

September 30, 2014

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 – 2013 Conservation and Demand Management Annual Report (EB-2010-0215)

Horizon Utilities Corporation ("Horizon Utilities") respectfully submits its 2013 Conservation and Demand Management Annual Report in accordance with the Ontario Energy Board's filing requirements specified in Section 2.2 and Appendix C: Annual Report Template of the *Conservation and Demand Management Code* for *Electricity Distributors* issued September 16, 2010.

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

Sincerely,

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

# **Horizon Utilities Corporation**

# Conservation and Demand Management 2013 Annual Report

Submitted to:

Ontario Energy Board EB-2010-0215

Submitted on September 30, 2014

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# **Executive Summary**

This annual report is submitted by Horizon Utilities in accordance with the filing requirements set out in the Conservation and Demand Management ("CDM") Code (EB-2010-0215), specifically Appendix C Annual Report Template, as a progress report. Accordingly, this report outlines Horizon Utilities' CDM activities for the period of January 1, 2013 to December 31, 2013. It includes net peak demand and net energy savings achieved for 2011, 2012 and 2013, with discussion of the current and future CDM framework; CDM program activities; successes and challenges; as well as forecasted savings to the end of 2014.

Horizon Utilities did not apply for any Board-Approved CDM Programs during 2013. However, as noted in the Guidelines for Electricity Distributor Conservation and Demand Management, released April 26, 2012, the Ontario Energy Board ("OEB" or the "Board") has deemed Time-of-Use ("TOU") pricing a Province-wide Board-Approved CDM Program. The Ontario Power Authority ("OPA") is to provide measurement and verification on TOU. At the time of this report, the OPA has not released any verified results of TOU savings to Horizon Utilities.

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. These programs were rolled-out by the OPA in June 2011. In 2011, program activities were centered on building a foundation for full program execution over the next three years of the program term, including staffing, procurement, and program delivery.

In its 2012 CDM Annual Report, Horizon Utilities submitted its modification to its CDM strategy indicating that results were trending to achieve 80 % of its demand target and 100 % of energy by the end of 2014. An application was filed with the OPA for capability funding for three shared Key Account Management and Roving Energy Manager resources. The effort put forth by these resources in 2012 materialized in 2013 through increased customer participation in the RETROFIT program and Industrial program initiatives. In 2013, Horizon Utilities experienced an increase of 165 completed RETROFIT projects over 2012. These projects are a major contributor to Horizon Utilities' 2013 incremental savings and overall results. Participation of Industrial customers in the demand response program DR-3 program represents 22 % of the demand target.

As of December 31, 2013, Horizon Utilities has achieved 33.93 MW or 56 % of net incremental peak demand savings and 241 GWh or 86 % of net cumulative energy savings. A summary of the achievements towards the CDM targets using results that include the CDM savings contribution of demand response programs follows in Table 1 below. This is referred to as Scenario 2; Scenario 1 excludes CDM savings from demand response programs.

Table 1 - Verified and Forecast Net Peak Demand (Scenario 2) and Cumulative Net Energy Reduction

	2011 Verified	2012 Verified	2013 Verified	2014 Forecast	2014 Forecast as a % of 2014 CDM Target	CDM Target
Net Peak Demand Savings (MW)	12.08	20.21	33.93	48.29	80 %	60.36
Cumulative Net Energy Savings (GWh)	137.11	188.66	240.77	275.08	97.75 %	281.42

The updated 2014 CDM results forecast prepared for this report shows that there will be a shortfall of approximately 12.07 MW versus Horizon Utilities' 2014 peak demand reduction target. Although the forecasted peak demand savings are below the assigned target, Horizon Utilities expects to achieve 98% of the 2014 energy savings target. Given the expected shortfall in demand and energy savings, Horizon Utilities continues to work actively on participant engagement.

# Reasons for the Shortfall

Despite attempts for collaboration with other Local Distribution Companies ("LDCs"), the OPA and the Electrical Distribution Association ("EDA") to improve program participation and savings, Horizon Utilities is expecting a shortfall in CDM results as compared to target due to the following reasons:

- the timing of program implementation:
- the timing of project completion:
- the lack of participation in programs and the discounting of results through the evaluation, measurement and verification process:
- Gains made in the acquisition of new customer participants for the peaksaver PLUS® residential demand response initiative were negatively impacted by the attributed savings to Horizon Utilities allocated by the OPA being reduced from 0.39 kW/participant as compared to the provincial average of 0.54 kW/participant; and

Connection constraints at Hydro One Networks Inc. ("Hydro One") transformer stations
were a deterrent for behind the load displacement meter generation projects that would
otherwise have had a significant contribution to the demand and cumulative energy
targets

To attempt to overcome these obstacles in achieving targets, Horizon Utilities' emphasis on increased customer participation in initiatives has been effective for some programs, including the RETROFIT, peaksaver **PLUS®** and DR-3. Horizon Utilities has also leveraged its Energy Mapping pilot with the OPA. The Energy Mapping pilot Horizon Utilities has used the energy mapping best practices learned from the pilot project in order to take a more tactical approach to its customer engagement strategy. By working with local suppliers and contractors, Horizon Utilities has also increased customer participation in projects as well.

#### **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 electricity distributors. Accordingly, on November 12, 2010, the OEB amended the distribution license of Horizon Utilities to require Horizon Utilities, as a condition of its license, to achieve 281.42 GWh of energy savings and 60.36 MW of peak demand savings, over the period beginning January 1, 2011 through December 31, 2014.

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

The Code also requires a distributor to file annual reports with the Board. This is Horizon Utilities' third Annual Report. It has been prepared in accordance with the Code requirements and covers the period from January 1, 2013 to December 31, 2013.

Horizon Utilities submitted its 2011 Annual Report on September 30, 2012 which summarized the CDM activities, successes and challenges experienced by Horizon Utilities for the January 1, 2011 to December 31, 2011 period. The OEB's 2011 CDM Results report identified that the delay in the full suite of CDM Programs being made available by the OPA, and that the absence of some programs negatively impacted the final 2011 results for the LDCs. This issue was also identified in the Environmental Commissioners 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 meet 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 demand savings targets. Therefore, the main focus of the LDCs' remains 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 OPA has yet to provide Horizon Utilities with the allocation of neither CDM savings associated with TOU rates nor have OPA posted any Provincial TOU related CDM savings. The OEB's Conservation and Demand Management Report – 2012 Results EB-2010-0215 identified that the majority of LDCs have achieved close to 20% of their net peak demand (kW) target from their 2012 results. Based on the 2013 OPA Final Verified Results report, LDCs collectively achieved 48% of the demand target under Scenario 2 and only 27% under Scenario 1.

According to the 2013 OPA Final Verified Results report, LDCs collectively achieved approximately 85.7% of the provincial energy savings (kWh) target. It was estimated that each year LDCs needed to achieve a minimum of 10% of their target in order to meet their respective 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 Conservation and Demand Management Report – 2012 Results identified that although there have been improvements to programs, some shortcomings to the design and delivery of initiatives still remains. These have resulted in less than anticipated customer participation in some programs. The report also identified that some initiatives are reaching the point of market saturation; new initiatives need to be developed in order replace the existing initiatives.

# 1 Board-Approved CDM Program

#### 1.1 Introduction

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

At this time, the implementation of TOU Pricing has been deemed a Board-Approved CDM program that is being offered in Horizon Utilities' service area.

# 1.2 TOU Pricing

# 1.2.1 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 distributors. On this basis, the OEB has determined that distributors will not have to file a Board-Approved CDM program application regarding TOU pricing. The OEB has deemed the implementation of TOU pricing to be a Board-Approved CDM program for the purposes of achieving the CDM targets. The costs associated with the implementation of TOU pricing are recoverable through distribution rates, and not through the Global Adjustment Mechanism ("GAM").

The OEB stated in the April 26, 2012 CDM Guidelines that verified CDM savings from TOU pricing will be determined by the OPA's Evaluation, Measurement and Verification ("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 distributors.

The OPA had retained the Brattle Group as the evaluation contractor and has been working with an expert panel convened to provide ongoing advice on methodology, data collection, models, and savings allocation. Evaluations are being conducted for the years 2012 - 2014 with five LDCs – Hydro One Networks, Toronto Hydro Energy Services Limited, Hydro Ottawa, Thunder Bay Hydro and Newmarket-Tay Power Distribution. 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. Preliminary results demonstrated load shifting behaviours from the residential customer class. Three additional LDCs were added to the study in 2014 – Cambridge and North Dumfries Hydro Inc., Powerstream and Greater Sudbury Hydro Inc., with preliminary results from this study being issued to the participating LDCs in September 2014. The OPA advised that the study will be complete in the summer of 2015. It will include a final report providing provincial savings results by MW and MWh, with allocated savings results by LDC for inclusion in the 2014 Final Results Report.

On November 26, 2013, the OPA received its "Impact Evaluation of Ontario's Time of Use Rates: First Year Analysis" report prepared by The Brattle Group which studied the impact of TOU rates for four LDC's. However, as of September 30, 2014, the OPA has not released any gross savings or verified CDM results from TOU rates to Horizon Utilities or for Province-Wide results. Therefore, Horizon Utilities is not able to provide any verified savings related to the TOU program at this time. Without visibility on the Province-Wide savings, it is difficult to forecast expected CDM savings from TOU pricing that will be allocated to the Horizon Utilities' demand target.

#### 1.2.2 TOU PROGRAM DESCRIPTION

**Target Customer Type(s):** Residential and small business customers (General Service <50 kW)

Initiative Frequency: Year-Round

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

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

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

RPP TOU	Rates (cents/kWh)			
<b>Effective Date</b>	On Peak	Mid Peak	Off Peak	
1-Nov-10	9.9	8.1	5.1	
1-May-11	10.7	8.9	5.9	
1-Nov-11	10.8	9.2	6.2	
1-May-12	11.7	10.0	6.5	
1-Nov-12	11.8	9.9	6.3	
1-May-13	12.4	10.4	6.7	
1-Nov-13	12.9	10.9	7.2	
1-May-14	13.5	11.2	7.5	

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

**Initiative Activities/Progress:** Horizon Utilities began transitioning its RPP customers to TOU billing in December, 2009. As of December 2013, Horizon Utilities has 235,494 customers (218,504 residential and 16,990 General Service <50 kW) billed on TOU rates. Horizon Utilities is considered to have completed its' Smart Meter transition.

# 1.3 Horizon Utilities' Application with the OEB

Horizon Utilities did not submit a CDM program application to the OEB in 2013.

# 1.4 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 province-wide initiatives. The Conservation Fund's LDC Program Innovation Stream fast-tracks LDC led program design and the launch of successfully piloted initiatives prior to full scale deployment. By driving program innovation through the Conservation Fund, LDCs have the opportunity to both realize additional savings through the piloting and implementation of initiatives not currently addressed by the OPA portfolio and the means to test concepts for future local or province wide programs post 2014. As per the OPA, as of March 2014, three pilots have been contracted and are underway with Toronto Hydro and Niagara Peninsula Energy and ten others are in various stages of the contracting and development process. One of the key projects being completed through the Conservation Fund is Horizon Utilities' Energy Mapping project (the "Energy Mapping project"). The Energy Mapping project is 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 can develop residential market segments and deliver marketing materials that align to the values of each customer segment. For commercial customers, Horizon Utilities can direct information about conservation incentives to customers in industries or building types that will benefit most from the implementation of energy efficient measures.

In 2013, building on LDC interest in behavior based CDM programs for the residential sector, the OPA, in collaboration with Hydro One, Milton Hydro and Horizon Utilities, completed the procurement of three social benchmarking pilot projects through the OPA Conservation Fund. Horizon Utilities expects to launch its social benchmarking pilot program on October 1, 2014. Beginning in 2014, social benchmarking behavior based reporting services will be offered to more than 100,000 customers for a one year period, with evaluation reports published shortly thereafter. Horizon Utilities was provided an estimate that 2 MW in demand and 10 GWh in energy savings would be saved annually. Since this pilot is being launched in late October 2014, the opportunity for any material savings to target has greatly diminished especially since the 2014 summer peak has elapsed. This social benchmarking pilot tests behavioural science methodology and gamification elements using rewards to entice customers to reduce energy use and demand.

# 2 OPA-Contracted Province-Wide CDM Programs

#### 2.1 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, which is listed below. Program details are included in Appendix A. In addition, results include projects started pre-2011 which were completed in 2011.

