2014.

Throughout 2011 to 2014, the EDA C&I Working Group, comprised of representatives of LDCs and the OPA, sought to enhance the existing C&I Program initiatives and to rectify identified operational and system deficiencies. This was a challenging undertaking, normally taking months to implement even relatively minor changes to the then-current CDM framework. In 2013, the introduction of an expedited change management process helped to fast-track minor changes into market. The removal of participant agreements and forms from the C&I Program schedules also helped reduce the length of time it took to process changes.

Management of the C&I Program by LDCs was hampered by varying interpretations of initiative eligibility requirements, a somewhat inflexible on-line system of checks and balances, and staffing shortfalls at the OPA to address questions and issues in a timely manner. Overbuilt governance, numerous initiative requirements and complex program structures restricted growth without providing the anticipated improvement in customer participation and verified demand and energy savings. In addition, EM&V assessments of the C&I Program initiatives did not achieve full transparency nor necessarily lead to program improvements. As an example, the net-to-gross ratio for the New Construction Initiative (the "HIGH PERFORMANCE NEW CONSTRUCTION" program, or "HPNC") remained at only about 50% for the entire 2011-2014 period. As a consequence, LDCs were held accountable for verified net demand and energy savings results as reported by the OPA and the IESO, yet were mostly removed from the process to determine these results and unable to proceed quickly with critical program changes.

### ***3.2.2.1 Efficiency: Equipment Replacement Incentive Initiative (RETROFIT PROGRAM) (Schedule C-2)***

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

The following illustrates the initiative activities and progress achieved in 2014:

#### **Participation / Activity:**



- Total province-wide participation in the RETROFIT PROGRAM since January 1, 2011 was 30,413 projects.
- Horizon Utilities completed 457 projects in 2014, and since January 1, 2011 contributed 1,181 projects including adjustments to prior years reported by the IESO, or 3.9% to the provincial results.

#### **Net Savings:**

- The incremental peak demand savings in 2014 was 2,594 kW and the incremental energy savings was 19,282,049 kWh.

#### **Contribution to Targets:**

- The program-to-date net peak demand savings that contributed to the 2014 demand target was 8,596 kW including adjustments to prior years reported by the IESO, or 14.2% of Horizon Utilities' 2014 CDM Target.
- The program-to-date 2011-2014 net cumulative energy savings was 110,582,400 kWh including adjustments to prior years reported by the IESO, or 39.3% of Horizon Utilities' 2014 CDM Target.

#### **Marketing & Promotional Tactics Used:**

In 2014, Horizon Utilities provided marketing support for this initiative through:

- Promoted directly by KAMs, EEMs and channel partners to eligible customers.
- Promoted on Horizon Utilities' website on a year-round basis.
- Printed advertising in the Hamilton Chamber of Commerce Membership Directory with a circulation of 2,500.
- Conducted a direct mail campaign to over 3,700 customers in specified market verticals (Health Care, Warehousing, Small and Large Retail, Small and Large Office, Restaurant, Fast Food and Small Medical sectors) highlighting electricity usage in comparison to sector average. This campaign promoted the RETROFIT PROGRAM, SBL, AUDIT FUNDING and *peaksaver* PLUS.
- Hosted an "Energy Excellence Awards" event on March 26, 2014 where recognition was given to customers that had RETROFIT PROGRAM projects with significant demand and energy savings. Also recognized were customers and their project representatives who completed projects that involved innovative design or measures. Attendance at this event increased by over 50% versus 2013.
- Promoted at 11 business-related events interfacing with over 535 customers and channel partners (see Appendix C for the list of events).
- Published case studies to promote energy efficient projects.
- Created a training support slide deck for Energy Managers.
- Printed 100 "Sell Sheets" and 150 brochures describing the RETROFIT PROGRAM (and other C&I and Industrial Program initiatives) for use by Horizon Utilities' personnel and channel partners.

#### **Additional Comments:**

- Of all of the CDM Programs offered by Horizon Utilities from 2011 to 2014, the RETROFIT PROGRAM was the largest contributor to Horizon Utilities' net cumulative energy savings.
- Horizon Utilities' 2014 RETROFIT PROGRAM results increased by 56 completed projects as compared to 2013. Horizon Utilities also received credit for closing 43 additional projects in 2014 from previous years. More than 230 project applications initiated in 2013 and 2014 remained in progress as of December 31, 2014 and carried-over into 2015.
- Horizon Utilities experienced an increase in the percentage of non-lighting project applications of over 20% in 2013 and 2014 versus less than 10% in 2011.
- The average size of retrofit projects completed in 2014 by customers of Horizon Utilities was 5.7 kW in terms of peak demand savings and 42,190 kWh in terms of net incremental energy savings. This compares to projects completed in 2013, where the average project size was 8.2 kW and 44,735 kWh, respectively (including adjustments to the 2013 results reported by the IESO). This trend of decreasing project size was experienced by other LDCs, as evidenced by similar trends in the results province-wide.
- Capability building programs from the Industrial Program had positive contributions to RETROFIT PROGRAM results. For example, 160 projects that were closed out in 2014 involved a Roving Energy Manager.
- Applicants and Applicant Representatives continued to express dissatisfaction and difficulty with the on-line application system for the RETROFIT PROGRAM. This issue was addressed by LDCs through application training workshops, KAMs, channel partner/contractor training and LDC staff acting as 'Applicant Representatives' on behalf of customers. Although this was an effective method of overcoming these issues and encouraging submissions, it also reflects on the complexity and time consuming nature of the application process. As such, Applicant Representatives continued to influence the majority of applications submitted. Continued development of channel partners is essential to future program success in the Conservation First Framework.
- The requirement for pre-approval of RETROFIT PROGRAM projects prior to their commencement was a barrier to participation, particularly for participants that needed to replace equipment that failed and needed immediate replacement. In the second half of 2013, changes to the 'Prescriptive' application process for the emergency replacement of HVAC equipment were implemented to allow for project applications to be completed after-the-fact, and the incentives available were also increased.
- The requirement to have a customer invoice the LDC for their RETROFIT PROGRAM incentive was very burdensome for the customer and resulted in a negative customer experience, and was another barrier to participation.
- Processing 'Head Office' applications became much easier for the 'Lead LDC' after changes to Schedule C-2 came into effect in August 2013. The changes allowed the Lead LDC to review and approve all facilities in a Head Office application on behalf of all 'Satellite LDCs' under certain circumstances. A framework to provide additional funding for Lead LDCs taking on Head Office applications is a requirement in the Conservation First Framework to make processing applications efficient for the customer and Lead LDC.
- Streamlining of the settlements system and procedures by the OPA resulted in significant improvements in the process for paying customer incentives in 2013 and 2014.

### **3.2.2.2 SBL Initiative (Schedule C-3)**

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

The following illustrates the initiative activities and progress achieved in 2014:

#### **Participation / Activity:**

- Total province-wide participation in SBL since January 1, 2011 was 81,049 projects.
- Horizon Utilities completed 991 projects in 2014, and since January 1, 2011 contributed 2,783 projects or 3.4% to the provincial results.

#### **Net Savings:**

- The incremental peak demand savings in 2014 was 852 kW and the incremental energy savings was 2,940,240 kWh.

#### **Contribution to Targets:**

- The program-to-date net peak demand savings that contributed to the 2014 demand target was 2,409 kW including adjustments to prior years reported by the IESO, or 4.0% of Horizon Utilities' 2014 CDM Target.
- The program-to-date 2011-2014 net cumulative energy savings was 17,995,592 kWh including adjustments to prior years reported by the IESO, or 6.4% of Horizon Utilities' 2014 CDM Target.

#### **Marketing & Promotional Tactics Used:**

In 2014, Horizon Utilities provided marketing support for this initiative through:

- Promoted on Horizon Utilities' website on a year-round basis, generating 492 page views with an average time-on-page of more than two minutes.
- Conducted a three tranche (April, May & June) Direct Mail campaign to 3,578 customers.
- Conducted an Outbound Calling Campaign in the Fall to over 4,300 customers resulting in a significant increase in installations in November and December.
- Continued to call on potential clients through "door-to-door" approach and distributed collateral sell sheets through this activity.
- Promoted at 11 business-related events interfacing with customers and channel partners (see Appendix C for the list of events).
- Included in collateral material available for other C&I and Industrial Program initiatives.
- Created 1,000 "Sell Sheets" for use by the personnel of Horizon Utilities' delivery agent for SBL.

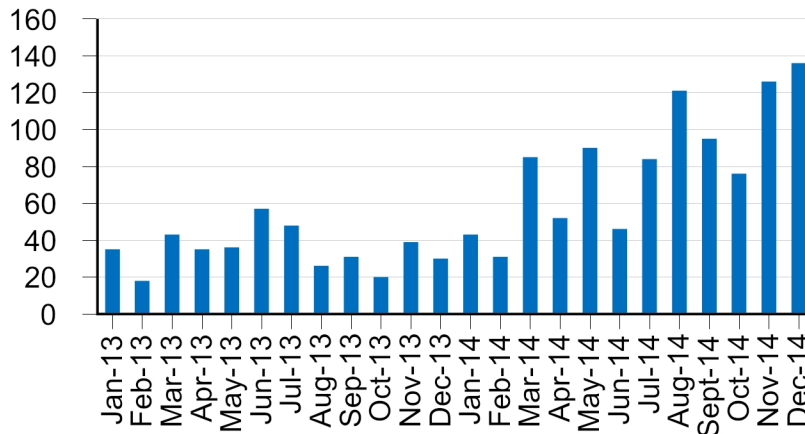
**Additional Comments:**

- Horizon Utilities' 2014 results for SBL increased by 576 completed projects as compared to 2013 - more than double the 2013 number. A summary of the annual participation levels in the programs was as follows:

<u>Year</u>	<u>Participants</u>
2008	504
2009	3,257
2010	1,954
2011	715
2012	662
2013	415
2014	991
<b>Total</b>	<b>8,498</b>

- The table below illustrates the distribution of direct install work-orders for the period of January 2013 through December 2014 as provided by Horizon Utilities' delivery agent for SBL.