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

Table 2 – Programs Contracted with the OPA

Initiative	Schedule	Date Schedule Posted	Customer Class	In-Market Date for Horizon Utilities
Residential Program				
Appliance Retirement	Schedule B- 1, Exhibit D	Jan 26 2011	All residential rate classes	January 26, 2011
Appliance Exchange	Schedule B- 1, Exhibit E	Jan 26 2011	All residential rate classes	January 26, 2011
Heating Ventilation Air Conditioning ("HVAC") Incentives	Schedule B- 1, Exhibit B	Jan 26 2011	All residential rate classes	January 26, 2011
Conservation Instant Coupon Booklet	Schedule B- 1, Exhibit A	Jan 26 2011	All residential rate classes	January 26, 2011
Bi-Annual Retailer Event	Schedule B- 1, Exhibit C	Jan 26 2011	All residential rate classes	January 26, 2011
Residential Demand Response	Schedule B-	Aug 22 2011	All general service classes	June 20, 2012
New Construction Program	Schedule B- 2	Jan 26 2011	All residential rate classes	July 1, 2013
Commercial & Institu	tional Program			
Efficiency: Equipment Replacement	Schedule C- 2	Jan 26 2011	All general service classes	January 26, 2011 using a paper based application
Direct Install Lighting	Schedule C- 3	Jan 26 2011	General Service < 50 kW	January 1, 2011
Existing Building Commissioning Incentive	Schedule C- 6	March 2, 2011	All general service classes	July 5, 2012
New Construction and Major Renovation Initiative	Schedule C-4	Feb 1, 2011	All general service classes	Feb 1, 2011

Initiative	Schedule	Date Schedule Posted	Customer Class	In-Market Date for Horizon Utilities
Energy Audit	Schedule C-	Jan 26, 2011	All general service classes	April 2011
Commercial Demand Response (part of the Residential program schedule)	Schedule B-3	Jan 26, 2011	All general service classes	
Demand Response 3 (part of the Industrial program schedule)	Schedule D- 6	May 31, 2011	General Service 50 kW & above	January 1, 2011
Industrial Program				
Process & System Upgrades	Schedule D-	May 31, 2011	General Service 50 kW & above	August 2011
Monitoring & Targeting	Schedule D- 2	May 31, 2011	General Service 50 kW & above	August 2011
Energy Manager	Schedule D- 3	May 31, 2011	General Service 50 kW & above	January 26, 2011
Key Account Manager	Schedule D- 4	May 31, 2011	Large User >5 MW	August 2011
Efficiency: Equipment Replacement Incentive (part of the Commercial and Institutional ("C&I") program schedule)	Schedule C-2	May 31, 2011	General Service 50 kW & above	January 1, 2011
Demand Response 3	Schedule D- 6	May 31, 2011	General Service 50 kW & above	January 2011
Home Assistance Pro	ogram			
Home Assistance Program	Schedule E-	May 9, 2011	All residential rate classes	June 20, 2012
Pre-2011 Programs c	ompleted in 20	11		
Electricity Retrofit Incentive Program	Schedule B- 2 -A	April 12, 2010	All general service classes	January 1, 2011
High Performance New Construction	n/a	n/a	All general service classes	January 1, 2011
Multifamily Energy Efficiency Rebates	n/a	n/a	All general service classes	N/A

As per the Table 3 below, several program initiatives are no longer available to customers or were not launched in 2013.

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

Not in Market	Objective	Status
Residential Program		
Midstream Electronics	Encourages retailers to promote and sell high efficency televisions, and for distributors to distribute high efficiency set top boxes.	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.
Commercial & Institution	onal Program	
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 no plans to launch this initiative in 2013.
Demand Response 1 ("DR1")	This initiative allows distribution customers to voluntarily reduce electricity demand during certain periods of the year pursuant to the DR 1 contract. The initiative provides DR payment for service for the actual electricity reduction provided during a demand response event.	No customer uptake for this initiative. As a result this Initiative was removed from the Schedule in Q4, 2012.
Industrial Program		
DR1	As above	No customer uptake for this initiative. Removed in Q4, 2012.

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

# 2.2 Program Descriptions

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

#### 2.2.1 CONSUMER PROGRAM

**Description:** Provides residential customers with programs 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:

Horizon Utilities included LED technology in the Biannual Coupon Event and in the annual coupon initiative in July 2013 which had a positive effect on consumer engagement. There was the additional benefit of three LDC custom coded coupon options for LDCs to utilize in 2013. The peaksaver **PLUS®** program continues to be the main residential initiative for LDCs and has been generally well received by consumers. Unfortunately, there were no savings associated with the In-Home Energy Display attributed to LDCs in the OPA's 2013 verified results. LDCs are awaiting the inclusion of these results in the 2013 verified results.

The Residential Program Portfolio is predominately a carryover of initiatives from previous programs. It is mostly driven by retailers and contractors who many not have fully delivered what was anticipated. Three new initiatives were never launched and subsequently removed from the schedule in 2013 with no new additions. Delays in communication with regards to initiative offerings and results reporting have hampered LDCs' abilities to engage customers and promote participation.

Work to revitalize and increase the effectiveness and breadth of the initiatives through the Residential Program continue to be a high priority. Opportunities within the Residential marketplace need to be identified, developed and offered to customers.

# 2.2.1.1 Appliance Retirement Initiative (Exhibit D)

# **Initiative Activities/Progress:**

The following illustrates the initiative activities and progress achieved in 2013:

# **Participation / Activity:**

 Total province-wide appliances uptake/participation was 20,952 units, of which Horizon Utilities contributed 878 units or 4.2% to the provincial results

# **Net Savings:**

 The incremental peak demand savings was 57 kW and the incremental energy savings was 373,209 kWh

# **Contribution to Targets:**

- The total program-to-date verified net peak demand savings contributed 320 kW to the 2014 demand target
- The 2011-2014 net cumulative energy savings is 7,707,371 kWh

# **Marketing & Promotional Tactics Used:**

In 2013, Horizon Utilities provided marketing support for this initiative through:

- Outer bill envelope printed advertising with over 570,000 distributed
- Bill statement messaging was printed on over 510,000 bills distributed to all residential customers
- 38 retail events resulted in over 1300 customer interactions
- Promotion at 19 community events having over 2,900 face to face conversations with the public
- Promotion at 6 home shows, achieving a total of over 4,000 customer interactions (see Appendix C for list of events)
- Collateral materials and fridge magnet handouts continued year round
- Advertising on the boards in Jack Gatecliff Arena created a gross number of 200,000 impressions at Niagara Ice Dogs hockey games during the 2012/2013 season
- Posters and advertising at community arenas (St. Catharines, Seymour Hannah Sports and Entertainment Centres) continued all year, with a gross number of 1,000,800 impressions
- Print newspaper advertising with co-promotion with saveONenergy<sup>OM</sup> HEATING & COOLING, a total of 36 colour ads in the Hamilton Spectator, St. Catharines Standard and the Hamilton Community Press, achieving approximately 3,297,196 impressions
- Promotion with City of St. Catharines and City of Hamilton with 3,000 Earth Day postcards
- Google Search Engine Optimization registered 2,059 visits and 3,298 page views

- Horizon Utilities' Website promotion and awareness is active all-year round generating over
   4,290 page views with one minute and twenty seconds average time on page
- Created awareness campaign using Social Media including Facebook, Blogs and Twitter

#### **Additional Comments:**

- Due to the duration of the Appliance Retirement Initiative, and the revised eligibility requirements to a minimum of 20 years old from the previous requirement of a refrigerator being 15 years old, this initiative appears to have reached market saturation and has been under consideration for removal from the Portfolio
- Rather than strictly remove this initiative from the schedules, the OPA and LDCs could review what opportunities there are to include other measures such as stoves, dishwashers, washers and dryers. The framework of this initiative may be a suitable foundation for a more holistic residential appliance retirement program. As such, the Residential portfolio could be strengthened through program evolution rather than weakened through diminished program offerings.
- As results are very responsive to province wide advertising, OPA provincial marketing should continue to play a key role
- Better relationships with retailers will play a large role in revitalizing this program. Retailers
  are essential to capture replacement appliances and having 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%.
- Historical results for the appliance retirement program since 2006 are as follows:

Year	Pickups
2006	1449
2007	1875
2008	3824
2009	4900
2010	2972
2011	3034
2012	1671
2013	878
Total	20603

- Participation rates in this initiative have been responsive to province-wide advertising by the OPA, supported by LDCs. In 2013, however, the OPA provided no mass media advertising support for this initiative.
- The OPA can make the availability of customer participation information more accessible on this program by including it in the LDC portal. This data would be useful in determining past participants in order to gauge marketing tactics to new potential participants versus program activity. With the change in the eligibility requirements for 2013, increasing the minimum age of refrigerators qualifying for the program from 15 years to a minimum age of 20 years, we have seen a significant decline in participation rates.
- The OPA and consumer 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. The Residential Program portfolio could be strengthened through program evolution rather than weakened through diminished program offerings.
- The experience of other jurisdictions should also be considered, where similar appliance retirement programs have typically included participant incentives of \$25 to \$50 (No participant cash incentives have been offered for any appliance pick up initiatives since the concept was first introduced into the Ontario market in 2006.)
- The OPA and Horizon Utilities will continue working to establish partnerships with independent retailers and municipalities. Horizon Utilities' experience with offering the service provider Just Junk a "referral fee" to attract participants is an example of such a partnership.

# 2.2.1.2 Appliance Exchange Initiative (Exhibit E)

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

The following illustrates the initiative activities and progress achieved in 2013:

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

- Total province-wide Appliance Exchange uptake/participation was 5,337
- Horizon Utilities' uptake/participation for the Appliance Exchange initiative was 178 units, or 3.3 % of the provincial results

#### **Net Savings:**

 The incremental peak demand savings was 37 kW and the incremental energy savings was 65,760 kWh

# **Contribution to Targets:**

- The total program-to-date verified net peak demand savings from this program initiative that contributes to the 2014 demand target is 62 kW
- The program-to-date 2011-2014 net cumulative energy savings is 307,519 kWh

# **Marketing & Promotional Tactics Used:**

In 2013, Horizon Utilities provided marketing support for this initiative through:

- Website promotion active throughout the year
- Promotion at nine retail events having over 200 face to face conversations with the public

#### **Additional Comments:**

- This initiative, eligible measures and incentive amounts are influenced by the retail partner
  with no direct involvement from the LDCs. The restrictive, limited and sometimes nonparticipation of local stores can diminish the savings potential for this initiative.
- Canadian Tire was the only retailer participant in the Appliance Exchange initiative in 2013
- 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
- Notification regarding retailer participation and eligible measures continues to be delayed.
   Improved communications will aid in appropriate resource allocation and marketing of the initiative.
- The initiative appears to require more promotion from retailers and LDCs
- As the in-store events are limited to twice per year, it would be helpful to be able to provide consumers with an in-store coupon incentive program, for products that can be purchased and contribute towards Horizon Utilities' Savings
- 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

#### 2.2.1.3 Heating and Cooling Incentive Initiative (Exhibit B)

# **Initiative Activities/Progress:**

The following illustrates the initiative activities and progress achieved in 2013:

# Participation / Activity:

 Total province-wide HEATING & COOLING INCENTIVE uptake/participation was 91,581 units, of which Horizon Utilities contributed 4,768, or 5.2 % of the provincial results

# **Net Savings:**

 The incremental peak demand savings was 974 kW and the incremental energy savings was 1,639,842 kWh

# **Contribution to Targets:**

- The program-to-date net peak demand savings that contributes to the 2014 demand target is 3,758 kW
- The program-to-date 2011-2014 net cumulative energy savings is 21,089,280 kWh

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

In 2013, Horizon Utilities provided marketing support for this initiative through:

- Print newspaper co-promotion advertising with saveONenergy<sup>OM</sup> FRIDGE & FREEZER PICKUP - a total of 29 full page ads in Hamilton Spectator, St. Catharines Standard, Hamilton Community Press, achieving approximately 2,948,779 impressions
- Print newspaper advertising posted a total of 21 spadia wraps one page ads in Hamilton Community Free Press and Hamilton Community News which created approximately 4,790,000 impressions
- Promotion on outer bill envelope which totaled over 1,700,000 distributed
- 38 retail events resulted in over 1,300 customer interactions
- Promotion at 19 community events having over 2,900 face to face conversations with the public
- Promotion at six home shows, achieving a total of over 4,000 customer interactions
- (see Appendix C for list of events)
- Bill statement messaging was printed on over 340,000 bills distributed to all residential customers
- Collateral material handouts were consistent throughout the year
- Promotion with City of St. Catharines and City of Hamilton, 3,000 Earth Day postcards
- Bill Inserts of two distinct waves, total of 400,000 distributed
- Deployed 636, ten second radio tags on seven radio stations (K-Lite FM, Y108, Fresh FM, CHML, CHRE, CHTZ, CKTB) generating 55,720,394 impressions Deployed two email blast campaigns with a distribution of 19,171 using AIRMILES® promotion (cross promotion with peaksaver PLUS® and FRIDGE & FREEZER Pickup)
- Horizon Utilities' Website promotion and awareness is active all-year round generating over 3,050 page views with 2:50 average time on page
- · Created awareness campaign using Social Media such as Facebook, Blogs and Twitter

#### **Additional Comments:**

- 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 increase the related uptake for this program.
- In an effort to build capacity by contractors to deliver the HVAC incentives, mandatory training has been instituted for all participating HVAC contractors. This additional training requirement is a barrier to the participation of those non-participating contractors as well as the OPA HEATING & COOLING INCENTIVE application process already presents an additional burden to the contractor sales process. There are approximately 4,500-5,000 HVAC contractors in the Province. However only 1,587 have completed the mandatory OPA training and are participating in program. Horizon Utilities has 56 participating contractors in the HVAC incentive initiative in its service territory.
- There are cases where those non-participating contractors are offering their own incentives (by discounting their installations to match value of the OPA incentive) to make the sale. As this occurs outside of the initiative, these installations should be attributed to the appropriate LDC. Changes to the OPA Master Agreement Schedule B1 in 2014 to allow for incentives for any installations, rather than strictly replacement units, may provide greater initiative results.
- Horizon Utilities should consider promoting participating contractors at the time of maintenance. The contractor performing a service call is most likely to make the recommendation for a replacement unit when a product is not fixable.
- In 2013, Horizon Utilities worked with the OPA to gather HVAC incentive participant specific location or postal code information to be used in conjunction with the Energy Mapping project
- Branding needs to be extended to Heating Refrigeration Air Conditioning Institute ("HRAI")
  contractors on advertising to promote and encourage customers to be more effective in
  leveraging the saveONenergy OM HEATING & COOLING INCENTIVE
- Incentive levels appear to be insufficient to prompt participants to upgrade HVAC equipment prior to end of useful life
- 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 central air conditioning ("CAC") sales to eligible units.
- Channel partners require timeliness of the rebate process to maintain a positive relationship between consumers, contractors, the OPA, and the participating LDC. In an effort to build capacity, mandatory training has been instituted for all participating HVAC contractors. This could present too much of a barrier for participation for some contractors as the application process already presents a restriction to contractor sales.

# 2.2.1.4 Conservation Instant Coupon Initiative (Exhibit A)

# **Initiative Activities/Progress:**

The following illustrates the initiative activities and progress achieved in 2013:

# **Participation / Activity:**

 Total province-wide coupons uptake/participation was 346,896 units of which Horizon Utilities was allocated 14,024 or 4 % to the provincial results

# **Net Savings:**

 The incremental peak demand savings was 21 kW and the incremental energy savings was 311,606 kWh

# **Contribution to Targets:**

- The program-to-date net peak demand savings that contributes to the 2014 demand target is 80 kW
- The program-to-date 2011-2014 net cumulative energy savings is 4,033,967 kWh

# **Marketing & Promotional Tactics Used:**

- Promotion at 19 community events with over 2,900 face to face conversations with the public.
- Promotion at six home shows, achieving a total of over 4,000 customer interactions (see Appendix C for list of events)
- Horizon Utilities' Website promotion and awareness is active all-year round generating over 2,800 page views with 1:22 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 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 out in 2013 so were not widely available to consumers without the ability 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.
- Program 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 have been provided with LDC custom coding so as to be able to push specific coupons based on localized needs.
- Consumer experience varies among retailers offering coupon discounts; such 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 programs would benefit from specific end cap displays, aisle product stands and product-specific areas. Having products scattered throughout different retail shelving environment weakens the impact.
- A conservation coupon booklet could be used all year to encourage customer participation and in-store retailer visits
- LDCs should be able to custom code all coupons to provide 100 % allocation and push specific coupons based on localized needs
- The product list should be distinctive from the Bi-Annual Retailer Event initiative in order to gain more consumer interest and uptake
- Program evolution, including new products and review of incentive pricing for the coupon initiatives, should be a regular activity to ensure continued consumer interest

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

# **Initiative Activities/Progress:**

The following illustrates the initiative activities and progress achieved in 2013:

# **Participation / Activity:**

- Total province-wide bi-annual retailer event uptake/participation was 944,772 units
- The OPA allocated Horizon Utilities participation results for the bi-annual retailer event. The result was 38,196 units, or 4% to the provincial results

#### **Net Savings:**

 The incremental peak demand savings was 48 kW and the incremental energy savings was 694,555 kWh

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

- The program-to-date net peak demand savings that contributes to the 2014 demand target is 176 kW
- The program-to-date 2011-2014 net cumulative energy savings is 9,389,704 kWh

# **Marketing & Promotional Tactics Used:**

In 2013, Horizon Utilities provided marketing support for this initiative through:

- Website promotion throughout the year
- Promotion at 19 community events having over 2,900 face to face conversations with the public
- Print newspaper advertising, three colour ads in the Hamilton Spectator, Hamilton Community Free Press and in the St. Catharines Standard generated over 323,702 Impressions
- Horizon Utilities' Website promotion and awareness is active all-year round generating, over
   419 page views with 0:56 average time on page
- Issued four press releases in February, March and September 2013

#### **Additional Comments:**

- 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 evolution, including new products (for example, LED lighting) and review of incentive pricing for the coupon initiatives, must be a regular activity to ensure continued consumer interest
- The product list could be distinctive from the Conservation Instant Coupon initiative in order to gain more consumer interest and uptake
- A review conducted by the EDA Residential Working Group in Q4 2011 identified three areas of need for initiative evolution:
  - 1. Introduction of product focused marketing
  - 2. Enhanced product selection
  - 3. Improved training for retailers as retail staff tend not to be knowledgeable regarding the products or promotion
- This initiative may benefit from a more exclusive relationship with a retailer appropriate to the program. There should be a value proposition for both the retailer and LDC.
- Some retailers have been rejecting coupons on qualified products as store name is 'not on the list', resulting in reduced participation
- The Retailer Co-op and 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 consumer 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.

# 2.2.1.6 Retailer Co-op

# **Initiative Activities/Progress:**

The following illustrates the progress achieved in 2013:

#### 2013 Results:

None

#### **Additional Comments:**

 This initiative was not in market in 2013 and produced no CDM savings provincially or for Horizon Utilities

#### **Additional Comments:**

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

# 2.2.1.7 New Construction Program (Schedule B-2)

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

The following illustrates the initiative activities and progress achieved in 2013:

# **Participation / Activity:**

 There was no participation by Horizon Utilities' customers in the Residential New Construction program; the province wide results were only 131 participants to date

# **Net Savings:**

None

# **Contribution to Targets:**

None

# **Marketing & Promotional Tactics Used:**

- Horizon Utilities attended two home builder meetings to discuss the program with individual builders and developers
- Horizon Utilities entered into an agreement with a provider who would be tasked with reaching out to builders, explaining the program and generating applications. This is expected to generate a significant number of final applications in 2014, as it produced over 140 preliminary applications for homes under construction in 2013.

#### **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

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

# **Initiative Activities/Progress:**

The following illustrates the initiative activities and progress achieved in 2013:

# **Participation / Activity:**

- The 2013 province-wide *peaksaver* **PLUS**® new participation was 73,345 thermostats and 83,968 in-home displays
- Horizon Utilities' 2013 new participation for peaksaver PLUS® was 4,167 programmable thermostats and 4,513 in-home displays to residential consumers, or 4.9% of the provincial thermostat total. Horizon Utilities' in-home display total was 5.3% of the provincial total for the year
- Total province-wide peaksaver PLUS® participation (program-to-date) was 171,733 thermostats at the end of 2013. Horizon Utilities' portion of the total was 9,560 thermostats, or 5.5 %

# **Net Savings:**

 Horizon Utilities' incremental peak demand savings was 1,039 kW and the incremental energy savings was 11,153 kWh

# **Contribution to Targets:**

- The program-to-date net peak demand savings that contributes to the 2014 demand target was 3,738 kW for Horizon Utilities
- The program-to-date net cumulative energy savings was 27,633 kWh

# **Marketing & Promotional Tactics Used:**

In 2013, Horizon Utilities provided marketing support for this initiative through:

- A new marketing campaign was created using a "Celebration" theme based on the Energy Mapping database to target key customer segments. Leveraging the Energy Mapping database, approximately 90,000 households were identified to have central air conditioning. This group was sub-segmented into clusters of similar customers. A total of seven targeted direct mail campaigns were deployed in 2013. Multiple campaigns to Horizon Utilities' eligible customers resulted in a total of approximately 217,200 direct mail pieces being sent over seven separate campaigns to in 2013
- Horizon Utilities leveraged its energy mapping database to better understand the needs of its residential customers in relation to peaksaver PLUS®. We were able to identify that specific demographic groups showed a higher propensity to participate in peaksaver PLUS® than other groups. 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 we are experiencing increased market penetration into market segments who have not traditionally participated in peaksaver PLUS®. Developing a better understanding of demographic groups has also shaped the marketing mix. Recognizing that small segments may have a much higher propensity to participate in the program the decision to contact customers in small, but key, demographic segments was tested to positive results. In one specific direct mail campaign, Horizon Utilities experienced a response rate of 3.1 % versus a response rate of 0.78 % that was experienced in the previous direct mail effort. The small outbound telephone campaign that was completed in conjunction with the direct mail resulted in 18 % of the customers spoken with signing up for the program.
- A total of 14 print ads placed in Hamilton Spectator and St. Catharines Standard generating over 1,536,059 impressions
- Promotion at 19 community events having over 2,900 face to face conversations with the public
- Promotion at six home shows, achieving a total of over 4,000 customer interactions (see Appendix C for list of events)
- Website related materials generated in excess of 108,000 page views

- Bill statement inserts in four distinct waves totaled 690,000 inserts
- Online banner advertising on The Weather Network consisting of gross impressions 1,480,000
- Telemarketing to over 5,800 customers promotion of upgrades from peaksaver® to the new peaksaver PLUS®
- Telemarketing to over 3,000 customers promotion follow up to direct mail
- On bill messaging consisted of a total of 1,190,000 statements
- Deployed two email blast campaigns (Sept. and Oct.) with a distribution of 19,171 using AIRMILES<sup>®</sup> promotion (cross promotion with the saveONenergy<sup>om</sup> HEATING & COOLING INCENTIVE Program and the saveONenergy<sup>om</sup> PICKUP program)
- Created awareness campaign using Social Media such as Facebook, Blogs and Twitter

#### **Additional Comments:**

• The peaksaver PLUS® initiative underwent the evaluation, measurement and verification process resulting in a decrease in the attributed demand savings in for residential central air conditioning systems in Horizon Utilities' territory. In 2012, the total peak savings for peaksaver PLUS® was 2,699kW with 5,393 customers participating, providing a contribution of .50 kW per participant. In 2013, the total peaks savings for peaksaver PLUS® was 3,738kW with 9,560 customers participating, providing a contribution of 0.39 kW per participant. The 2013 results demonstrate that the net contribution per device is lower for Horizon Utilities than the province as illustrated below.

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

As shown below, this change in allocated demand savings per participant represents a decrease in net kW demand savings of 1.4 MW or 2% of the Horizon Utilities demand target.

	2013
Total Number of installed devices 2011 – 2013	9,560
Current Horizon Utilities contribution based on 0.39 kW/participant	3,728
Horizon Utilities contribution based on Provincial Average of 0.54 kW/participant	5,162
Current kW Loss to Horizon Utilities Demand Target (kW)	-1,434
% to Horizon Utilities Demand Target	-2%

- Despite these results, Horizon Utilities intends to work with the OPA to investigate this decrease in allocated demand savings per participant further
- Outbound calling was introduced in late 2013 as a method of marketing the peaksaver PLUS® program. Calling was identified as a valuable avenue as customers in focus groups and interviews repeatedly indicated a lack of understanding of the program details. Many potential customers have several questions to be answered before a participation decision is made. Questions often revolve around 'control' of the participant's thermostat, as well as misunderstandings about the relationship between smart meters, TOU and peaksaver PLUS®.
- Energy Mapping was used in 2013 to select key market segments to include in outbound calling efforts. It was determined that certain demographics were more likely to respond to the program, and Energy Mapping also revealed details such as type of home, age of home, type of home heating and presence of AC which helped to pinpoint potential participants.
- Some manufacturers of in-home energy displays are introducing technology that allows the
  in-home energy display to read data directly from the smart meter. However, this requires
  utilities that have installed smart meters that do not have the technology required to transmit
  data to an in-home energy display, such as zigbee chip. When proposing technical initiatives
  that rely on existing LDC hardware or technology the existing metering infrastructure for
  utilities needs to be considered.
- In 2013, there were more options available in terms of In-Home Energy Display ("IHD") products, including IHDs that were able to communicate directly with smart meters. Horizon Utilities continued to use the Blueline IHD it had originally selected, which uses a collar installed externally to the meter in order to communicate meter data to the handheld 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 2013, LDCs did not receive any energy or demand savings associated with the
  installation of in-home energy displays. With peaksaver PLUS® being the main initiative in
  the residential portfolio the opportunity to gain savings reductions from residential customers
  is greatly reduced.
- In a few cases customers did not want the in home energy display due to performance limitations of the device to communicate over a long distance between the electrical meter and the dwelling. Currently the Blue Line in-home energy display product does not adapt to statutory holidays for off peak energy pricing.
- Horizon Utilities has approved the use of an in-home energy display provided by Efergy in
  cases where the range of the in-home energy display supplied by Blue Line Innovations is a
  problem for the customer, as the Efergy unit has shown to have a better effective range than
  the Blueline unit. The Efergy in-home energy display also reportedly has better battery
  performance, and its collar design is less likely to lead to signal loss due to collar misalignment.