**SBL Installations**



**3.2.2.3 Building Commissioning Initiative (Schedule C-6)**

**Initiative Activities/Progress:**

The following illustrates the initiative activities and progress achieved in 2014:

**Participation / Activity:**

- Total province-wide participation in the Building Commissioning Initiative (also known as "EXISTING BUILDING COMMISSIONING", or ("EBC") since January 1, 2011 was 5 projects, all completed in 2014.
- Horizon Utilities completed 2 projects in 2014, contributing 40.0% to the provincial results.

#### **Net Savings:**

- The incremental peak demand savings in 2014 was 133 kW and the incremental energy savings was 157,250 kWh.

#### **Contribution to Targets:**

- The program-to-date net peak demand savings that contributed to the 2014 demand target was 133 kW, or 0.2% of Horizon Utilities' 2014 CDM Target.
- The program-to-date 2011-2014 net cumulative energy savings was 157,250 kWh, or 0.1% of Horizon Utilities' 2014 CDM Target.
- There were no adjustments to prior years reported by the IESO to the program-to-date results.

#### **Marketing & Promotional Tactics Used:**

In 2014, Horizon Utilities provided marketing support for this initiative through:

- Promoted directly by KAMs, EEMs and channel partners to eligible customers.
- Promoted on Horizon Utilities' website on a year-round basis, generating 60 page views with an average average time-on-page of more than one minute.
- Promoted at 11 business-related events (see Appendix C for the list of events).
- Included in collateral material available for other C&I and Industrial Program initiatives.

#### **Additional Comments:**

- Horizon Utilities deployed the first channel partner to support EBC in Ontario in 2012. An additional 12 project applications from 2013 and 2014 remained in-progress as of December 31, 2014 and carried-over into 2015.
- The prescribed implementation of this initiative originally dictated that all measurements, both pre- and post-project, be conducted within the months of June through September. Given that the pre-project phase required data be collected for 60 consecutive days, it was imperative that all pre-project measurements commence in early June or the implementation of the improvements would not be credited until the following calendar year. As technology currently exists to collect the required data in as little as two weeks, a change was implemented in late 2014 through the C&I Working Group to reduce the data collection period to 30 days.

#### **3.2.2.4 New Construction Initiative ("HPNC") (Schedule C-4)**

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

The following illustrates the initiative activities and progress achieved in 2014:

**Participation / Activity:**

- Total province-wide participation in HPNC since January 1, 2011 was 507 projects.
- Horizon Utilities completed 8 projects in 2014, and since January 1, 2011 contributed 21 projects including adjustments to prior years reported by the IESO, or 4.1% to the provincial results.

**Net Savings:**

- The incremental peak demand savings in 2014 was 151 kW and the incremental energy savings was 521,315 kWh.

**Contribution to Targets:**

- The program-to-date net peak demand savings that contributed to the 2014 demand target was 823 kW including adjustments to prior years reported by the IESO, or 1.4% of Horizon Utilities' 2014 CDM Target.
- The program-to-date 2011-2014 net cumulative energy savings was 7,644,522 kWh including adjustments to prior years reported by the IESO, or 2.7% of Horizon Utilities' 2014 CDM Target.

**Marketing & Promotional Tactics Used:**

- In 2014, Horizon Utilities delivered HPNC through the services of Enbridge Gas Distribution Inc. ("Enbridge") and Union Gas Limited. The initiative was also promoted on Horizon Utilities' website on a year-round basis.
- Promoted at 11 business-related events (see Appendix C for the list of events).
- Included in collateral material available for other C&I and Industrial Program initiatives.

**Additional Comments:**

- As noted previously, HPNC had a very low net-to-gross ratio, which resulted in approximately half of the expected demand and energy savings being 'lost'.
- There is typically a long project planning and development cycle for new construction projects. Estimated completion dates tend to be inaccurate and are typically delayed by at least six months.
- The application process for 'Custom' projects in HPNC required considerable customer support and skilled LDC staff, and potential participants often expressed that the effort involved exceeded the value of the incentives available.

**3.2.2.5 Energy Audit Initiative ("AUDIT FUNDING") (Schedule C-1)****Initiative Activities/Progress:**

The following illustrates the initiative activities and progress achieved in 2014:

**Participation / Activity:**

- The total province-wide participation in AUDIT FUNDING since January 1, 2011 was 1,641 projects.
- Horizon Utilities contributed 20 projects in 2014, and since January 1, 2011 contributed 49 projects including adjustments to prior years reported by the IESO, or 3.0% to the provincial results.

#### **Net Savings:**

- The incremental peak demand savings in 2014 was 267 kW and the incremental energy savings was 1,305,471 kWh.

#### **Contribution to Targets:**

- The program-to-date net peak demand savings that contributed to the 2014 demand target was 431 kW including adjustments to prior years reported by the IESO, or 0.7% of Horizon Utilities' 2014 CDM Target.
- The program-to-date 2011-2014 net cumulative energy savings that contributes to the 2014 demand target was 3,643,425 kWh including adjustments to prior years reported by the IESO, or 1.3% of Horizon Utilities' 2014 CDM Target.

#### **Marketing & Promotional Tactics Used:**

In 2014, Horizon Utilities provided marketing support for this initiative through:

- Promoted directly by KAMs, EEMs and channel partners to eligible customers.
- Promoted on Horizon Utilities' website on a year-round basis, generating 137 page views with an average time-on-page of more than two minutes..
- Promoted at 11 business-related events (see Appendix C for the list of events).
- Included in collateral material available for other C&I and Industrial Program initiatives.

#### **Additional Comments:**

- AUDIT FUNDING was an 'enabling' initiative, designed to support subsequent participation in the RETROFIT PROGRAM or other initiatives within the C&I Program portfolio. While no demand or energy savings were necessarily expected to be attributed to this initiative, evaluators have recognized savings towards LDCs' CDM Targets as a result of customers implementing low cost / no cost recommendations from their energy audits.
- Participation in the Energy Audit initiative was originally limited to one energy audit per customer which has restricted enabling and direction to the other initiatives. This was revised in 2014 and LDCs were able to consider additional customer participation when presented with a new scope of work.

#### **3.2.2.6 *peaksaver PLUS Initiative (Schedule B-3)***

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

The following illustrates the progress achieved in 2014:

#### **Participation / Activity:**

- Number of load control devices installed province-wide in the premises of non-residential customers since January 1, 2011 was 3,652, including 2,441 in 2014.
- Number of load control devices installed within Horizon Utilities' service area in the premises of non-residential customers in 2014 was 2, and since January 1, 2011 was 22 or 0.6% of the provincial results.
- Number of IHDs installed province-wide in the premises of non-residential customers since January 1, 2011 was 820, including 442 in 2014.
- Number of IHDs installed within Horizon Utilities' service area in the premises of non-residential customers in 2014 was 3, or 0.68% of the provincial results.

#### **Net Savings:**

- The incremental peak demand savings resulting from the load control devices installed in 2014 was 0 kW and the incremental energy savings was 0 kWh.
- No incremental peak demand savings or energy savings were attributed to the installation of IHDs.

#### **Contribution to CDM Targets**

- The program-to-date net peak demand savings that contributed to the 2014 demand target was 12 kW, or less than 0.0% of Horizon Utilities' 2014 CDM Target.
- The program-to-date 2011-2014 net cumulative energy savings was 51 kWh or less than 0.0% of Horizon Utilities' 2014 CDM Target.
- Adjustments reported by the IESO for 2014 reduced the average peak demand savings per load control device installed, from 0.650 kW per device in 2013 to 0.545 kW per device in 2014.

#### **Marketing & Promotional Tactics Used:**

- Promoted on Horizon Utilities' web-site on a year-round basis.
- Promoted at 11 business-related events interfacing with customers and channel partners (see Appendix C for the list of events).
- Included in collateral material available for other C&I and Industrial Program initiatives.

#### **Additional Comments:**

- Changes to the initiative made in March 2013 to increase the participant-based funding specifically for small commercial customers, to address the expectations of delivery partners for adequate compensation to service this customer segment, did not materially contribute to Horizon Utilities results for 2014.
- The *peaksaver* PLUS program underwent the evaluation, measurement and verification process resulting in a decrease in the attributed peak demand savings in for residential central air conditioning systems in Horizon Utilities' territory. In 2012, the total peak savings for



*peaksaver* PLUS was 2,699 kW with 5,393 customers participating, providing a contribution of .50 kW per participant. In 2013, the total peak savings for *peaksaver* PLUS was 3,738 kW with 9,560 customers participating, providing a contribution of 0.39 kW per participant. The 2013/14 results demonstrate that the net contribution per device is lower for Horizon Utilities than the province as illustrated below. The IESO conducted a field study of Horizon Utilities *peaksaver* PLUS participants to determine the net peak demand savings per device. Full details of the IESO study have not been made available to support the rationale for discounting all Horizon Utilities participant *peaksaver* PLUS devices.

	2011	2012	2013	2014
Horizon Utilities' allocated kW Savings / RDR control device	1	0.5	0.39	0.36
Provincial average kW Savings / RDR control device	1	0.5	0.54	0.49
Difference kW / RDR control device	0	0	0.15	0.13

### 3.2.2.7 DR3 Initiative (Schedule D-6)

#### Initiative Activities/Progress:

The following illustrates the progress achieved in 2014:

#### Participation / Activity

- The total province-wide participation by commercial customers in DR3 since January 1, 2011 was 180 participants.
- Horizon Utilities contributed no net new participating commercial customers in 2014, and since January 1, 2011 contributed 5 participants or 2.8% to the provincial results.

#### Net Savings

- There were no incremental peak demand savings or incremental energy savings realized in 2014.