#### 2.2.2 COMMERCIAL AND INSTITUTIONAL PROGRAM

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

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

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

The most important of the C&I Program initiatives with respect to the provision of demand and energy savings are the Efficiency: Equipment Replacement Incentive initiative (the "RETROFIT Program", also known as the "ERII Program") and the Direct Install Lighting Program initiative (the "DIL Program", also known as the "Small Business Lighting Program"). Both are continuations of earlier programs that have been refined over time, particularly to increase the incentives available.

Participants in the DIL Program, for which business customers in the General Service < 50 kW category are eligible, can receive 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 the DIL Program or Power Savings Blitz is restricted to only once per eligible facility, Horizon Utilities has experienced lower participation rates in 2011 to 2013 versus the provincial average.

While the RETROFIT Program is targeted at all sizes and types of business customers and for almost any energy efficient product or measure, most applications for this initiative involve lighting replacement projects. Including 118 projects completed in 2011 under the previous version of this initiative, the Electricity Retrofit Incentive Program ("ERIP"), 799 eligible equipment replacement/upgrade projects have been completed by customers of Horizon Utilities as of December 31, 2013. Horizon Utilities' participation rates for the RETROFIT Program are approximately one project completed for every three General Service Customers >50 kW.

Horizon Utilities has undertaken a number of steps to improve its results for the RETROFIT Program. Commencing in late 2012 and continuing in 2013, Horizon Utilities has implemented a channel partner engagement program by hiring a Channel Partner Supervisor and offering a series of training sessions for equipment manufacturers, distributors and contractors. This has resulted in an increase in new project applications overall, improved quality in the applications (i.e. applications are 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 has also refined its sales and marketing approaches to business customers; for example, by 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, while the proportion of applications that were deemed to be ineligible decreased by over 50 % year-over-years.

Throughout 2011 to 2013, the EDA C&I Working Group, comprised of representatives of LDCs and the OPA, has strived to enhance the existing C&I Program initiatives and to rectify identified operational and system deficiencies. This continues to be a challenging undertaking, normally taking months to complete even relatively minor changes due to the current CDM framework. In 2013, the introduction of an expedited change management process helped to fast track small intuitive changes into market. The removal of participant agreements and forms from the schedules has helped reduce the length of time it takes to process changes.

Management of the C&I Program by LDCs continues to be hampered by varying interpretations of initiative eligibility requirements, a somewhat inflexible online 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 have 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 have not yet achieved transparency. LDCs are held accountable for verified net demand and energy savings results as reported by the OPA, yet are mostly completely removed from the process.

# 2.2.2.1 Efficiency: Equipment Replacement Incentive (RETROFIT Program) (Schedule C-2)

# **Initiative Activities/Progress:**

The following illustrates the initiative activities and progress achieved in 2013:

# **Participation / Activity:**

- Total province-wide participation under the C&I Program since January 1, 2011 was 17,738 retrofit projects
- Horizon Utilities completed 372 retrofit projects in 2013, and since January 1, 2011 has contributed 666 projects under the C&I Program, or 3.8 % to the provincial results

# **Net Savings:**

 The incremental peak demand savings in 2013 was 2,948 kW and the incremental energy savings was 16,367,574 kWh

# **Contribution to Targets:**

- The program-to-date net peak demand savings that contributes to the 2014 demand target is 5,309 kW excluding adjustments to prior years reported by the OPA, or 8.8 % of Horizon Utilities' 2014 CDM Target
- The program-to-date 2011-2014 net cumulative energy savings is 80,195,294 kWh excluding adjustments to prior years reported by the OPA, or 28.5 % of Horizon Utilities' 2014 CDM Target

# **Marketing & Promotional Tactics Used:**

In 2013, Horizon Utilities provided marketing support for this initiative through:

- Print newspaper advertising in the Hamilton Spectator and the St. Catharines Standard, 30 colour ads generating over 3.3MM impressions
- Deployed 1,000 direct mail pieces to key decision makers
- Promotion on local radio weather and traffic ads, a total of 1,265 spots creating over 1.1MM impressions
- Online advertising generating 34,700 impressions on Hamiltonbusiness.com and the websites for the Hamilton Chamber of Commerce and the St. Catharines Chamber of Commerce
- Hosted an "Energy Excellence Awards" event on March 22, 2013 that saw over 60
  participants attend where recognition was given to customers that had RETROFIT projects
  with significant demand and energy savings. Also recognized were customers and their
  project representatives who completed projects that involved innovative design or measures.
- Created a You Tube video hosted on Horizon Utilities' website and distributed by City of Hamilton's Economic Development using social media and website
- Bill insert promotion of roof-top air-conditioning units 13,200 pieces distributed to small commercial customers
- Promoted at 25 business-related events interfacing with over 535 customers and channel partners (see Appendix C for the list of events)
- Promoted on Horizon Utilities' website on a year-round basis, generating over 2,205 page views with about two minutes average time on page
- Created awareness using Social Media such as Twitter and Facebook

#### **Additional Comments:**

- Horizon Utilities' 2013 RETROFIT Program results increased by 165 completed projects as compared to 2012. More than 200 additional project applications remained in progress and carried-over into 2014.
- Horizon Utilities experienced an increase in the percentage of non-lighting project applications of approximately 20 % for 2013 versus 12.5 % for 2012 and less than 10 % for 2011

- The average size of projects completed in 2013 by customers of Horizon Utilities was 7.9 kW in terms of demand savings and 44,000 kWh in terms of net incremental energy savings. Compared to projects completed in 2012, where the average project size was 8.5 kW and 57,100 kWh, respectively. This trend of decreasing project size has been experienced by other LDCs, as evidenced by similar trends in the results province-wide.
- Capability building programs from the Industrial Program have had positive contributions to RETROFIT Program results. Over 100 projects that were closed out in 2013 involved a Roving Energy Manager.
- Applicants and Applicant Representatives continue to express dissatisfaction and difficulty with the online application system. This issue has been addressed by LDCs through application training workshops, Key Account Managers, channel partner/contractor training and LDC staff acting as 'Applicant Representatives' on behalf of customers. Although this has been an effective method of overcoming these issues and encouraging submissions, it also reflects on the complexity and time consuming nature of the application process. As such, Applicant Representatives continue to influence the majority of applications submitted. Continued development of channel partners is essential to program success.
- The requirement for pre-approval of projects prior to their commencement is a barrier, particularly for participants that need to replace equipment that has failed and must be replaced immediately. In the second half of 2013, changes to the 'Prescriptive' application process for the emergency replacement of HVAC equipment have been implemented to allow for project applications to be completed after-the-fact, and the incentives available have been increased.
- The requirement to have a customer invoice the LDC for their incentive is very burdensome for the customer and results in a negative customer experience and is 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 LDC's
  taking on Head Office applications is a requirement to make processing applications efficient
  for the customer and Lead LDC.
- Streamlining of the settlements system and procedures by the OPA resulted in a significant improvement in the payment process in 2013

# 2.2.2.2 Direct Install Lighting Initiative (DIL Program) (Schedule C-3)

# **Initiative Activities/Progress:**

The following illustrates the initiative activities and progress achieved in 2013:

# **Participation / Activity:**

- Total province-wide participation in the DIL Program since January 1, 2011 was 57,214 projects
- Horizon Utilities completed 415 projects in 2013, and since January 1, 2011 has contributed 1,792 projects or 3.1 % to the provincial results

#### **Net Savings:**

 The incremental peak demand savings in 2013 was 453 kW and the incremental energy savings was 1,442,489 kWh

# **Contribution to Targets:**

- The program-to-date net peak demand savings that contributes to the 2014 demand target is 1,531 kW excluding adjustments to prior years reported by the OPA, or 2.5% of Horizon Utilities' 2014 CDM Target
- The program-to-date 2011-2014 net cumulative energy savings is 14,816,492 kWh excluding adjustments to prior years reported by the OPA, or 5.3% of Horizon Utilities' 2014 CDM Target

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

In 2013, Horizon Utilities provided marketing support for this initiative through:

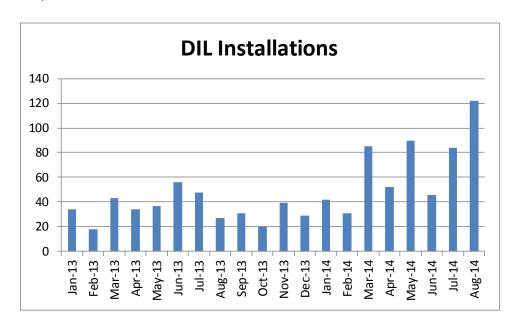
- Print newspaper advertising in the Hamilton Spectator and the St. Catharines Standard, generating over 160,000 impressions
- Continued to call on potential clients through "door-to-door" approach and distributed collateral sell sheets through this activity
- Promoted at 25 business-related events interfacing with over 535 customers and channel partners (see Appendix C for the list of events)
- Promoted on Horizon Utilities' website on a year-round basis, generating over 800 page views with and more than 3 minutes average time on page
- Created awareness using Social Media such as Twitter and Facebook

#### **Additional Comments:**

 Horizon Utilities' 2013 DIL Program results decreased by 247 completed projects as compared to 2012. As noted earlier, successful execution of the previous version of this initiative, the Power Savings Blitz has resulted in diminished potential for the initiative in Horizon Utilities' service area. A summary of the annual participation levels in these programs is as follows:

<u>Year</u>	<u>Participants</u>
2008	504
2009	3,257
2010	1,954
2011	715
2012	662
2013	<u>415</u>
Total	<u>7,507</u>

 In March 2014, Horizon Utilities began leveraging the Energy Mapping database as a method of identifying Direct Install Lighting opportunities. The table below illustrates the positive impact in installations versus 2013.



- LED lighting (for standard light bulbs) was introduced in 2013 as a new measure and has been well received by customers who may not have previously qualified for any eligible upgrades. This is an efficient product with a long estimated useful life.
- Measure incentives and additional funding for lifts were introduced in September 2013 and were well received by installers

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

# **Initiative Activities/Progress:**

The following illustrates the initiative activities and progress achieved in 2013:

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

None reported province-wide since January 1, 2011

#### **Net Savings:**

None

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

None

# Marketing & Promotional Tactics Used:

In 2013, Horizon Utilities provided marketing support for this initiative through:

- Promoted directly by Key Account Managers, Embedded and Roving Energy Managers and channel partners to eligible customers
- Included in collateral material available for all C&I Program initiatives
- Promoted on Horizon Utilities' website on a year-round basis

#### **Additional Comments:**

- Horizon Utilities deployed the first channel partner to support this initiative in Ontario in 2012. This resulted in two approved projects initiated in 2012 and 14 approved projects in 2013; although no demand or energy savings have been attributed to any of these projects as of December 31, 2013.
- The prescribed implementation of this initiative dictates that all measurements, both preand post-project, be conducted within the months of June through September. Given that the pre-project phase requires data be collected for 60 consecutive days, it is imperative that all pre-project measurements commence in early June or the implementation of the improvements 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 has been proposed in 2014 through the C&I working group that the data collection period be reduced to 30 days.

# 2.2.2.4 New Construction and Major Renovation Initiative (HPNC Program) (Schedule C-4)

# **Initiative Activities/Progress:**

The following illustrates the initiative activities and progress achieved in 2013:

# **Participation / Activity:**

- Total province-wide participation in this initiative (the "HPNC Program", also known as the High Performance New Construction Program) since January 1, 2011 is 177 projects
- Horizon Utilities completed three projects in 2013, and since January 1, 2011 has contributed 5 projects or 2.8% to the provincial results

# **Net Savings:**

• The incremental peak demand savings in 2013 was 6 kW and the incremental energy savings was 20,831 kWh

## **Contribution to Targets:**

- The program-to-date net peak demand savings that contributes to the 2014 demand target is 6 kW excluding adjustments to prior years reported by the OPA, or <1% of Horizon Utilities' 2014 CDM Target
- The program-to-date 2011-2014 net cumulative energy savings is 45,654 kWh excluding adjustments to prior years reported by the OPA, or <1% of Horizon Utilities' 2014 CDM Target

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

In 2013, Horizon Utilities delivered this initiative through the services of Enbridge Gas Distribution Inc. ("Enbridge") and Union Gas Limited. The initiative is also promoted on Horizon Utilities' website on a year-round basis.