#### Contribution to CDM Targets

- The program-to-date net peak demand savings that contributed to the 2014 demand target was 595 or 1.0% of Horizon Utilities' 2014 CDM Target.
- The program-to-date 2011-2014 net cumulative energy savings was 38,226 kWh or 0.01% of Horizon Utilities' 2014 CDM Target.
- Adjustments reported by the IESO in 2014 reduced the average peak demand savings per participant, from 119.4 kW per participant in 2013 to 112.2 kW per participant in 2014; there was no change in the average energy savings per participant.

#### Marketing & Promotional Tactics Used:

- See discussion in Section 3.2.3.6.

**Additional Comments:**

- See discussion in Section 3.2.3.6.

### 3.2.3 INDUSTRIAL PROGRAM

**Description:** Designed to help identify and promote energy saving opportunities for large building and manufacturing based customers. The Industrial Program portfolio included 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 allowed facilities to take control of their energy so customers 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 promote the installation of energy efficient measures and to promote participation in demand management.

**Discussion:**

The Industrial Program portfolio provided valuable resources to large facilities including funding for enabling Engineering Studies and for process or system changes. The Engineering Studies in particular provided a unique opportunity for customers to complete a comprehensive analysis of an energy intensive process that would not otherwise be able to undertake. The Industrial Program also provided funding for EEMs to provide customers with a skilled individual whose only role is to assist them with conservation initiatives. These Energy Managers played a key role in customer participation.

Activities carried out in 2014 by the Key Account Manager resources for Horizon Utilities and other LDCs serviced by Horizon Utilities resulted in identification of many potential CDM projects through on-site energy assessments and further engineering studies. Some large-scale projects approved within Horizon Utilities' service area will not be completed until 2015.

Extensive legal documents, customer release of environmental credits, complex program structure and lengthy change management process restricted the change and growth of this portfolio. While the expedited change management described in Section 3.2.2 benefited the C&I Program portfolio, the Industrial Program portfolio did not experience the same results due to the narrow scope of the process.

#### **3.2.3.1 PSUI: Preliminary Engineering Study Initiative, Detailed Engineering Study Initiative, and Project Incentive Initiative (Schedule D-1)**

**Initiative Activities/Progress:**

The following illustrates the initiative activities and progress achieved in 2014:

**Participation / Activity:**

- The total province-wide participation by industrial customers in PSUI (also known as the "PROCESS & SYSTEMS" program) in the Project Incentive Initiative since January 1, 2011 was

15 participants. Participation rates for Preliminary Engineering Studies and Detailed Engineering Studies were not reported by the IESO.

- Horizon Utilities contributed no net new participating industrial customers in 2014, and none since January 1, 2011 that contributed to Horizon Utilities' 2014 CDM Target.
- Horizon Utilities did execute two Capital Project Agreements with industrial customers in 2014 for projects that will be completed in 2015.

**Net Savings:**

- None in 2014.

**Contribution to Targets:**

- None.

**Marketing & Promotional Tactics Used:**

In 2014, Horizon Utilities provided marketing support for this initiative through:

- Promoted directly by KAMs, EEMs and channel partners to eligible customers.
- Promoted on Horizon Utilities' website on a year-round basis.
- Included in collateral material available for other C&I and Industrial Program initiatives.

**Additional Comments:**

- As noted above, province-wide there were only 15 completed capital projects under PSUI from 2011 to 2014. The OPA's standard form of contract for capital projects was a significant barrier to participation as the contract term was too long and as well contained other provisions that were considered to be too onerous and/or complicated. For this reason, many customers opted to undertake projects under the RETROFIT PROGRAM even though the potential incentives would have been greater under PSUI.
- A business case was submitted by the Industrial Working Group (originally established by the OPA in 2010 to aid in the development of the CDM programs for the Industrial sector and comprised of representatives of LDCs and the OPA) in July 2012 to change the upper limit for a small project from 700 MWh to 1MM dollars in incentives. This was intended to allow more projects to be eligible for the new small capital project agreement and increase participant uptake, while still protecting the ratepayer. This small capital project agreement was finalized in August 2013.
- A number of Preliminary and Detailed Engineering Studies were submitted and completed by customers of Horizon Utilities, most of which were initiated through the KAMs and EEMs. This is a strong indication of the potential for large projects with corresponding demand and energy savings.
- While there is considerable customer interest in on-site Load Displacement (Co-Generation) projects, the OPA initially accepted waste heat/waste fuel projects only. Natural gas generation projects were on hold awaiting a decision on whether PSUI would consider these types of projects to be eligible. In June 2013, however, a decision was made to allow natural gas load

displacement generation projects to proceed under PSUI. A number of customers of Horizon Utilities have investigated natural gas generation projects, although none have proceeded that were completed as of December 31, 2014.

- There were three significant PSUI capital projects within Horizon Utilities' service area that were expected to have considerable contributions to the CDM targets but did not proceed. These projects were not only critical with respect to Horizon Utilities' 2014 CDM Target, but also to the economic viability of the customer's operation. Given the long lead time required to build and commission these projects, the delays caused significant concern for these customers.
- The first project involved a large user with a 5.6 MW Co-Generation project that was designed to produce high quality steam for generation and to use the "waste" steam for the production process. A Detailed Engineering Study was completed in October of 2012 but the OPA did not approve the review of the project and prevented it from moving forward. Connection constraints at the Hydro One Networks Inc.'s Glendale Transformer Station also prevented this project from being approved and contributing to the CDM target.
- A second large user is currently burning waste gas that the user hoped to use to build a 5.0 MW Co-Generation facility that will completely displace their load. This customer has attempted to get the project to move forward at the OPA through Horizon Utilities since November of 2011.
- A third Large Use customer's Co-Generation project was expected to deliver 9.1 MW in peak demand savings and 72 GWh of annual incremental energy savings, but was delayed due to a work-stoppage. Horizon Utilities worked with the OPA to obtain a waiver that would allow the customer to continue the project; however, economic conditions since 2011 have adversely affected production and reduced the production of furnace gases necessary to feed the generation.

### **3.2.3.2 Process & Systems Upgrades Initiatives 2011-2014: Monitoring & Targeting Initiative ("M&T") (Schedule D-2)**

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

The following illustrates the initiative activities and progress achieved in 2014

#### **Participation / Activity:**

- The total province-wide participation by industrial customers in M&T since January 1, 2011 was 9 participants.
- Horizon Utilities contributed no net new participating industrial customers in 2014, and since January 1, 2011 contributed 0 projects including adjustments to prior years reported by the IESO, or 0.0% to the provincial results.

#### **Net Savings:**

- None in 2014.

#### **Contribution to Targets:**

- None.

## **Marketing & Promotional Tactics Used:**

In 2014, Horizon Utilities provided marketing support for this initiative through:

- Promotion directly by KAMs, EEMs and channel partners to eligible customers.
- Promoted on Horizon Utilities' website on a year-round basis.
- Included in collateral material available for other C&I and Industrial Program initiatives.

## **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 was a barrier for some customers. As such, there was only limited interest in this initiative among Horizon Utilities' customers.
- The demand and energy savings target required for this initiative presented a significant challenge for smaller customers. Changes were made to the RETROFIT PROGRAM in 2013 that allowed smaller facilities to undertake less-complicated monitoring and targeting projects.

### **3.2.3.3 *Process & Systems Upgrades Initiatives 2011-2014: Energy Manager Initiative (Schedule D-3)***

## **Initiative Activities/Progress:**

The following illustrates the initiative activities and progress achieved in 2014:

### **Participation / Activity:**

- As of December 31, 2014, the OPA had provided funding for 379 Energy Managers across the province.
- Horizon Utilities received funding from the OPA for 5 Roving Energy Managers ("REMs") as of December 31, 2014.
- Approval for funding for two Embedded Energy Managers ("EEMs") was also provided for customers of Horizon Utilities as of December 31, 2014.

### **Net Savings:**

- The incremental peak demand savings was 41 kW and the incremental energy savings was 1,056,692 kWh.

### **Contribution to Targets:**

- The program-to-date net peak demand savings that contributes to the 2014 target was 109 kW including adjustments to prior years reported by the IESO, or 0.2% of Horizon Utilities' 2014 CDM Target.
- The program-to-date 2011-2014 net cumulative energy savings was 2,558,898 kWh including adjustments to prior years reported by the IESO, or 0.9% of Horizon Utilities' 2014 CDM Target.

**Additional Comments:**

- Horizon Utilities had four REMs positions (one position was vacant) as of the end of 2014, that provided assistance to at least 20 customers each for initiatives under both the Industrial Program and C&I Program portfolios. Many of these customers initiated and completed multiple projects since 2011.
- REMs have proved to be a popular and useful resource for customers, providing expertise and guidance with respect to potential energy efficiency projects. Restricting a REM to servicing only three customers, as was specified in Schedule D-3, underutilized the potential of these resources to achieve energy and peak demand savings. Maximum CDM potential is realized when these resources are deployed to the largest number of engaged customers. As such, REMs were deployed accordingly at Horizon Utilities.
- Despite having funding approval from the OPA for additional EEMs for other Horizon Utilities' customers, these customers were not successful in filling these positions. This stems from a lack of qualified resources available in the Greater Toronto/Hamilton Area.

**3.2.3.4 Process & Systems Upgrades Initiatives 2011-2014: Key Account Manager (Schedule D-4)****Participation / Activity:**

Horizon Utilities, working with 8 other LDCs, had a team of three KAMs in place throughout 2013. As these other LDCs subsequently refined their plans and adopted new go-to-market strategies, by June 2014 only two KAMs remained, servicing three LDCs. Up to June 2014 the KAM team serviced as many as 30 Large Use customers in the 9 LDC service territories, as well as providing additional support to many smaller customers. This greatly helped all participating LDCs augment their total commercial CDM production.

Specifically for Horizon Utilities, the KAMs provided assistance to more than 20 large user industrial customers and large commercial customers. Many of these customers initiated and completed multiple projects since 2011.

**Additional Comments**

- Customers appreciate dealing with a single contact to interface with an LDC, a resource that has both the technical and business background who can communicate easily with the customer and the LDC.
- As was the case with Roving and Embedded Energy Managers, Horizon Utilities found that it difficult to find candidates with the necessary qualifications and experience to serve as KAMs due to a shortage of such personnel within the service area.
- The multi-year duration for this initiative proved 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.