### **Additional Comments**

- This initiative has a very low Net-to-Gross ratio, which results 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.
- Per changes to Schedule C-4 in 2014, it is possible to accept applications with expected project completion dates of up to December 31, 2015. At the present time, however, projects with expected completion dates in 2016 or later are not eligible for this initiative and effectively do not qualify for any existing C&I Program. Customers have expressed frustration with respect to this situation.
- The application process for 'Custom' projects requires considerable customer support and skilled LDC staff, and potential participants often express that the effort involved exceeds the value of the incentives available

# 2.2.2.5 Energy Audit Initiative (Schedule C-1)

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

The following illustrates the initiative activities and progress achieved in 2013:

## **Participation / Activity:**

- The total province-wide participation in the Energy Audit initiative since January 1, 2011 is 862 projects
- Horizon Utilities contributed 8 projects in 2013 including projects identified by the OPA as being incremental to the 2012 results, and since January 1, 2011 has contributed 27 projects or 3.1% to the provincial results

### **Net Savings:**

 The incremental peak demand savings in 2013 was 71 kW and the incremental energy savings was 387,606 kWh

### **Contribution to Targets:**

- The program-to-date net peak demand savings that contributes to the 2014 demand target is 86 kW excluding adjustments to prior years reported by the OPA, or <1% of Horizon Utilities' 2014 CDM Target
- The program-to-date 2011-2014 net cumulative energy savings that contributes to the 2014 demand target is 1,001,799 kWh excluding adjustments to prior years reported by the OPA, or <1% of Horizon Utilities' 2014 CDM Target</li>

# **Marketing & Promotional Tactics Used:**

In 2013, Horizon Utilities provided marketing support for this initiative through:

- Promoted directly by Key Account Managers, Embedded and Roving Energy Managers and channel partners to eligible customers
- Promoted at 25 business-related events interfacing with over 535 customers and channel partners (see Appendix C for the list of events)
- Included in collateral material available for all C&I Program initiatives
- Promoted on Horizon Utilities' website on a year-round basis

### **Additional Comments:**

- This initiative is 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 are necessarily expected to be attributed to Energy Audits, evaluators have recognized savings towards LDCs targets as a result of customers implementing low cost / no cost recommendations from their energy audits.
- Participation has been limited to one energy audit per customer which has restricted enabling and direction to the other initiatives. This has been revised in 2014 and LDCs are now able to consider additional customer participation when presented with a new scope of work.

# 2.2.2.6 Small Commercial Demand Response Program (Schedule B-3)

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

The following illustrates the progress achieved in 2013:

### **Participation / Activity:**

- Number of load control devices installed province-wide in the premises of non-residential customers since January 1, 2011 was 1,637 Number of load control devices installed within Horizon Utilities' service area in the premises of non-residential customers in 2013 was 11, and since January 1, 2011 was 20 or 1.8 % of the provincial results
- Number of IHDs installed province-wide in the premises of non-residential customers since January 1, 2011 was 1,211, including 917 in 2013
- Number of IHDs installed within Horizon Utilities' service area in the premises of nonresidential customers in 2013 was 15, or 4.0 % of the provincial results

# **Net Savings:**

- The incremental peak demand savings resulting from the load control devices installed in 2013 was 13 kW and the incremental energy savings was 18 kWh
- No incremental peak demand savings or energy savings are attributed to the installation of IHDs

## **Contribution to CDM Targets**

- The program-to-date net peak demand savings that contributes to the 2014 demand target is 0 kW under Scenario 1; and is assumed to be 13 kW under Scenario 2 or <1% of Horizon Utilities' 2014 CDM Target
- The program-to-date 2011-2014 net cumulative energy savings is 51 kWh or <1% of Horizon Utilities' 2014 CDM Target (under both Scenario 1 and Scenario 2)

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

 No specific marketing or promotional activities targeted at small business customers were undertaken for this initiative in 2013

### **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, may contribute positively to the results for 2014.

### 2.2.2.7 Demand Response 3 Initiative (DR3 Program) (Schedule D-6)

# **Initiative Activities/Progress:**

The following illustrates the progress achieved in 2013:

### **Participation / Activity**

- The total province-wide participation by commercial customers in the Demand Response 3 Program (the "DR3 Program") since January 1, 2011 was 175 participants
- Horizon Utilities contributed 1 net new participating commercial customer in 2013, and since January 1, 2011 has contributed 5 participants or 2.9% to the provincial results

### **Net Savings**

The incremental peak demand savings resulting from the net new participant in 2013 was 66 kW and the incremental energy savings was 9,571 kWh

# **Contribution to CDM Targets**

- The program-to-date net peak demand savings that contributes to the 2014 demand target is 0 kW under Scenario 1; and is assumed to be 597 kW under Scenario 2 or about 1% of Horizon Utilities' 2014 CDM Target
- The program-to-date 2011-2014 net cumulative energy savings is 38,226 kWh or <1% of Horizon Utilities' 2014 CDM Target (under both Scenario 1 and Scenario 2)

# **Marketing & Promotional Tactics Used:**

See discussion in Section 2.2.3.5

### **Additional Comments:**

See discussion in Section 2.2.3.5

### 2.2.3 INDUSTRIAL PROGRAM

**Description:** Designed to help identify and promote energy saving opportunities for large building and manufacturing based customers. The Industrial Program portfolio includes financial incentives and technical expertise to help organizations modernize systems for enhanced productivity and product quality, as wells as provide a substantial boost to energy productivity. This allows facilities to take control of their energy so 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 provides valuable resources to large facilities including funding for enabling Engineering Studies and for process or system changes. The Engineering Studies in particular provide 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 provides funding for Embedded and Roving Energy Managers to provide customers with a skilled individual whose only role is to assist them with conservation initiatives. To date these Energy Managers have played a key role in customer participation.

Activities carried out in 2013 by the Key Account Manager ("KAM") resources for Horizon Utilities and the eight 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 has restricted the change and growth of this Portfolio. While the expedited change management has benefited the C&I Program Portfolio, the Industrial Portfolio has not seen the same results due to the narrow scope of the process.

## 2.2.3.1 Process & Systems Upgrades Initiatives (PSUI) (Schedule D-1)

# **Initiative Activities/Progress:**

The following illustrates the initiative activities and progress achieved in 2013:

### **Participation / Activity:**

None reported province-wide since January 1, 2011

# **Net Savings:**

None

# **Contribution to Targets:**

None

# **Marketing & Promotional Tactics Used:**

In 2013, Horizon Utilities provided marketing support for this initiative through:

- Promoted directly by Key Account Managers, Embedded and Roving Energy Managers and channel partners to eligible customers
- Included in collateral material available for all C&I Program initiatives
- Promoted on Horizon Utilities' website on a year-round basis

### **Additional Comments:**

 Province-wide there have been no completed capital projects to date under the Process & Systems Upgrade initiatives ("PSUI"). The OPA's standard form of contract for capital projects remains a significant barrier, as the contract term is too long and as well contains other provisions that are considered to be too onerous and/or complicated. For this reason, many customers opt to undertake projects under the RETROFIT Program even though the potential incentives would be 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 OPA Programs for the Industrial sector and comprised of representatives of LDCs and the OPA, in July 2012 which would change the upper limit for a small project from 700 MWh to 1MM dollars in incentives. This would allow more projects to be eligible for the new small capital project agreement and increase participant uptake, while still protecting the ratepayer. This small capital project agreement was finalized in August 2013.
- A number of engineering studies have been submitted and completed by customers of Horizon Utilities, most of which have been initiated through the KAMs and Energy Managers. This is a strong indication that there is 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, in 2012 the OPA was accepting waste heat/waste fuel projects only. Natural gas generation projects were on hold awaiting a decision on whether PSUI will fund these types of projects. In June 2013, however, a decision was made to allow natural gas load displacement generation projects to proceed under PSUI. It is expected that a number of projects may now proceed although results would not be counted towards LDC targets due to in-service dates beyond 2014.
- There are three significant PSUI projects that were expected to have considerable
  contributions to the CDM targets that have not proceeded. These projects are not only
  critical with respect to Horizon Utilities' CDM targets but also to the economic viability of the
  customer's operation. Given the long time required to build and commission these projects
  the delays have caused significant concern for these customers.
- The first project involves a large user with a 5.6 MW cogeneration 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 user is anxiously hoping to use to build a 5.0 MW cogeneration facility that will completely displace their load. This customer has been engaged in attempting to get the project to move forward at the OPA through Horizon Utilities since November of 2011.
- A third Large Use customer's cogeneration project was expected to deliver 9.1 MW in 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.

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

# **Initiative Activities/Progress:**

The following illustrates the initiative activities and progress achieved in 2013

### **Participation / Activity:**

None reported province-wide since January 1, 2011

## **Net Savings:**

None

# **Contribution to Targets:**

None

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

In 2013, Horizon Utilities provided marketing support for this initiative through:

- Promotion directly by Key Account Managers, Embedded and Roving Energy Managers and channel partners to eligible customers;
- Collateral material available for all C&I Program initiatives; and
- Promotion on Horizon Utilities' website on a year-round basis

### **Additional Comments:**

- The M&T initiative was originally targeted at larger customers with the capacity to review the M&T data. This review requires the customer facility to employ an Energy Manager, or a person with equivalent qualifications, which has been a barrier for some customers. As such, a limited number of applications have been received from Horizon Utilities' customers; none of the projects had been completed as of December 31, 2013.
- The demand and energy savings target required for this initiative can present a significant challenge for smaller customers. Changes were made to the RETROFIT Program in 2013 allows smaller facilities to undertake less-complicated monitoring and targeting projects.

# 2.2.3.3 Energy Manager Initiative (Schedule D-3)

# **Initiative Activities/Progress:**

The following illustrates the initiative activities and progress achieved in 2013:

## **Participation / Activity:**

- As of December 31, 2013, the OPA had provided funding for 205 Energy Managers across the province
- Horizon Utilities received funding from the OPA for three Roving Energy Managers ("REMs") as of December 31, 2013
- Approval for funding for two Embedded Energy Managers ("EEMs") was also provided for customers of Horizon Utilities as of December 31, 2013

# **Net Savings:**

 The incremental peak demand savings was 23 kW and the incremental energy savings is 178,203 kWh

# **Contribution to Targets:**

- The program-to-date net peak demand savings that contributes to the 2014 target was 77 kW, or <1 % of Horizon Utilities' 2014 CDM Target</li>
- The program-to-date 2011-2014 net cumulative energy savings is 1,744,203 kWh, or <1 % of Horizon Utilities' 2014 CDM Target</li>

### **Additional Comments:**

- Horizon Utilities had three REMs in place in 2013 that provided assistance to over 50 customers for initiatives under both the Industrial Program and C&I Program portfolios.
   Many of these customers have initiated and completed multiple projects since 2011.
   Activities for the REMs in 2013 include:
  - o 7 Energy Plans completed
  - 2 Preliminary and Detailed Engineering Study applications submitted
  - 110 RETROFIT Program project applications closed
  - 14 Building Re-Commissioning project applications initiated
  - 2 Energy Audit applications completed
  - 1 Process and System Upgrade Capital Incentives applications submitted

- REMs have proven 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 specified in Schedule D-3, underutilizes the potential of
  these resources to achieve energy and demand savings. Maximum CDM potential is
  realized when these resources are deployed to the largest number of engaged customers.
  As such, REMs have been deployed accordingly at Horizon Utilities.
- Despite having funding approval from the OPA for 2 EEMs for Horizon Utilities' customers, as of December 31, 2013 only one of these customers had been successful in filling this position. This stems from a lack of qualified resources available within Horizon Utilities' service area.

# 2.2.3.4 Key Account Manager (Schedule D-4)

## **Initiative Activities/Progress:**

The following illustrates the initiative activities and progress achieved in 2013:

### **Participation / Activity:**

Horizon Utilities, working with eight other LDCs, has a team of three KAMs in place throughout 2013. Together the KAM team has been servicing 30 large user customers in the 9 LDC service territories since August 2011. Additional support is being given to larger customers at the other LDCs that are able to support project activity beyond their prescribed large-user accounts. This has greatly helped these other LDCs augment their total commercial CDM production.

Specifically for Horizon Utilities, the three KAMs have provided assistance to more than 20 large user industrial customers and large commercial customers. Many of these customers have initiated and completed multiple projects since 2011. Activities for the KAMs in 2013 include:

- 24 RETROFIT Program projects for customers of Horizon Utilities
- 1 Energy Audit application completed
- o 7 Preliminary Engineering Study applications submitted
- 3 Detailed Engineering Study applications submitted
- 1 EEM application submitted
- o 2 Process and System Upgrade Capital Incentives applications submitted
- 2 Monitoring and Targeting project applications submitted

### **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 is the case with REMs and EEMs, Horizon Utilities has found that it is 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. In addition, the short-term contract and
  associated energy targets discourage some skilled applicants resulting in longer lead times
  to acquire the right resource.
- The multi-year duration for this initiative is proving to be critical in its potential for success.
  The long business cycle required to identify, propose and implement projects with this
  customer base requires a multi-year program at minimum and an open ended initiative in
  the ideal case in order to build the long-lasting relationships and trust necessary to move
  these projects forward.