**3.2.3.5 Efficiency: Equipment Replacement Incentive Initiative (RETROFIT PROGRAM)(Schedule C-2)**

**Initiative Activities/Progress:**

The following illustrates the initiative activities and progress achieved in 2014:

**Participation / Activity:**

- In 2011, the OPA reported on ERII projects completed in the Industrial sector. For 2012 through 2014 there were no reported RETROFIT PROGRAM projects included in the results of the Industrial Program.

**Net Savings:**

- None.

**Contribution to Targets:**

- The program-to-date net peak demand savings that contributes to the 2014 demand target was 70 kW or <1% of Horizon Utilities' 2014 CDM Target.
- The program-to-date 2011-2014 net cumulative energy savings was 1,610,107 kWh or <1% of Horizon Utilities' 2014 CDM Target.

**Marketing & Promotional Tactics Used:**

- See discussion in Section 2.2.2.1.

**Additional Comments:**

- See discussion in Section 2.2.2.1.

**3.2.3.6 DR3 Initiative (Schedule D-6)****Initiative Activities/Progress:**

The following illustrates the initiative activities and progress achieved in 2014:

**Participation / Activity:**

- The total province-wide participation in DR3 since January 1, 2011 was 336 participants .
- Horizon Utilities contributed 2 net new participating industrial customers in 2014, and since January 1, 2011 has contributed 11 participants or 3.3% to the provincial results.

**Net Savings:**

- The incremental peak demand savings resulting from the net new participants in 2014 was 3,832 kW and the incremental energy savings was 0 kWh.

**Contribution to Targets:**

- The program-to-date net peak demand savings that contributed to the 2014 demand target was 17,093 kW or 28.3% of Horizon Utilities' 2014 CDM Target.



- The program-to-date 2011-2014 net cumulative energy savings was 692,298 kWh or 0.2% of Horizon Utilities' 2014 CDM Target.
- There were no adjustments to prior years reported by the IESO to the program-to-date results.

### **Marketing & Promotional Tactics Used:**

In 2014, Horizon Utilities provided marketing support for this initiative through:

- Promoted directly by KAMs and Roving Energy Managers to eligible customers.
- Interaction with, and support of, active Aggregators.
- Promoted on Horizon Utilities' website on a year-round basis.
- Included in collateral material available for other C&I and Industrial Program initiatives.

### **Additional Comments:**

- Until early in 2013, customer data was not provided on an individual customer basis due to contractual requirements with the Aggregators. This limited LDCs' abilities to effectively market to prospective participants and verify savings. While LDCs eventually could confirm which customers were participating in the DR3 Program, information such as contracted amount and contract term was not provided by the OPA on an individual customer basis. As a result, LDCs were not able to verify the information provided by the OPA and IESO concerning this initiative.
- As of 2013, Aggregators were able to enter into contracts beyond 2014 which allowed them to offer a more competitive contract price (five year) than if limited to one or two year contracts.
- Metering and settlement requirements are expensive and complicated and can reduce customer compensation amounts, and presented a barrier to participation for smaller customers.
- Compensation amounts for new contracts and renewals was reduced from the initial launch of this program (premium zones and 200 hour option have been discontinued) and subsequently there was a corresponding decrease in renewal revenue.
- The Ministry of Energy's Directive to the IESO issued in March 2014, to no longer contract for new demand response capacity, prevented some of Horizon Utilities customers from participating in the DR-3 Program.

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

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

The following illustrates the program activities and progress achieved in 2014:

#### **Participation / Activity:**

- 25,424 audits were conducted provincially in 2014.
- Horizon Utilities had 3,538 participants, or 13.9% of the provincial total.

#### **Net Savings:**

- Horizon Utilities' incremental peak demand savings was 717 kW and the incremental energy savings was 4,387,048 kWh.

#### **Contribution to Targets:**

- The program-to-date net peak demand savings was 1,745 kW to the 2014 target.
- The program-to-date cumulative energy savings was 15,893,583 kWh.

#### **Marketing Tactics Used:**

In 2014, Horizon Utilities provided marketing support for this initiative through:

- 3rd party Delivery Agents who were most successful when working directly with housing providers. The large upswing in participation was a direct result of working with a local housing provider, who manage thousands of qualifying tenants, and has the ability to require participation of tenants.
- Worked with clients through dedicated energy project managers, to champion the Low Income Program.
- Identification to Delivery Agents the use of electric heating to target homes for participation.
- Work shops were hosted for social services providers and social housing providers to provide an overview of the program.
- On-site presentations were conducted for staff of larger social services providers.
- Collateral materials were provided to Social Agencies.
- Website promotion and awareness activity year round generating over 960 page views with two minutes and three seconds average time on page.

#### **Additional Comments:**

- The process for enrolling in the Social Housing program was complicated and time consuming. This was addressed in late 2012 and showed some benefits in 2013 and 2014.
- The financial scope, complexity, and customer privacy requirements of this initiative are challenging for LDCs and most have contracted this program out.

- 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. Horizon Utilities chose to market to channels where customers self-qualify.

### **3.2.5 PRE-2011 PROGRAMS**

Savings were realized towards LDCs' 2014 CDM Targets through Pre-2011 programs. The targeted customer types, objectives, descriptions, and activities of these programs are detailed in Appendix B.

#### **3.2.5.1 Electricity Retrofit Incentive Program (ERIP)**

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

The following illustrates the initiative activities and progress achieved in 2014:

##### **Participation / Activity:**

- Total province-wide participation in ERIP since January 1, 2011 was 2,028 projects.
- Horizon Utilities completed no ERIP projects in 2014, and since January 1, 2011 contributed 118 projects or 5.8% to the provincial results.

##### **Net Savings:**

- None in 2014.

##### **Contribution to Targets:**

- The program-to-date net peak demand savings that contributed to the 2014 demand target was 3,066 kW, or 5.1% of Horizon Utilities' 2014 CDM Target.
- The program-to-date 2011-2014 net cumulative energy savings was 70,800,874 kWh, or 25.2% of Horizon Utilities' 2014 CDM Target.
- There were no adjustments to prior years reported by the IESO to the program-to-date results.

#### **3.2.5.2 HPNC Program**

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

The following illustrates the initiative activities and progress achieved in 2014:

##### **Participation / Activity:**

- Total province-wide participation in the pre-2011 version of the HPNC Program since January 1, 2011 was 277 projects.
- Horizon Utilities completed no projects in the pre-2011 version of the HPNC Program in 2014, and since January 1, 2011 contributed 12 projects including adjustments to prior years reported by the IESO, or 4.3% to the provincial results.

**Net Savings:**

- None in 2014.

**Contribution to Targets:**

- The program-to-date net peak demand savings that contributed to the 2014 demand target was 979 kW including adjustments to prior years reported by the IESO, or 1.6% of Horizon Utilities' 2014 CDM Target.
- The program-to-date 2011-2014 net cumulative energy savings was 21,317,889 kWh including adjustments to prior years reported by the IESO, or 7.6% of Horizon Utilities' 2014 CDM Target.