# 2.2.3.5 Equipment Replacement Incentive Initiative (RETROFIT Program) (Schedule C-2)

## **Initiative Activities/Progress:**

The following illustrates the initiative activities and progress achieved in 2013:

### **Participation / Activity:**

 In 2011, the OPA reported on ERII projects completed in the Industrial sector. For 2012 and 2013 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</li>
- The program-to-date 2011-2014 net cumulative energy savings was 1,610,107 kWh or <1% of Horizon Utilities' 2014 CDM Target</li>

# **Marketing & Promotional Tactics Used:**

See discussion in Section 2.2.2.1

### **Additional Comments:**

See discussion in Section 2.2.2.1

### 2.2.3.6 Demand Response 3 (DR3 Program) (D-6)

# **Initiative Activities/Progress:**

The following illustrates the initiative activities and progress achieved in 2013:

## **Participation / Activity:**

- The total province-wide participation in the DR3 Program since January 1, 2011 was 281 participants
- Horizon Utilities contributed two net new participating industrial customers in 2013, and since January 1, 2011 has contributed nine participants or 3.2% to the provincial results

# **Net Savings:**

 The incremental peak demand savings resulting from the net new participant in 2013 was 6,816 kW and the incremental energy savings was 331,641 kWh

### **Contribution to Targets:**

- The program-to-date net peak demand savings that contributes to the 2014 demand target is 0 kW under Scenario 1; and is assumed to be 13,261 kW under Scenario 2 or 22.0 % of Horizon Utilities' 2014 CDM Target
- The program-to-date 2011-2014 net cumulative energy savings was 692,298 kWh or <1 % of Horizon Utilities' 2014 CDM Target (under both Scenario 1 and Scenario 2)

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

In 2013, Horizon Utilities provided marketing support for this initiative through:

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

### **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 can now confirm which customers are participating in the DR3 Program, information such as contracted amount and contract term are not provided by the OPA on an individual customer basis. As a result, LDCs are not able to verify the information provided by the OPA concerning this initiative.
- As of 2013, aggregators were able to enter into contracts beyond 2014 which has 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 present a barrier to smaller customers
- Compensation amounts for new contracts and renewals have been reduced from the initial launch of this program (premium zones and 200 hour option have been discontinued) and subsequently there has been a corresponding decrease in renewal revenue
- The Ministry of Energy's Directive to the OPA issued in March 2014, to no longer contract for new demand response capacity, and has left a number of customers with no option to participate in the DR3 Program. One customer of Horizon Utilities was expected to contribute at least 3 MW in net demand savings according to the aggregator, but as of August 31, 2014 the OPA is attributing less than 1 MW to this customer. This situation will undoubtedly impact on Horizon Utilities' demand savings results to December 31, 2014.

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

## **Initiative Activities/Progress:**

The following illustrates the initiative activities and progress achieved in 2013:

# **Participation / Activity:**

- 26,756 audits were conducted provincially in 2013
- Horizon Utilities had 3,550 participants, or 13.3 % of the provincial total

# **Net Savings:**

- The 2013 incremental net demand savings was 808 kW which contributed to the 2014 target
- The 2013 incremental net energy savings was 4,634,362 kWh

# **Contribution to Targets:**

- The program-to-date net demand savings is 827 kW to the 2014 target
- The program-to-date cumulative energy savings is 10,037,324 kWh

# **Marketing Tactics Used:**

- Honeywell (delivery agent) was most successful when working directly with housing providers (such as CityHousing Hamilton). The large upswing in participation was a direct result of working with CityHousing, who manage thousands of qualifying tenants, and have the ability to require participation of tenants.
- CityHousing also has a dedicated energy project manager, who was a champion internally for the Home Assistance Program and worked with the delivery agent to meet goals.
- Horizon Utilities assisted the delivery agent in determining which customer homes were electrically heated in order to conduct a targeted marketing campaign for those homes
- On alternate Tuesday mornings from June through December, Horizon Utilities hosted social services providers and social housing providers to provide an overview of the program
- For larger social services providers, such as Ontario Works and the United Way, Horizon Utilities conducted on-site presentations to staff
- Horizon Utilities worked directly with social housing providers to explain the value of the program to both housing providers and to their tenants
- Horizon Utilities also provided collateral materials to Social Agencies
- Hosted Events for Social Agencies
- Horizon Utilities Website promotion and awareness is active all-year round generating over 800 page views with 2:20 average time on page

### **Additional Comments:**

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

### 2.2.5 PRE-2011 PROGRAMS

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

# 2.2.5.1 Electricity Retrofit Incentive Program (ERIP)

# **Initiative Activities/Progress:**

The following illustrates the initiative activities and progress achieved in 2013:

### **Participation / Activity:**

- Total province-wide participation in ERIP since January 1, 2011 was 2,028 projects
- Horizon Utilities completed no ERIP projects in 2013, and since January 1, 2011 has contributed 118 projects or 5.8% to the provincial results

## **Net Savings:**

None in 2013

# **Contribution to Targets:**

- The program-to-date net peak demand savings that contributes to the 2014 demand target is 3,066 kW, or 5.1 % of Horizon Utilities' 2014 CDM Target
- The program-to-date 2011-2014 net cumulative energy savings is 70,800,874 kWh, or 25.2 % of Horizon Utilities' 2014 CDM Target

## 2.2.5.2 High Performance New Construction Program (HPNC Program)

# **Initiative Activities/Progress:**

The following illustrates the initiative activities and progress achieved in 2013:

## **Participation / Activity:**

- Total province-wide participation in the pre-2011 version of the HPNC Program since January 1, 2011 was 252 projects
- Horizon Utilities completed no projects in the pre-2011 version of the HPNC Program in 2013, and since January 1, 2011 has contributed 11 projects or 4.4 % to the provincial results

### **Net Savings:**

None in 2013

# **Contribution to Targets:**

- The program-to-date net peak demand savings that contributes to the 2014 demand target is 389 kW excluding adjustments to prior years reported by the OPA, or <1% of Horizon Utilities' 2014 CDM Target
- The program-to-date 2011-2014 net cumulative energy savings is 6,724,846 kWh excluding adjustments to prior years reported by the OPA, or 2.4% of Horizon Utilities' 2014 CDM Target

# 3 2013 LDC CDM Results

# 3.1 Participation and Savings

# Table 4 Horizon Utilities Corporation Initiative and Program Level Net Savings by Year (Scenario 1):

		Telete de tre d	! !!!!!!	C	1-141-41	D	I NI=+ C=l==	/6		11		1			
		rable 1: Hori	izon Utilities	corporation	Initiative and	Program Leve	er ivet Saving	s by Year (Sce	enario 1)					Brogram to Date Verif	ind Progress to Tares
Incremental Activity		Net Incremental Peak Demand Savings (kW)				Net I	Net Incremental Energy Savings (kWh)			Program-to-Date Verified Progress to Target (excludes DR)					
Initiative	Unit	(new progr	am activity occ		the specified	(new peak demand savings from activity within the			(new energy savings from activity within the specified			2014 Net Annual Peak	2011-2014 Net		
			reportin	g period)			specified repo	orting period)			reporting	period)		Demand Savings (kW)	Cumulative Energy Savings (kWh)
		2011*	2012*	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014	2014
Consumer Program															
Appliance Retirement	Appliances	3,034	1,671	878	i	172	96	57		1,238,865	669,778	373,209	_	320	7,707,371
Appliance Exchange HVAC Incentives	Appliances Equipment	186 5,029	131 5,092	178 4,768	-	1,693	1,091	37 974		21,438 3,070,047	33,812 1,843,136	65,760 1,639,842	<del>-</del>	62 3,758	307,519 21,089,280
Conservation Instant Coupon Booklet	Items	21,872	1,249	14,024	I	50	9	21	:	810,293	56,527	311,606		80	4,033,967
Bi-Annual Retailer Event	Items	38,494 0	42,891 0	38,196	-i	68	60 0	48	<u> </u>	1,188,091	1,082,743	694,555	<u> </u>	176	9,389,704
Retailer Co-op	Items			0		0		0	<u></u>		0	0	<del>-</del>	0	0
Residential Demand Response Residential Demand Response (IHD)	Devices Devices	1,952 0	5,393 3,855	9,560 8,368	<b></b>	1,093	2,699	3,738	<del></del>	2,830	13,650	11,153 0	<u>!</u>	0	27,633 0
Residential New Construction	Homes	0	0	0		0	0	- 0			0 -	- 0			0
Consumer Program Total				-		3,093	3,975	4,876		6,331,565	3,699,646	3,096,125		4,396	42,555,475
Business Program															
Retrofit	Projects	87	207	372		857	1,659	2,948		4,805,916		16,367,574		5,309	80,195,294
Direct Install Lighting	Projects	715	662	415	·	661	550	453		1,693,346	1,875,038	1,442,489		1,531	14,816,492
Building Commissioning	Buildings	0	0	0	-	0	0	0		0	0	0	i	0	0
New Construction	Buildings	15	4	3 8	+	0 0	16	6 71	i	0 0	1,331 75,529	20,831 387,606		6 86	45,654 1,001,799
Energy Audit Small Commercial Demand Response	Audits Devices	0	9	20	+	0	6	13	1	0		18	<del></del>	0	51
Small Commercial Demand Response (IHD)	Devices	0	0	15		0	0	0		0	0	0		0	0
Demand Response 3	Facilities	5	4	5		536	531	597		20,936	7,718	9,571	!	0	38,226
Business Program Total						2,054	2,762	4,086		6,520,199	11,560,119	18,228,089		6,932	96,097,516
Industrial Program					_										
Process & System Upgrades	Projects	0			-!							00	<del>.</del>	<u> </u>	0
Monitoring & Targeting	Projects		00		<b>↓</b> ·		<u> </u>	<u> </u>				<u> </u>	!		
Energy Manager Retrofit	Projects			5	+	0	60	23		0	479,921	178,203	¦ ·	77	1,744,203
Demand Response 3	Projects Facilities	15 6	$-\frac{0}{7}$	<u>0</u>	-!	70 3,498	0 6,445	13,261		402,527 205,346	0 155,311	0 331,641	+	70	1,610,107 692,298
Industrial Program Total	racilities	0	·			3,568	6,505	13,283	ì	607,873	635,233	509,844		147	4,046,608
Home Assistance Program						5,000	5,233			001,010					1,5 10,000
Home Assistance Program	Homes	0	235	3,550		0	24	808	i	0	286,839	4,634,362	Q .	827	10,037,324
Home Assistance Program Total						0	24	808		0	286,839	4,634,362		827	10,037,324
Aboriginal Program															
Home Assistance Program	Homes	0	·o	0		00	0	0		00	0		<del>!</del>	0	0
Direct Install Lighting	Projects	0	1 0	0	1	0	0	0	1	0	0	0	1	0	0
Aboriginal Program Total						0	0	0		0	0	0		0	0
Pre-2011 Programs completed in 2011	Oit-	110			L	2.066	0	0		17 700 210				2.000	70,800,874
Electricity Retrofit Incentive Program  High Performance New Construction	Projects	118	$-\frac{0}{3}$	- 0 -		3,066	146	F - 5		17,700,219	0 582,164		+	3,066	6,724,846
Toronto Comprehensive	Projects Projects		3	0	+	0	0		,	0	0			0	0,724,846
Multifamily Energy Efficiency Rebates	Projects	0	<u>0</u>	0	1	0	0			0	0	0	i	0	0
LDC Custom Programs	Projects		0	0	-,							0	†	0	0
Pre-2011 Programs completed in 2011 To						3,308	146	0		18,944,807	582,164	0		3,455	77,525,721
Other				•				-			•				
Program Enabled Savings	Projects	0	0	0	·	0	0	0	-	0	0	00		0	0
Time-of-Use Savings	Homes	0	0	0		0	0	0		0	0	0	!	0	0
Other Total						0	0	0		0	0	0		0	0
Adjustments to 2011 Verified Results							193	0			2,151,259	0		191	8,600,509
Adjustments to 2012 Verified Results								126				682,390		123	2,036,622
Energy Efficiency Total						6,896	3,730	5,445		32,175,331	16,587,289	26,116,036		15,756	229,504,435
Demand Response Total (Scenario 1)						5,128	9,681	17,608		229,113	176,712	352,384		0	758,208
Adjustments to Previous Years' Verified						0	193	126		0	2,151,259	682,390		315	10,637,130
OPA-Contracted LDC Portfolio Total (inc.		The UID II		2 1 -		12,023	13,604	23,180		32,404,444	18,915,260	27,150,809		16,071	240,899,774
Activity and savings for Demand Response res- year represent the savings from all active facil					ort has been left formation is ma		a results upda	ate from evalu	ations;				I OEB Target:	60,360	281,420,000
contracted since January 1, 2011 (reported cum										% of Full	OEB Target Ach	ieved to Date	(Scenario 1):	26.6%	85.6%
*Includes adjustments after Final Reports wer	re issued	Energy Manag	er, Aboriginal I	Program and F	rogram Enabled	Savings were n	otindepende	ntly evaluated							

**Table 5 Summarized Program Results (Scenario 2)** 

	Gross	Savings	Net Sa	avings	Contribution to Targets		
Program	Incremental Peak Demand Savings (MW)	Incremental Energy Savings (GWh)	Incremental Peak Demand Savings (MW)	Incremental Energy Savings (GWh)	Program-to-Date: Net Annual Peak Demand Savings (MW) in 2014	Program-to-Date: 2011- 2014 Net Cumulative Energy Savings (GWh)	
Consumer Program Total	6.0	5.3	4.9	3.1	8.1	42.6	
Business Program Total	5.2	24.5	4.1	18.2	7.5	96.1	
Industrial Program Total	13.3	0.53	13.2	0.51	13.4	4.0	
Home Assistance Program Total	0.8	4.6	.8	4.6	0.8	10.0	
Pre-2011 Programs completed in 2011 Total	0	0	0	0	3.5	77.5	
Other Adjustments	0.2	0.88	0.1	0.68	.31	10.6	
Total OPA Contracted Province-Wide CDM Programs	25.5	35.9	23.2	27.1	33.7	240.9	

# 3.2 Evaluation

# **Table 6 - Methodology Equations**

# METHODOLOGY

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

	EQUATIONS				
Prescriptive Measures and Projects	Gross Savings = Activity * Per Unit Assumption  Net Savings = Gross Savings * Net-to-Gross Ratio  All savings are annualized (i.e. the savings are the same regardless of time of year a project was completed or measure installed)				
Engineered and Custom Projects	Gross Savings = Reported Savings * Realization Rate  Net Savings = Gross Savings * Net-to-Gross Ratio  All savings are annualized (i.e. the savings are the same regardless of time of year a project was completed or measure installed)				
Demand Response	Peak Demand: Gross Savings = Net Savings = contracted MW at contributor level * Provincial contracted to ex ante ratio Energy: Gross Savings = Net Savings = provincial ex post energy savings * LDC proportion of total provincial contracted MW All savings are annualized (i.e. the savings are the same regardless of the time of year a participant began offering DR)				
Adjustments to Previous 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.				