# 4 2014 LDC CDM Results

## 4.1 Participation and Savings

### Table 4 Horizon Utilities Corporation Initiative and Program Level Net Savings by Year:

#	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 Unverified Progress to Target		
			2011 Adj.*	2012 Adj.*	2013 Adj.*	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)	
<b>Consumer Program</b>																	
1	Appliance Retirement	Appliances	3,034	1,671	878	604	172	96	57	39	1,238,865	669,778	373,209	263,320	360	7,970,691	
2	Appliance Exchange	Appliances	186	131	178	203	18	19	37	42	21,438	33,812	65,760	74,996	104	382,515	
3	HVAC Incentives	Equipment	5,029	5,100	5,023	5,772	395	1,109	1,029	1,109	2,524,725	1,877,013	1,735,057	2,035,819	4,642	21,235,870	
4	Conservation Instant Coupon Booklet	Items	21,872	1,249	14,067	42,295	50	21	21	86	821,438	56,527	312,559	1,153,159	167	5,233,609	
5	Bi-Annual Retailer Event	Items	38,494	42,891	38,196	195,057	72	60	48	325	1,276,363	1,082,743	694,555	4,968,775	505	14,711,564	
6	Retailer Co-op	Items	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
7	Residential Demand Response	Devices	1,952	5,393	9,560	12,539	1,093	2,699	3,738	4,457	2,830	13,650	11,153	1,510	4,457	29,144	
8	Residential Demand Response (IHD)	Devices	—	3,855	8,368	11,478	—	—	—	—	—	—	—	—	—	—	
9	Residential New Construction	Homes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
<b>Consumer Program Total</b>			—	—	—	—	2,801	3,993	4,930	6,059	5,885,659	3,733,523	3,192,293	8,497,580	10,235	49,563,394	
<b>Business Program</b>																	
10	Retrofit	Projects	87	221	401	457	968	1,932	3,268	2,594	5,421,757	11,447,324	17,938,416	19,282,049	8,596	110,582,400	
11	Direct Install Lighting	Projects	715	662	415	991	688	530	453	832	1,754,193	1,875,038	1,442,489	2,840,240	2,402	17,985,592	
12	Building Commissioning	Buildings	—	—	—	2	—	—	—	—	—	—	—	137	157,250		
13	New Construction	Buildings	—	6	7	8	—	85	587	151	—	225,869	3,222,801	521,315	823	7,644,522	
14	Energy Audit	Audits	15	4	10	20	54	21	88	267	263,983	104,121	484,829	1,305,471	431	3,643,425	
15	Small Commercial Demand Response	Devices	—	9	20	22	—	6	13	12	—	33	18	—	12	51	
16	Small Commercial Demand Response (IHD)	Devices	—	—	15	18	—	—	—	—	—	—	—	—	—	—	
17	Demand Response 3	Facilities	5	4	5	5	536	531	597	595	20,936	7,718	9,571	—	595	38,226	
<b>Business Program Total</b>			—	—	—	—	2,247	3,126	5,005	4,604	7,460,869	13,660,103	23,098,124	24,206,326	12,999	140,061,466	
<b>Industrial Program</b>																	
18	Process & System Upgrades	Projects	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
19	Monitoring & Targeting	Projects	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
20	Energy Manager	Projects	—	4	8	9	—	67	2	41	—	485,374	24,617	1,056,692	109	2,558,898	
21	Retrofit	Projects	15	—	—	—	—	—	—	—	402,527	—	—	—	70	1,610,107	
22	Demand Response 3	Facilities	6	7	9	11	3,498	6,445	13,261	17,093	205,346	155,311	331,641	—	17,093	692,398	
<b>Industrial Program Total</b>			—	—	—	—	3,568	6,511	13,263	17,134	607,873	640,685	356,258	1,056,692	17,272	4,861,303	
<b>Home Assistance Program</b>																	
23	Home Assistance Program	Homes	—	247	3,756	3,538	—	25	1,008	717	—	300,370	5,351,170	4,387,048	1,745	15,893,583	
<b>Home Assistance Program Total</b>			—	—	—	—	—	25	1,008	717	—	300,370	5,351,170	4,387,048	1,745	15,893,583	
<b>Aboriginal Program</b>																	
24	Home Assistance Program	Homes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
25	Direct Install Lighting	Projects	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
<b>Aboriginal Program Total</b>			—	—	—	—	—	—	—	—	—	—	—	—	—	—	
<b>Pre-2011 Programs completed in 2011</b>																	
26	Electricity Retrofit Incentive Program	Projects	118	—	—	—	3,066	—	—	—	17,700,219	—	—	—	3,066	70,800,874	
27	High Performance New Construction	Projects	8	4	—	—	537	442	—	—	2,913,304	3,221,557	—	—	979	21,317,889	
28	Toronto Comprehensive	Projects	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
29	Multifamily Energy Efficiency Rebates	Projects	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
30	LDC Custom Programs	Projects	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
<b>Pre-2011 Programs completed in 2011 Total</b>			—	—	—	—	3,603	442	—	—	20,613,523	3,221,557	—	—	4,045	92,118,764	
<b>Other</b>																	
31	Program Enabled Savings	Projects	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
32	Time-of-Use Savings	Homes	—	—	—	—	—	—	—	—	—	—	—	—	2,487	—	
33	LDC Pilots	Projects	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
<b>Other Total</b>			—	—	—	—	—	—	—	—	—	—	—	—	2,487	—	
<b>Adjustments to 2011 Verified Results</b>			—	—	—	—	—	193	—	2	2,151,259	—	12,220	—	194	8,649,390	
<b>Adjustments to 2012 Verified Results</b>			—	—	—	—	—	—	126	552	—	682,390	4,088,349	—	676	14,343,093	
<b>Adjustments to 2013 Verified Results</b>			—	—	—	—	—	—	—	—	—	—	5,566,313	—	1,156	11,095,738	
<b>Energy Efficiency Total</b>			—	—	—	—	6,896	3,730	5,445	8,845	32,175,331	16,587,289	26,116,036	38,146,135	24,601	267,650,570	
<b>Demand Response Total (Scenario 1)</b>			—	—	—	—	5,128	9,681	17,608	22,157	229,113	176,712	352,384	1,510	22,157	759,719	
<b>Adjustments to Previous Years' Verified Results Total</b>			—	—	—	—	—	193	126	1,711	—	2,151,259	682,390	9,666,883	2,025	34,088,221	
<b>IESO-Contracted LDC Portfolio Total (inc. Adjustments)</b>			—	—	—	—	12,023	13,604	23,180	32,712	32,404,444	18,915,260	27,150,809	47,814,528	48,783	302,498,510	
														<b>Full OEB Target:</b>		60,360	281,420,000
														<b>% of Full OEB Target Achieved to Date (Scenario 1):</b>		80.8%	107.5%

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

The IHD line item on the 2013 annual report has been left blank pending a results update from evaluations; results will be updated once sufficient information is made available.

\*Includes adjustments after Final Reports were issued

Full OEB Target:

% of Full OEB Target Achieved to Date (Scenario 1):

**Table 5 Summarized Program Results**

Program	Gross Savings		Net Savings		Contribution to Targets	
	Incremental Peak Demand Savings (MW)	Incremental Energy Savings (GWh)	Incremental Peak Demand Savings (MW)	Incremental Energy Savings (GWh)	Program-to-Date: Net Annual Peak Demand Savings (MW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (GWh)
Consumer Program Total	7.2	8.5	6.1	8.5	10.2	49.6
Business Program Total	5.9	32.7	4.6	24.2	13.0	140.1
Industrial Program Total	17.1	1.20	17.1	1.10	17.3	4.9
Home Assistance Program Total	0.7	4.4	0.7	4.4	1.7	15.9
Pre-2011 Programs completed in 2011 Total	0	0	0	0	4.0	92.1
Other Adjustments	2.6	16.30	1.7	9.70	2	34.1
<b>Total OPA Contracted Province-Wide CDM Programs</b>	<b>36.1</b>	<b>63.1</b>	<b>32.7</b>	<b>47.8</b>	<b>48.8</b>	<b>302.5</b>

## 4.2 Evaluation

METHODOLOGY	
All results are at the end-user level (not including transmission and distribution losses)	
EQUATIONS	
Prescriptive Measures and Projects	<b>Gross Savings = Activity * Per Unit Assumption</b> <b>Net Savings = Gross Savings * Net-to-Gross Ratio</b> <b>All savings are annualized (i.e. the savings are the same regardless of time of year a project was completed or measure installed)</b>
Engineered and Custom Projects	<b>Gross Savings = Reported Savings * Realization Rate</b> <b>Net Savings = Gross Savings * Net-to-Gross Ratio</b> <b>All savings are annualized (i.e. the savings are the same regardless of time of year a project was completed or measure installed)</b>
Demand Response	<b>Peak Demand: Gross Savings = Net Savings = contracted MW at contributor level * Provincial contracted to ex ante ratio</b> <b>Energy: Gross Savings = Net Savings = provincial ex post energy savings * LDC proportion of total provincial contracted MW</b> <b>All savings are annualized (i.e. the savings are the same regardless of the time of year a participant began offering DR)</b>
Adjustments to Previous Years' Verified Results	All variances from the Final Annual Results Reports from prior years will be adjusted within this report. Any variances with regards to projects counts, data lag, and calculations etc., will be made within this report. Considers the cumulative effect of energy savings.

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



Initiative	Attributing Savings to LDC's	Savings 'start' Date	Calculating Resource Savings
<b>Consumer Program</b>			
Retailer Co-op	When postal code information is provided by the customer, results are directly attributed. If postal code information is not available, results are allocated based on average of 2008 & 2009 residential throughput.	Savings are considered to begin in the year of the home visit and installation date.	Peak demand and energy savings are determined using the verified measure level per unit assumption multiplied by the uptake in the market (gross) taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.
Residential Demand Response	Results are directly attributed to LDC based on data provided to IESO through project completion reports and continuing participant lists.	Savings are considered to begin in the year the device was installed and/or when a customer signed a <b>peaksaver PLUS™</b> participant agreement.	Peak demand savings are based on an ex ante estimate assuming a 1 in 10 weather year and represents the "insurance value" of the initiative. Energy savings are based on an ex post estimate which reflects the savings that occurred as a result of activations in the year and accounts for any "snapback" in energy consumption experienced after the event. Savings are assumed to persist for only 1 year, reflecting that savings will only occur if the resource is activated.
Residential New Construction	Results are directly attributed to LDC based on LDC identified in application in the iCon system. Initiative was not evaluated in 2011, reported results are presented with forecast assumptions as per the business case.	Savings are considered to begin in the year of the project completion date.	Peak demand and energy savings are determined using the verified measure level per unit assumption multiplied by the uptake in the market (gross) taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.

Initiative	Attributing Savings to LDC's	Savings 'start' Date	Calculating Resource Savings
<b>Business Program</b>			
Efficiency: Equipment Replacement	Results are directly attributed to LDC based on LDC identified at the facility level in the iCon system. Projects in the Application Status: "Post-Stage Submission" are included (excluding "Payment denied by LDC"); Please see page for Building type to Sector mapping.	Savings are considered to begin in the year of the actual project completion date in the iCON system.	Peak demand and energy savings are determined by the total savings for a given project as reported in the iCON system (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net). Both realization rate and net-to-gross ratios can differ for energy and demand savings and depend on the mix of projects within an LDC territory (i.e. lighting or non-lighting project, engineered/custom/prescriptive track).
Additional Note: project counts were derived by filtering out invalid statuses (e.g. Post-Project Submission - Payment denied by LDC) and only including projects with an "Actual Project Completion Date" in 2014)			
Direct Installed Lighting	Results are directly attributed to LDC based on the LDC specified on the work order.	Savings are considered to begin in the year of the actual project completion date.	Peak demand and energy savings are determined using the verified measure level per unit assumptions multiplied by the uptake of each measure accounting for the realization rate for both peak demand and energy to reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings take into account net-to-gross factors such as free-ridership and spillover for both peak demand and energy savings at the program level (net).

Initiative	Attributing Savings to LDC's	Savings 'start' Date	Calculating Resource Savings
<b>Business Program</b>			
Existing Building Commissioning Incentive	Results are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year of the actual project completion date.	Peak demand and energy savings are determined by the total savings for a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).
New Construction and Major Renovation Incentive	Results are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year of the actual project completion date.	
Energy Audit	Projects are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year of the audit date.	Peak demand and energy savings are determined by the total savings resulting from an audit as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).
Commercial Demand Response (part of the Residential program schedule)	Results are directly attributed to LDC based on data provided to IESO through project completion reports and continuing participant lists	Savings are considered to begin in the year the device was installed and/or when a customer signed a <b>peaksaver PLUS™</b> participant agreement.	Peak demand savings are based on an ex ante estimate assuming a 1 in 10 weather year and represents the "insurance value" of the initiative. Energy savings are based on an ex post estimate which reflects the savings that occurred as a result of activations in the year. Savings are assumed to persist for only 1 year, reflecting that savings will only occur if the resource is activated.

Initiative	Attributing Savings to LDC's	Savings 'start' Date	Calculating Resource Savings
<b>Business Program</b>			
Demand Response 3 (part of the Industrial program schedule)	Results are attributed to LDCs based on the total contracted megawatts at the contributor level as of December 31st, applying the provincial ex ante to contracted ratio (ex ante estimate/ contracted megawatts); Ex post energy savings are attributed to the LDC based on their proportion of the total contracted megawatts at the contributor level.	Savings are considered to begin in the year in which the contributor signed up to participate in demand response.	Peak demand savings are ex ante estimates based on the load reduction capability that can be expected for the purposes of planning. The ex ante estimates factor in both scheduled non-performances (i.e. maintenance) and historical performance. Energy savings are based on an ex post estimate which reflects the savings that actually occurred as a results of activations in the year. Savings are assumed to persist for 1 year, reflecting that savings will not occur if the resource is not activated and additional costs are incurred to activate the resource.

Initiative	Attributing Savings to LDC's	Savings 'start' Date	Calculating Resource Savings
<b>Industrial Program</b>			
Process & System Upgrades	Results are directly attributed to LDC based on LDC identified in application.	Savings are considered to begin in the year in which the incentive project was completed.	Peak demand and energy savings are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).
Monitoring & Targeting	Results are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year in which the incentive project was completed.	Peak demand and energy savings are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).

Initiative	Attributing Savings to LDC's	Savings 'start' Date	Calculating Resource Savings
<b>Industrial Program</b>			
Energy Manager	Results are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year in which the project was completed by the energy manager. If no date is specified the savings will begin the year of the Quarterly Report submitted by the energy manager.	Peak demand and energy savings are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	Results are directly attributed to LDC based on LDC identified at the facility level in the saveONenergy CRM; Projects in the Application Status: "Post-Stage Submission" are included (excluding "Payment denied by LDC"); Please see "Reference Tables" tab for Building type to Sector mapping.	Savings are considered to begin in the year of the actual project completion date on the iCON CRM system.	Peak demand and energy savings are determined by the total savings for a given project as reported in the iCON CRM system (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net). Both realization rate and net-to-gross ratios can differ for energy and demand savings and depend on the mix of projects within an LDC territory (i.e. lighting or non-lighting project, engineered/custom/prescriptive track).

Initiative	Attributing Savings to LDC's	Savings 'start' Date	Calculating Resource Savings
<b>Industrial Program</b>			
Demand Response 3	Results are attributed to LDCs based on the total contracted megawatts at the contributor level as of December 31st, applying the provincial ex ante to contracted ratio (ex ante estimate/contracted megawatts); Ex post energy savings are attributed to the LDC based on their proportion of the total contracted megawatts at the contributor level.	Savings are considered to begin in the year in which the contributor signed up to participate in demand response.	Peak demand savings are ex ante estimates based on the load reduction capability that can be expected for the purposes of planning. The ex ante estimates factor in both scheduled non-performances (i.e. maintenance) and historical performance. Energy savings are based on an ex post estimate which reflects the savings that actually occurred as a results of activations in the year. Savings are assumed to persist for 1 year, reflecting that savings will not occur if the resource is not activated and additional costs are incurred to activate the resource.

Initiative	Attributing Savings to LDC's	Savings 'start' Date	Calculating Resource Savings
<b>Home Assistance Program</b>			
Home Assistance Program	Results are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year in which the measures were installed.	Peak demand and energy savings are determined using the measure level per unit assumption multiplied by the uptake of each measure (gross), taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.
<b>Aboriginal Program</b>			
Aboriginal Program	Results are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year in which the measures were installed.	Peak demand and energy savings are determined using the measure level per unit assumption multiplied by the uptake of each measure (gross), taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.



Initiative	Attributing Savings to LDC's	Savings 'start' Date	Calculating Resource Savings
<b>Pre-2011 Programs completed in 2011</b>			
Electricity Retrofit Incentive Program	Results are directly attributed to LDC based on LDC identified in the application; Initiative was not evaluated in 2011, 2012, 2013 or 2014 assumptions as per 2010 evaluation.	Savings are considered to begin in the year in which a project was completed.	Peak demand and energy savings are determined by the total savings from a given project as reported. A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net). If energy savings are not available, an estimate is made based on the kWh to kW ratio in the provincial results from the 2010 evaluated results ( <a href="http://www.powerauthority.on.ca/evaluation-measurement-and-verification/evaluation-reports">http://www.powerauthority.on.ca/evaluation-measurement-and-verification/evaluation-reports</a> ).
High Performance New Construction	Results are directly attributed to LDC based on customer data provided to the IESO from Enbridge; Initiative was not evaluated in 2011, 2012, 2013 or 2014, assumptions as per 2010 evaluation.	Savings are considered to begin in the year in which a project was completed.	
Toronto Comprehensive	Program run exclusively in Toronto Hydro-Electric System Limited service territory; Initiative was not evaluated in 2011, 2012, 2013 or 2014, assumptions as per 2010 evaluation.		
Multi-family Energy Efficiency Rebates	Results are directly attributed to LDC based on LDC identified in the application; Initiative was not evaluated in 2011, 2012, 2013 or 2014, assumptions as per 2010 evaluation.	Savings are considered to begin in the year in which a project was completed.	Peak demand and energy savings are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net). If energy savings are not available, an estimate is made based on the kWh to kW ratio in the provincial results from the 2010 evaluated results ( <a href="http://www.powerauthority.on.ca/evaluation-measurement-and-verification/evaluation-reports">http://www.powerauthority.on.ca/evaluation-measurement-and-verification/evaluation-reports</a> ).
Data Centre Incentive Program	Program run exclusively in PowerStream Inc. service territory; Initiative was not evaluated in 2011, assumptions as per 2009 evaluation.		
EnWin Green Suites	Program run exclusively in ENWIN Utilities Ltd. service territory; Initiative was not evaluated in 2011 or 2012, assumptions as per 2010 evaluation.		

### 4.3 Spending

Tables 6 and 7 summarize the total spending that Horizon Utilities incurred in 2014 and cumulatively since 2011 by initiative. The table includes details by the Program Administration Budget (“PAB”), Participant Based Funding (“PBF”), Participant Incentives (“PI”) and Capability Building Funding (“CBF”).

**Table 6: 2014 Spending**

Initiative	PAB	PBF	PI	CBF	TOTAL
<b>Consumer Program</b>					
Appliance Retirement	35,108				35,108
Appliance Exchange	7,846				7,846
HVAC Incentives	45,913				45,913
Annual Coupons					
Bi-Annual Retailer Event	6,610				6,610
Retailer Co-op					
Residential Demand Response	1,004,098	1,200,247			2,204,345
New Construction Program	63,788				63,788
<b>Business Program</b>					
Equipment Replacement	1,200,792		3,279,093		4,479,885
Direct Installed Lighting	182,190	250,280	1,311,533		1,744,003
Existing Building Commissioning Incentive	9,486		123,250		132,736
New Construction and Major Renovation Initiative	132,934		435,395		568,329
Energy Audit	49,362		81,950		131,312
Small Commercial Demand Response					
Demand Response 3					

Initiative	PAB	PBF	PI	CBF	TOTAL
<b>Industrial Program</b>					
Process & System Upgrades					
a) preliminary engineering study	13,775				13,775
b) detailed engineering study	18,715		60,000		78,715
c) program incentive	79,950				79,950
Monitoring & Targeting	32,788		75,000		107,788
Energy Manager					0
Key Account Manager ("KAM")					
<b>Equipment Replacement</b>					
Equipment Replacement					
Demand Response 3	16,469				16,469
<b>Home Assistance Program</b>					
Home Assistance Program	209,519	3,810,339			4,019,858
<b>TOTAL SPENDING</b>	<b>3,109,343</b>	<b>5,260,866</b>	<b>5,366,221</b>	<b>—</b>	<b>13,736,430</b>

**Table 7: Cumulative Spending (2011-2014)**

Initiative	PAB	PBI	PI	CBF	TOTAL
<b>Consumer Program</b>					
Appliance Retirement	432,542				432,542
Appliance Exchange	58,235				58,235
HVAC Incentives	180,170				180,170
Annual Coupons	67,469				67,469
Bi-Annual Retailer Event	84,275				84,275
Retailer Co-op					
Residential Demand Response	3,331,762	4,342,333	51,050		7,725,145
New Construction Program	139,804				139,804
<b>Business Program</b>					
Equipment Replacement	3,202,706		7,832,367		11,035,073
Direct Installed Lighting	579,554	659,720	3,266,275		4,505,549
Existing Building Commissioning Incentive	135,586		162,000		297,586
New Construction and Major Renovation Initiative	365,138		444,510		809,648
Energy Audit	146,114		104,112		250,226
Small Commercial Demand Response					
Demand Response					
<b>Industrial Program</b>					
Process & System Upgrades					
a) preliminary engineering study	66,711				66,711
b) detailed engineering study	125,774		144,292		270,066
c) program incentive	214,673				214,673

Initiative	PAB	PBI	PI	CBF	TOTAL
<b>Industrial Program</b>					
Monitoring & Targeting	84,370		112,500		196,870
Energy Manager					—
Key Account Manager (“KAM”)					—
Equipment Replacement Incentive					
Demand Response 3	58,118				58,118
<b>Home Assistance Program</b>					
Home Assistance Program	673,445	6,319,404			6,992,849
<b>Pre 2011 Programs</b>					
Electricity Retrofit Incentive Program	376,433		3,883,072		4,259,505
High Performance New Construction					
Toronto Comprehensive					
Multi-family Energy Efficiency Rebates					
Data Centre Incentive Program					
EnWin Green Suites					
<b>Initiatives Not In Market</b>					
Midstream Electronics					
Midstream Pool Equipment					
Demand Service Space Cooling					
Demand Response 1					
Home Energy Audit Tool					
<b>TOTAL SPENDING</b>	<b>10,322,879</b>	<b>11,321,457</b>	<b>16,000,178</b>	<b>—</b>	<b>37,644,514</b>

As of December 31, 2014, the final PAB funding spending was \$10.323 MM (including \$0.226 MM in *peaksaver*® 2011 extension). Horizon Utilities prudently managed its Program Administration Budget and delivered excellent results in a cost effective manner.