Table 7 – Initiative Summary

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
<b>Consumer Prog</b>	ram		
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.	
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.	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.
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
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.	level.

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
<b>Consumer Prog</b>	ram		
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 OPA through project completion reports and continuing participant lists.	Savings are considered to begin in the year the device was installed and/or when a customer signed a peaksaver PLUS™ participant agreement.	Peak demand savings are based on an ex ante estimate assuming a 1 in 10 weather year and represents the "insurance value" of the initiative. Energy savings are based on an ex post estimate which reflects the savings that occurred as a result of activations in the year 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 saveONenergy CRM system; Initiative was not evaluated in 2011, reported results are presented with forecast assumptions as per the business case.	Savings are considered to begin in the year of the project completion date.	Peak demand and energy savings are determined using the verified measure level per unit assumption multiplied by the uptake in the market (gross) taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
<b>Business Progra</b>	m		
Efficiency: Equipment Replacement	Results are directly attributed to LDC based on LDC identified at the facility level in the saveONenergy CRM; Projects in the Application Status: "Post-Stage Submission" are included (excluding "Payment denied by LDC"); Please see page 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).
	Additional Note: project counts were d	erived by filtering out invalid statu	uses (e.g. Post-Project Submission - Payment denied by LDC) and
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 netto-gross factors such as free-ridership and spillover for both peak demand and energy savings at the program level (net).

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
<b>Business Progra</b>	m		
	Results are directly attributed to LDC based on LDC identified in the application; Initiative was not evaluated, no completed projects in 2011 or 2012.	Savings are considered to begin in the year of the actual project completion date.	Peak demand and energy savings are determined by the total savings for a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that
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.	were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).
Energy Audit	Projects are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year of the audit date.	Peak demand and energy savings are determined by the total savings resulting from an audit as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).
Commercial Demand Response (part of the Residential program schedule)	Results are directly attributed to LDC based on data provided to OPA through project completion reports and continuing participant lists	Savings are considered to begin in the year the device was installed and/or when a customer signed a peaksaver PLUS™ participant agreement.	Peak demand savings are based on an ex ante estimate assuming a 1 in 10 weather year and represents the "insurance value" of the initiative. Energy savings are based on an ex post estimate which reflects the savings that occurred as a result of activations in the year. Savings are assumed to persist for only 1 year, reflecting that savings will only occur if the resource is activated.

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
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	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
	the total contracted megawatts at the contributor level.		additional costs are incurred to activate the resource.

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
<b>Industrial Progra</b>	am		
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; Initiative was not evaluated, no completed projects in 2011, 2012 or 2013.	Savings are considered to begin in the year in which the incentive project was completed.	Peak demand and energy savings are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
<b>Industrial Progra</b>	m		
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 LDCs	Savings 'start' Date	Calculating Resource Savings
<b>Industrial Progra</b>	ım		
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 LDCs	Savings 'start' Date	Calculating Resource Savings
<b>Home Assistance</b>	e Program		
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 Progr</b>	am		
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 LDCs	Savings 'start' Date	Calculating Resource Savings		
Pre-2011 Progra	ims completed in 2011				
Electricity Retrofit Incentive Program	Results are directly attributed to LDC based on LDC identified in the application; Initiative was not evaluated in 2011, 2012 or 2013 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		
High Performance New Construction	Results are directly attributed to LDC based on customer data provided to the OPA from Enbridge; Initiative was not evaluated in 2011, 2012 or 2013, assumptions as per 2010 evaluation.	Savings are considered to begin in the year in which a project	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		
Toronto Comprehensive	Program run exclusively in Toronto Hydro-Electric System Limited service territory; Initiative was not evaluated in 2011, 2012 or 2013, assumptions as per 2010 evaluation.	was completed.	the kWh to kW ratio in the provincial results from the 2010 evaluated results (http://www.powerauthority.on.ca/evaluati measurement-and-verification/evaluation-reports).		
Multifamily Energy Efficiency Rebates	Results are directly attributed to LDC based on LDC identified in the application; Initiative was not evaluated in 2011, 2012 or 2013, assumptions as per 2010 evaluation.		Peak demand and energy savings are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that		
Data Centre Incentive Program	Program run exclusively in PowerStream Inc. service territory; Initiative was not evaluated in 2011, assumptions as per 2009 evaluation.	Savings are considered to begin in the year in which a project was completed.	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		
EnWin Green Suites	Program run exclusively in ENWIN Utilities Ltd. service territory; Initiative was not evaluated in 2011		based on the kWh to kW ratio in the provincial results from the 2010 evaluated results (http://www.powerauthority.on.ca/evaluation-measurement-and-		
	or 2012, assumptions like per 2011 on 201 evaluation.	3 CDM Annual Report	verification/evaluation-reports).		

# 3.3 Spending

Tables 8 and 9 summarize the total spending that Horizon Utilities has incurred in 2013 and cumulatively since 2011 by initiative. It is detailed by the Program Administration Budget ("PAB"), Participant Based Funding ("PBF"), Participant Incentives ("PI") and Capability Building Funding ("CBF").

Table 8: 2013 Spending

Initiative	PAB	PBF	PI	CBF	TOTAL				
Consumer Program									
Appliance Retirement	30,658				30,658				
Appliance Exchange	23,184				23,184				
HVAC Incentives	31,920				31,920				
Annual Coupons									
Bi-Annual Retailer Event	15,589				15,589				
Retailer Co-op									
Residential Demand Response	1,164,145	1,633,748			2,797,893				
New Construction Program	46,841				46,841				
Business Program	Business Program								
Equipment Replacement	1,069,795		1,932,460		3,002,254				
Direct Installed Lighting	153,160	97,920	613,645		864,725				
Existing Building Commissioning	20,423		38,750		59,173				
Incentive New Construction and Major Renovation	,		9,115		103,152				
Initiative	94,037		3,110		100,102				
Energy Audit	10,904		22,162		33,066				
Small Commercial Demand Response									
Demand Response 3	·	·	`	·					

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Initiative	PAB	PBF	PI	CBF	TOTAL			
Industrial Program								
Process & System Upgrades								
a) preliminary engineering study	28,022				28,022			
b) detailed engineering study	67,807		84,292		152,098			
c) program incentive	48,429				48,429			
Monitoring & Targeting	31,626		37,500		69,126			
Energy Manager				383,013	383,013			
Key Account Manager ("KAM")				609,374	609,374			
Industrial Program								
Equipment Replacement								
Demand Response 3	16,543				16,543			
Home Assistance Program								
Home Assistance Program	210,548	2,509,065			2,719,613			
TOTAL SPENDING	3,063,632	4,240,733	2,737,923	992,387	11,034,674			

Table 9: Cumulative Spending (2011-2014)

Initiative	PAB	PBI	PI	CBF	TOTAL			
Consumer Program								
Appliance Retirement	397,434				397,434			
Appliance Exchange	50,389				50,389			
HVAC Incentives	134,257				134,257			
Annual Coupons	67,469				67,469			
Bi-Annual Retailer Event	77,665				77,665			
Retailer Co-op								
Residential Demand Response	2,327,664	3,142,086	51,050		5,520,800			
New Construction Program	76,016				76,016			
Business Program								
Equipment Replacement	2,001,913		4,553,274		6,555,187			
Direct Installed Lighting	397,364	409,440	1,954,742		2,761,546			
Existing Building Commissioning Incentive	126,100		38,750		164,850			
New Construction and Major Renovation Initiative	232,204		9,115		241,319			
Energy Audit	96,753		22,162		118,915			
Small Commercial Demand Response								
Demand Response								
Industrial Program								
Process & System Upgrades								
a) preliminary engineering study	52,936				52,936			
b) detailed engineering study	107,059		84,292		191,351			
c) program incentive	134,723				134,723			

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Initiative	PAB	PBI	PI	CBF	TOTAL			
Industrial Program								
Monitoring & Targeting	51,582		37,500		89,082			
Energy Manager				600,896	600,896			
Key Account Manager ("KAM")				1,177,213	1,177,213			
Equipment Replacement Incentive								
Demand Response 3	41,650				41,650			
Home Assistance Program								
Home Assistance Program	463,926	2,509,065			2,972,991			
Pre 2011 Programs								
Electricity Retrofit Incentive Program	376,433		3,883,072		4,259,505			
High Performance New Construction								
Toronto Comprehensive								
Multifamily Energy Efficiency Rebates								
Data Centre Incentive Program								
EnWin Green Suites								
Initiatives Not In Market								
Midstream Electronics								
Midstream Pool Equipment								
Demand Service Space Cooling								
Demand Response 1								
Home Energy Audit Tool								
TOTAL SPENDING	7,213,537	6,060,591	10,633,956	1,778,110	25,686,194			

As of December 31, 2013, the PAB funding spending of \$7.2MM was approximately 58% of the total PAB funding allocation of \$12.5MM for Horizon Utilities. The projected spending to the end of 2014 is anticipated to be \$10.2MM or 82% of the overall PAB budget of \$12.5MM.

### 3.4 Additional Comments

Horizon Utilities recognized that generating demand savings from the Province-Wide CDM Programs would be the greatest challenge based on the shortfall of demand savings results achieved in 2011 and 2012. The Industrial Program initiatives delivered to the Large User Class customers were expected to generate the highest contribution to targets. Of the Industrial Program initiatives, the DR-3 program had the greatest contribution to Horizon Utilities' achievement of its demand target. However, transitioning of the demand response programs such as DR-3 over to the IESO created suspension of additional capacity being released to registered Aggregators. As a result, Horizon Utilities' customers were not given a chance to participate in the DR-3 program as Aggregator capacity was capped leaving only opportunities to replace non-performing customers with new customer participants. This limitation to the DR-3 market potential has put severe constraints on Horizon Utilities ability to promote the program to customers and work with Aggregators to contract more DR-3 capacity.

The Industrial Program PSUI Capital Incentive initiative has been a disappointment for Horizon Utilities due to the delays experienced in the approval process of two very large load displacement generation projects representing a contribution of approximately 10.6 MW and 84,000,000 kWh annually to Horizon Utilities' CDM target. Customers expressed interest in the PSUI capital incentives and proceeded to investigate the opportunity to receive capital incentive funding through the OPA by initiating detailed engineering studies and investigating connection requirements and limitations. The delays in the review of these projects will postpone completion dates outside of Horizon Utilities' 2014 CDM target deadline.

Horizon Utilities partnered with Simple Energy to begin development of the Social Benchmarking pilot project proposal and scope of work through the OPA RFP process. Social Benchmarking was a very important aspect of Horizon Utilities CDM Plan and was originally estimated to contribute 2 MW and 10 GWh to the CDM target. Complications experienced in the both the OPA RFP process and release of the Canadian Anti-Spam Legislation ("CASL") delayed the timeliness of being able to implement the Social Benchmarking initiative in 2014 diminishing the opportunity to achieve any cumulative energy savings or contribute to any 2014 summer demand reduction.

The conversion of street lighting to LED technology was planned for in the Horizon Utilities' CDM strategy, but will not to be completed by 2014. Conversion of roadway lighting to LED technology was identified as a potential Board-Approved program but will most likely be completed on mass through incentives provided by the RETROFIT program in the new Conservation First framework 2015 – 2020. Only a few pilot projects have materialized and have not provided any material CDM savings to the Horizon Utilities target.

Declining market potential for programs like peaksaver **PLUS**® and the Small Business Lighting program initiatives are illustrations that new programs to the Consumer and Small Business sectors are required in order to achieve more energy and demand savings. Also the RETROFIT program participation indicates that an average of one in three customers have applied for a RETROFIT project incentive. The majority of the applications being received are still for more energy efficient lighting.

# **Timely and Accurate Reporting:**

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

### 2011 and 2012 CDM Savings Adjustments:

There were positive adjustments to both the 2011 and 2012 program initiatives resulting in another 314 kW and 10,637,131 kWh to target.