#### **4.4 Additional Comments**

Under separate cover, Horizon Utilities will be submitting an Application for payment of the 2011-2014 Conservation Demand Management (“CDM”) Performance Incentive in accordance with Section 7, Performance Incentive, of the OEB's CDM Code.

## 5 Combined CDM Reporting Elements

### 5.1 Progress Towards CDM Targets

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

Net Peak Demand Savings at the End User Level (MW) (Scenario 1)				
Implementation Period	Annual			
	2011	2012	2013	2014
2011 - Verified	12.0	6.9	6.9	6.8
2012 - Verified†	0.2	13.6	3.9	3.8
2013 - Verified†	0.0	0.1	23.2	5.5
2014 - Verified†	—	0.6	1.7	32.7
Verified Net Annual Peak Demand Savings Persisting in 2014:				<b>48.8</b>
Horizon Utilities Corporation 2014 Annual CDM Capacity Target:				<b>60.4</b>
Verified Portion of Peak Demand Savings Target Achieved in 2014 (%):				<b>80.8%</b>

*†Includes adjustments to previous years' verified results*

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

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

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†	2.2	18.9	18.7	18.5	58.2
2013 - Verified†	0.0	0.7	27.2	26.4	54.2
2014 - Verified†	—	4.1	9.65	47.8	61.6
Verified Net Annual Peak Demand Savings Persisting in 2014:					<b>302.5</b>
Horizon Utilities Corporation 2014 Annual CDM Capacity Target:					<b>281.4</b>
Verified Portion of Peak Demand Savings Target Achieved in 2014 (%):					<b>107.5%</b>

*†Includes adjustments to previous years' verified results*

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

### 5.2 Variance from Strategy

As anticipated in its forecasted 2014 CDM results, Horizon Utilities was on pace to achieve 80% of the demand and 100% of its energy target. The IESO's Horizon Utilities Corporation 2011-2014 Final Results Report indicated CDM results bettered this forecast slightly with verified achievements 80.82% of demand target and 107.49% of the energy target. Improvements to this forecast were based on the following:

- Inclusion of the allocated demand savings resulting from TOU rates contributed another 2,487 kW.
- EM&V activities conducted on the *peaksaver* PLUS program.
- Better than expected uptake of the RETROFIT PROGRAM.

Table 10 illustrates the status of the additional CDM programs identified in Horizon Utilities' CDM strategy filed with the Board on Nov 1, 2010.

**Table 10 – Horizon Utilities' Proposed Board-Approved CDM Programs**

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 IESO	4th Qtr. 2013 - 1st Qtr. 2014	25000	2.2	14000
Monitoring and Targeting	Active	Monitoring and Targeting Modified Schedule D-2	2012	10	1000	4300
LED Lighting	Active	Pilot projects through ERII Schedule C2	2014	3	0	4625
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	22792
Generation Conservation	Cancelled	None				

Final verified results for 2014 are now included as per Table 1 on Page 2 of this report.



### **5.3 Outlook to 2015-2020**

In order to achieve its new Conservation First energy savings target of 330.68 GWh, Horizon Utilities must achieve 55.1 GWh annually from 2015 - 2020. Momentum from the 2011-2014 Framework is expected to continue into 2015 with a forecast of 68.91 GWh of energy savings to be achieved.

Contributing to the 2015 forecast is a one large PSUI project (28 GWh) and the verified savings from the Social Benchmarking pilot project (10 GWh). Using its Customer Relationship Management ("CRM") tool, Horizon Utilities continues to track customer participation opportunities and applications received in order to maximize participation in all program initiatives.

## **6 Conclusion**

Over the course of 2011-2014, Horizon Utilities achieved 48.783 MW in peak demand savings and 302.5 GWh in energy savings, which represents 80.82% and 107.49% of Horizon Utilities' 2014 target, respectively. These results are representative of the collaborative approach taken by Horizon Utilities, to actively engage with other LDCs, customers, channel partners and stakeholders to overcome the operational and structural issues that limited program effectiveness across all market sectors. This achievement is a success and the relationships built within the 2011-2014 CDM program term will aid results in further achievements under the Conservation First CDM Framework 2015–2020.

Provincially, Horizon Utilities ranked 13th in demand savings and 36th in energy savings delivering its market share of CDM savings. Horizon Utilities is one of 13 LDCs eligible for OEB incentives by exceeding both the 80% demand and energy thresholds.

Going forward, Horizon Utilities continues to support the electricity sector by actively participating in various CDM working groups, investigating new opportunities for cost effective CDM programs with potential business partners and maximizing its implementation opportunities for OPA-Contracted Province-Wide programs under the Conservation First CDM Framework.

## Appendix A: Initiative Descriptions

### **Residential Program**

APPLIANCE RETIREMENT INITIATIVE (Schedule B-1, 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 was an energy efficiency initiative that offered individuals and businesses free pick-up and decommissioning of old large refrigerators and freezers. Window ACs and portable dehumidifiers were also be picked up when a refrigerator or a freezer was being collected.

**Targeted End Uses:** Large refrigerators, large freezers, window ACs and portable dehumidifiers

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

Additional detail is available at the saveONenergy website <https://saveonenergy.ca/Consumer/Programs/Appliance-Retirement.aspx>

APPLIANCE EXCHANGE INITIATIVE (Schedule B-1, Exhibit E)

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

**Initiative Frequency:** Spring and fall

**Objective:** The objective of this initiative was to remove and permanently decommission older, inefficient window ACs and portable dehumidifiers in Ontario.

**Description:** This initiative involved appliance exchange events. Exchange events were held at local retail locations and customers were encouraged to bring in their old room ACs and dehumidifiers in exchange for coupons/discounts towards the purchase of new energy efficient equipment.

**Targeted End Uses:** Window ACs and portable dehumidifiers

**Delivery:** OPA contracted with participating retailers for collection of eligible units.

Additional detail is available at the saveONenergy website <https://saveonenergy.ca/Consumer.aspx>

## HVAC INCENTIVES INITIATIVE (Schedule B-1, Exhibit B)

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

**Initiative Frequency:** Year round

**Objective:** The objective of this initiative was to encourage the replacement of existing heating systems with high efficiency furnaces equipped with ECM, and to replace existing CACs with **ENERGY STAR** qualified systems and products.

**Description:** This was 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 CACs by approved HRAI qualified contractors.

**Targeted End Uses:** CACs and furnaces

**Delivery:** The OPA contracted centrally for delivery of the program and LDCs were encouraged to convince local contractors to participate in the initiative.

Additional detail is available at the saveONenergy website <https://saveonenergy.ca/Consumer.aspx>

## CONSERVATION INSTANT COUPON INITIATIVE (Schedule B-1, Exhibit A)

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

**Initiative Frequency:** Year round

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

**Description:** This initiative provided customers with year round coupons. The coupons offered instant rebates towards the purchase of a variety of low cost, easy to install energy efficient measures and could 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.saveONenergy.ca](http://www.saveONenergy.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 contracted centrally for the distribution of the coupon booklets across Ontario. LDCs distributed coupons at local events. The OPA entered into agreements with retailers to honour the coupons.

Additional detail is available at the saveONenergy website <https://saveonenergy.ca/Consumer.aspx>

## BI-ANNUAL RETAILER EVENT INITIATIVE (Schedule B-1, Exhibit C)

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

**Initiative Frequency:** Bi-annual events

**Objective:** The objective of this initiative was 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 hosted month-long rebate events. During the months of April and October, customers were encouraged to visit participating retailers where customers could 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 entered into arrangements with participating retailers to promote the discounted products, and to post and honour related coupons. LDCs also referred retailers to the OPA.

Additional detail is available at the saveONenergy Horizon Utilities' website <https://saveonenergy.ca/Consumer.aspx>

RETAILER CO-OP

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

**Initiative Frequency:** Year Round

**Objective:** Held 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 provided LDCs with the opportunity to work with retailers in their service territory by holding special events at retail locations. These events were typically special promotions that encourage customers to purchase energy efficiency measures outside of the traditional Bi-Annual Coupon Events.

**Targeted End Uses:** Energy efficient products at Co-Op Retailer locations

**Delivery:** Retailers applied to the OPA for co-op funding to run special promotions that promoted energy efficiency to customers in their stores. LDCs could refer retailers to the OPA. The OPA provided each LDC with a list of retailers who qualified for Co-Op Funding as well as the 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 was to provide incentives to participants for the purpose of promoting the construction of energy efficient residential homes in Ontario.

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

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

**Targeted End Uses:** All “OFF” switches, ECMs, **ENERGY STAR** qualified central a/c, lighting control products, lighting fixtures, 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 at the 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 were 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 providing consumers with their current electricity consumption and associated costs.

**Description:** In *peaksaver* PLUS, participants were eligible to receive a free programmable thermostat or switch, including installation. Participants also received access to price and near real-time consumption information on an IHD. Participants of the original *peaksaver* program were able to enroll in *peaksaver* PLUS and received an IHD. Horizon Utilities was 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* PLUS 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 recruited customers and procured technology

Additional detail is available at the saveONenergy website <https://saveonenergy.ca/Consumer.aspx>

## **C&I Program**

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

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

**Initiative Frequency:** Year round

**Objective:** The objective of this initiative (promoted as the RETROFIT PROGRAM in 2014) was 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:** This initiative offered financial incentives to customers for the upgrade of existing equipment to energy efficient equipment. Upgrade projects could 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 at the

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

DIRECT INSTALL LIGHTING AND WATER HEATING 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 (promoted as SMALL BUSINESS LIGHTING in 2014) was to offer a free installation of eligible lighting and water heating measures of up to \$1,500 (previously \$1,000) 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:** This initiative targeted customers in the General Service < 50 kW category. Qualifying customers were offered turn-key lighting and electric hot water heater measures with a value up to \$1,500 at no cost. In addition, standard prescriptive incentives are available for eligible equipment beyond the initial \$1,500 limit.

**Target End Uses:** Commercial, institutional and agricultural facilities lighting

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

Additional detail is available at the saveONenergy website <https://saveonenergy.ca/Business.aspx>

#### BUILDING COMMISSIONING INITIATIVE (Schedule C-6)

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

**Initiative Frequency:** Year round, system measurements required in June to September

**Objective:** The objective of this initiative (promoted as the EXISTING BUILDING COMMISSIONING in 2014) was 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 offered 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 at the saveONenergy website <https://saveonenergy.ca/Business/Program-Overviews/Existing-Building-Commissioning.aspx>

#### NEW CONSTRUCTION INITIATIVE (Schedule C-4)

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

**Initiative Frequency:** Year round

**Objective:** The objective of this initiative (promoted as HIGH PERFORMANCE NEW CONSTRUCTION in 2014) was 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:** This initiative provided incentives for new buildings to exceed existing codes and standards for energy efficiency; using both a prescriptive and custom approach.

**Targeted End Uses:** Building modeling, lighting, space cooling, ventilation and other Measures



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

Additional detail is available at the 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 (promoted as AUDIT FUNDING in 2014) was 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 provided participants with incentives for the completion of energy audits of electricity consuming equipment located in the facility. Energy audits included development of energy baselines, usage assessments and performance monitoring and reporting.

**Targeted End Uses:** Various

**Delivery:** LDC delivered.

Additional detail is available at the saveONenergy website <https://saveonenergy.ca/Business/Program-Overviews/Audit-Funding.aspx>

## **Industrial Program**

PSUI (Schedule D-1)

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

**Initiative Frequency:** Year round

**Objectives:** The objectives of this initiative were 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 was an energy management program that included three initiatives: (Preliminary Engineering Study, Detailed Engineering Study, and Project Incentive). The incentives were available to large distribution connected customers with projects or portfolio projects that were 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 was the lowest of:

- \$200/MWh of annualized electricity savings; or
- 70% of projects cost; or
- 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 at the saveONenergy website <https://saveonenergy.ca/Business.aspx>

PROCESS AND SYSTEMS UPGRADES INITIATIVE 2011-2014: MONITORING & TARGETING INITIATIVE (Schedule D-2)

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

**Initiative Frequency:** Year round

**Objective:** This initiative offered 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 offered 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, was then 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 at the saveONenergy website <https://saveonenergy.ca/Business.aspx>

#### PROCESS AND SYSTEMS UPGRADES INITIATIVE 2011-2014: 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 was 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 provided 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 was 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 were 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 had a target of 300 kW per year in demand savings to achieve from one or more facilities. LDCs received 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 at the saveONenergy website <https://saveonenergy.ca/Business.aspx>

#### PROCESS AND SYSTEMS UPGRADES INITIATIVE 2011-2014: KEY ACCOUNT MANAGER INITIATIVE (Schedule D-4)

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

**Initiative Frequency:** Year round

**Objective:** This initiative offered 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 was

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 could 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 at the

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

DEMAND RESPONSE 3 INITIATIVE (Schedule D-6)

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

**Initiative Frequency:** Year round

**Objective:** This initiative (promoted as DR3 in 2014) provided for payments for service to participants to compensate them for making available electricity demand response during a demand response event.

**Description:** DR3 was 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 was a contractual resource that is an economic alternative to procurement of new generation capacity. DR3 came with specific contractual obligations requiring participants to reduce their use of electricity relative to a baseline when called upon. This initiative made payments for participants to be on standby and energy payments for the actual energy reduction provided during a demand response event. Participants were 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 was delivered by Demand Response Providers (also known as Aggregators), under contract to the OPA. The OPA administered contracts with all Aggregators and participants that provided in excess of 5 MW of demand response capacity. The OPA provided administration including settlement, measurement and verification, and dispatch. LDCs were responsible for outreach and marketing efforts.

Additional detail is available at thesaveONenergy website <https://saveonenergy.ca/Business.aspx>

## **Low Income Program**

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

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

**Initiative Frequency:** Year round

**Objective:** The objective of this Program was 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 was a turnkey program for income qualified customers. It offered residents the opportunity to take advantage of free installation of energy efficient measures that improved the comfort of their home, increased efficiency, and helped them save money. All eligible customers received a Basic and Extended Measures Audit, while customers with electric heat also received a Weatherization Audit. The program was designed to coordinate efforts with gas utilities.

**Targeted End Uses:** Energy Saving light bulbs, power bars, refrigerators and other appliances such as room ACs. Also for electrically heated homes are a programmable thermostat, weather stripping and insulation.

**Delivery:** LDC delivered.

Additional detail is available at the saveONenergy website <https://saveonenergy.ca/Consumer/Home-Assistance.aspx>

## Appendix B: Pre-2011 Programs

### ELECTRICITY RETROFIT INCENTIVE PROGRAM

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

**Initiative Frequency:** Year Round

**Objective:** The objective of this program was 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. For Horizon Utilities, the electricity savings associated with these projects were 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 program provided incentives for new buildings to exceed existing codes and standards for energy efficiency. The program used 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 program was 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. For Horizon Utilities, the electricity savings associated with these projects were attributed to 2011, 2012 and 2013

**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: 2014 Events Schedule

<b>Residential Customer Event Interactions 2014</b>		
<b>Date 2014</b>	<b>Event</b>	<b>City</b>
27-Feb	Spring Home & Garden Show, Careport Centre	Hamilton
28-Feb	Spring Home & Garden Show, Careport Centre	Hamilton
1-Mar	Spring Home & Garden Show, Careport Centre	Hamilton
7-Mar	Greater Hamilton Home & Garden Show, Players Paradise	Stoney Creek
8-Mar	Greater Hamilton Home & Garden Show, Players Paradise	Stoney Creek
9-Mar	Greater Hamilton Home & Garden Show, Players Paradise	Stoney Creek
29-Mar	saveONenergy Spring Coupon Event, Lowes	Hamilton
4-Apr - 6-Apr	Lifestyle Home Show	St. Catharines
5-Apr	saveONenergy Spring Coupon Event, Lowes	Hamilton
19-Apr	saveONenergy Spring Coupon Event, Canadian Tire	Hamilton
19-Apr	Canadian Tire Event	St. Catharines
26-Apr	saveONenergy Spring Coupon Event, Lowes	Hamilton
5-Jun	World Environment Day	Hamilton
20-Jul - 22-Jul	Exchange Events, Canadian Tire	Hamilton & St. Catharines
13-Sep	Movie Night & Summer Festival Westmount Recreation Centre	Hamilton
26-Sep	Coupon Event , Canadian Tire	Hamilton & St. Catharines

<b>Business Customer &amp; Channel Partner Interactions 2014</b>		
<b>Date 2014</b>	<b>Event</b>	<b>City</b>
22-Jan	Gerrie Electric Lunch & Learn	Hamilton
26-Mar	Hamilton District Apartment Association Trade Show	Hamilton
26-Mar	Energy Excellence Awards	Stoney Creek
27-Mar	Realtors Association of Hamilton-Burlington	Hamilton
31-Mar	Osram Sylvania & Gerrie Electric Lighting Event	Burlington
14-Apr	Nedco-Electrifest Event	Mississauga
21-Aug	Gerrie Electric BBQ	Hamilton
8-Sep	Fall Classic Golf Tournament	St. Catharines
1-Oct	Energy Into Action	Mississauga
24-Oct	Electromart Trade Show	Hamilton
4-Dec	PM Expo - Trade Show	Toronto

## Appendix D: Glossary of Defined Terms

Term	Definition
AC	Air Conditioner
Audit Funding	Energy Audit Initiative
C&I	Commercial and Institutional
CAC	Central Air Conditioning
CASL	Canadian Anti-Spam Legislation
CBF	Capability Building Funding
CDM	Conservation and Demand Management
CFL	Compact Fluorescent Light
Code	Conservation and Demand Management Code for Electricity Distributors
Coupons	Coupons Initiative and Bi-Annual Retailer Event Initiative
CRM	Customer Relationship Management
DIL	Direct Install Lighting
DR1	Demand Response 1 Initiative
DR3	Demand Response 3 Initiative
EBC	Existing Building Commissioning
ECM	Electronically Commutated Motor
EDA	Electricity Distributors Association
EEM	Embedded Energy Manager
EM&V	Evaluation Measurement and Verification
ERII	Efficiency: Equipment Replacement Incentive Initiative
ERIP	Electricity Retrofit Incentive Program
GAM	Global Adjustment Mechanism
HPNC	High Performance New Construction Program
HRAI	The Heating, Refrigeration and Air Conditioning Institute of Canada
HVAC	Heating, Ventilation, and Air Conditioning
HVACR	Heating, Ventilation, Air Conditioning and Refrigeration
Hydro One	Hydro One Networks Inc.
IESO	Independent Electricity System Operator
IHD	In-Home Energy Display
KAM	Key Account Manager
LED	Light Emitting Diode
OEB or Board	Ontario Energy Board
OPA	Ontario Power Authority
PAB	Program Administration Budget
PBF	Participant Based Funding
peaksaver PLUS	Residential and Small Commercial Demand Response Initiative
PSUI	Process & Systems Program
REM	Roving Energy Manager
RETROFIT PROGRAM	Equipment Replacement Incentive Initiative
RFP	Request For Proposal
RPP	Regulated Price Plan
SBL	Small Business Lighting
Take Charge	Social Benchmarking Pilot Project Initiative
TOU	Time-of-Use