## Sales Cycle:

The sales cycle around Industrial Program initiatives is typically about two years longer than the ERII. Horizon Utilities is working collaboratively with eight other LDCs to share 3 Key Account Managers that are working with large industrial customers. Reports from these Key Account Managers indicate that the industrial customers see the "OPA Customer Waiver Agreement" as a barrier to participation in all initiatives such as the Embedded Energy Manager and PSUI, all of which impact Horizon Utilities' efforts in reaching its CDM targets.

# 4 Combined CDM Reporting Elements

# 4.1 Progress Towards CDM Targets

Table 10: Net Peak Demand Savings at the End-User Level (MW) (Scenario 1)

Table 4: Net Peak Demand Savings at the End User Level (MW) (Scenario 1)								
Implementation Period		Α	nnual					
implementation renou	2011	2012	2013	2014				
2011 - Verified	12.0	12.0 6.9 6.9 6.8						
2012 - Verified†	0.2	0.2 13.6 3.9 3.8						
2013 - Verified†	0.0	0.0 0.1 23.2 5.5						
2014								
Verified Net Annual Peak Demand Savings Persisting in 2014: 16.1								
Horizon	60.4							
Verified Portion	Verified Portion of Peak Demand Savings Target Achieved in 2014 (%): 26.6%							

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

Table 5: Net Energy Savings at the End User Level (GWh)								
Annual								
Implementation Period	2011	2012	2013	2014	2011-2014			
2011 - Verified	<b>2011 - Verified</b> 32.4 32.2 32.1 31.8							
2012 - Verified†	2.2	18.9	18.7	18.5	58.2			
2013 - Verified†	ed† 0.0 0.7 27.2 26.4							
2014								
	240.9							
	281.4							
	85.6%							

# 4.2 Variance from Strategy

Based on the adjustments to the CDM strategy reported in the 2012 CDM Annual report, Horizon Utilities had expected to achieve 80 % of its demand target and 100 % of its energy target. Based on its current forecast of 2014 results provided in Table 1 on page 2 the estimate for energy savings has been reduced slightly due to the following considerations:

- Evaluation, measurement and verification of the In Home Display device installed as part of the peaksaver PLUS® program has not achieved any energy savings as originally expected
- Delays to the launch of the Social Benchmarking pilot may not produce any material results to the 2014 demand or energy savings target but will carry over into 2015. Based on the strategy the expected CDM results from social benchmarking was 2.2 MW of demand reduction and 14 GWh (5 %) to the energy target. Once the scope of the social benchmarking pilot was more defined in 2013 the estimate for the CDM savings was revised to 2.0 (3 %) MW in demand savings and 10 GWh (3 %) to the energy target. The social benchmarking project alone could have bridged the gap expected to reach 100 % of the energy target.
- Retrofit of existing roadway lighting to higher efficiency LED products has not materialized as of 2014. Only a few pilot projects have tested various LED technologies in the Municipalities of Hamilton and St. Catharines. It is not expected that any material demand or energy savings will be achieved by way of any mass retrofit of municipal roadway lighting.

The following Table 12 illustrates the status of the additional CDM programs identified in Horizon Utilities CDM strategy filed with the Board on November 1, 2010.

**Table 12 – 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 Energy consumption Reduction (MWh)
Residential Customer Energy Use Benchmarking	Active	Pilot project with OPA	4th Qtr. 2013 - 1st Qtr. 2014	25,000	2.2	14,000
Monitoring and Targeting	Active	Monitoring and Targeting Modified Schedule D-2	2012	10	1000	4,300
LED Lighting	Active	Pilot projects through ERII Schedule C2	2014	3	0	4,625
Small Commercial Demand Response	Inactive	Residential Demand Response modified Schedule B-3	4th Qtr. 2013	200	0.112	0.237
Residential Hot Water Program	Active	Residential and Small Commercial Demand Response modified Schedule B-3	2013	100	0.2	22.792
Generation Conservation	Cancelled	None				

Therefore, as part of Horizon Utilities' strategy modifications, re-forecasted CDM results are included as per Table 1 on Page 2 of this report.

# 4.3 Outlook to 2014 and Strategy Modifications

Horizon Utilities continues to promote the Province-Wide CDM programs to customers with the understanding that customer incentives will be available in 2015. Of all the customer projects, Horizon Utilities has one PSUI capital incentive project that is expected to contribute 3.6 MW and 28 GWh to its target in 2014. However, delays in approvals for construction have pushed the project completion date into 2015. The expected impact to target was an additional 6 % to the demand target and 11.6 % to the energy target.

The Minister's Directive of March 31, 2012 announced the transition of the Demand Response program management to the IESO for the new framework which caused the OPA to halt any additional DR-3 capacity allocation to Aggregators. This resulted in new customers being denied participation in the DR-3 program. Horizon Utilities' customers have been impacted by this transition. Customers can only be added if other customers withdraw from the program or fail to perform. The potential DR-3 capacity and corresponding contribution to Horizon Utilities' demand target is estimated at 3 MW resulting in a gap of 2 MW or 3.3 % to the demand target.

Social Benchmarking project delays will result in another gap of 2 MW in demand and 10 GWh in energy savings being shifted to 2015 based on the expected October 2014 launch date and year-long pilot. This represents a gap of 3 % in demand and energy savings to the CDM target in 2014.

The expectation is that Horizon Utilities will only reach 80 % of its demand target and 98 % of its energy target as a result of the timing of some the initiatives above not materializing prior to the end of 2014.

Contribution to the demand target from TOU implementation has not been established by the OPA, including a model to estimate these results to the demand target. Horizon Utilities has reviewed the OPA report "Impact Evaluation of Ontario's Time of Use Rates: First Year Analysis" prepared by The Brattle Group, and has conservatively estimated that, based on 1 % of the residential and GS <50 kW customers contribution to summer peak, a potential of 4MW of demand savings (6.6 % of demand target) could be achieved. This estimate has been factored into the 2014 demand savings forecasted achievement of 80% to target shown in Table 1.

Finally, downward adjustments to the allocated demand savings per participant in the *peaksaver* **PLUS**<sup>®</sup> residential demand response program will be investigated further with the OPA to ensure that the verification of contributions to summer peak demand reductions have been accurately reflected in Horizon Utilities service territory. An increase to the allocated demand savings per participant in line with the provincial average would increase demand savings by 1.5 MW based on the 2011 – 2013 *peaksaver* **PLUS**<sup>®</sup> participation.

#### 5 Conclusion

Over the course of 2013, Horizon Utilities has achieved 33.9 MW in peak demand savings and 241 GWh in energy savings, which represents 56% and 86% of Horizon Utilities 2014 target, respectively. These results are representative of a considerable effort expended by Horizon Utilities, in cooperation with other LDCs, customers, channel partners and stakeholders to overcome many operational and structural issues that limited program effectiveness across all market sectors. This achievement is a success and the relationships built within the 2011-2014 CDM program term will aid results in a subsequent CDM term.

However, despite continuing improvements to existing programs, Horizon Utilities faces challenges in the remaining year of the current CDM framework. With the current slate of available OPA Programs and the current forecast of implementation and projected savings, Horizon Utilities expects to meet 98% of the energy target and will be challenged to meet 80% of the demand target.

At the time of drafting this report there is limited opportunity to make valuable changes to the current program portfolio of initiatives and have these changes reflected in Horizon Utilities' 2014 results. However, LDCs and the OPA can build on the strengths and key successes of the 2011-2014 programs to launch new programs which will meet the future needs of the industry and consumers.

# Appendix A: Initiative Descriptions

### **Residential Program**

APPLIANCE RETIREMENT INITIATIVE (Exhibit D)

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

Initiative Frequency: Year round

**Objectives:** Achieve energy and demand savings by permanently decommissioning certain older, inefficient refrigeration appliances located in Ontario.

**Description:** This is an energy efficiency initiative that offers individuals and businesses free pick-up and decommissioning of old large refrigerators and freezers. Window air conditioners and portable dehumidifiers will also be picked up if a refrigerator or a freezer is being collected.

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

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

Additional detail is available:

Schedule B-1, Exhibit D <a href="http://www.poHorizon Utilities">http://www.poHorizon Utilities</a>
<a href="mailto:rauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/current\_electricity\_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf\_and">http://www.poHorizon Utilities</a>
<a href="mailto:rauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/current\_electricity\_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf\_and</a>

saveONenergy Horizon Utilities website <a href="https://saveonenergy.ca/Consumer/Programs/Appliance-Retirement.aspx">https://saveonenergy.ca/Consumer/Programs/Appliance-Retirement.aspx</a>

APPLIANCE EXCHANGE INITIATIVE (Exhibit E)

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

Initiative Frequency: Spring and fall

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

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

Targeted End Uses: Window air conditioners and portable dehumidifiers

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

Additional detail is available:

Schedule B-1, Exhibit C <a href="http://www.poHorizon Utilities">http://www.poHorizon Utilities</a>
<a href="rauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/current\_electricity\_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf">https://saveonenergy.ca/Consumer.aspx</a>
<a href="mailto:saveonenergy.ca/Consumer.aspx">saveONenergy website https://saveonenergy.ca/Consumer.aspx</a>

HVAC INCENTIVES INITIATIVE (Exhibit B)

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

Initiative Frequency: Year round

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

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

Targeted End Uses: Central air conditioners and furnaces

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

Additional detail is available:

Schedule B-1, Exhibit B <a href="http://www.poHorizon Utilities">http://www.poHorizon Utilities</a>
<a href="mailto:rauthority.on.ca/sites/default/files/new files/industry stakeholders/current electricity contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf">http://www.poHorizon Utilities</a>
<a href="mailto:rauthority.on.ca/sites/new files/industry">http://www.poHorizon Utilities</a>
<a href="mailto:rauthority.on.ca/sites/new files/industry">rauthority.on.ca/sites/new files/industry</a>
<a href="mailto:rauthority.on.ca/sites/new files/new files/new files/industry">rauthority.on.ca/sites/new files/new files/

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

### CONSERVATION INSTANT COUPON INITIATIVE (Exhibit A)

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

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

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

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

Additional detail is available:

Schedule B-1, Exhibit A <a href="http://www.poHorizon Utilities">http://www.poHorizon Utilities</a>
<a href="mailto:rauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/current\_electricity\_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf">http://www.poHorizon Utilities</a>
<a href="mailto:rauthority.on.ca/sites/new\_files/industry\_stakeholders/current\_electricity\_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf</a>
<a href="mailto:rauthority.on.ca/sites/new\_files/new\_files/new\_files/industry\_stakeholders/current\_electricity.on.ca/sites/new\_files/new\_f

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

BI-ANNUAL RETAILER EVENT INITIATIVE (Exhibit C)

Target Customer Type(s): Residential Customers

**Initiative Frequency:** Bi-annual events

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

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

Targeted End Uses: Same as the Conservation Instant Coupon Booklet initiative

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

Additional detail is available:

Schedule B-1, Exhibit C <a href="http://www.poHorizon Utilities">http://www.poHorizon Utilities</a>

<u>rauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/current\_electricity\_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf and</u>

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

**RETAILER CO-OP** 

Target Customer Type(s): Residential Customers

Initiative Frequency: Year Round

**Objective:** Hold promotional events to encourage customers to purchase energy efficiency measures in their regular purchasing habits other than the traditional Bi-Annual Coupon Events.

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

#### Targeted End Uses:

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

NEW CONSTRUCTION PROGRAM (Schedule B-2)

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

**Initiative Frequency:** Year round

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

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

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

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

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

Additional detail is available: Schedule B-1, Exhibit C

http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/current\_elect\_ricity\_contracts/pdfs/Schedule%20B-2%20New%20Construction%20Program.pdf and

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

RESIDENTIAL DEMAND RESPONSE PROGRAM (Schedule B-3)

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

Initiative Frequency: Year round

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

**Description:** In *peaksaver* PLUS®, participants are eligible to receive a free programmable thermostat or switch, including installation. Participants also receive access to price and near real-time consumption information on an In-Home Energy Display ("IHD"). Participants of the original *peaksaver* program are able to enroll in *peaksaver* PLUS® and will receive an In-Home Energy Display. Horizon Utilities are given the choice to continue to offer the standard load

control program (programmable thermostat or switch with a \$25 bill credit) for the first 8 months of 2011 (referred to as *peaksaver*® extension). After August 2011, the *peaksaver*® extension ended and the program (including marketing) ceased until new IHD products were available.

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

**Delivery:** LDCs recruit customers and procure technology

Additional detail is available: Schedule B-1. Exhibit C

http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/current\_elect ricity\_contracts/pdfs/SCHED\_2011\_ResDR\_B\_3\_110727%28MJB%29v15\_redacted.pdf and

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

#### **C&I Program**

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

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

Initiative Frequency: Year round

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

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

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

**Delivery:** LDC delivered.

Additional detail is available:

Schedule C-2

http://www.powerauthority.on.ca/sites/default/files/new files/industry stakeholders/current elect ricity\_contracts/pdfs/Schedule%20C-2%20ERII%20Initiative.pdf and

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

DIRECT INSTALL LIGHTING (DIL) INITATIVE (Schedule C-3)

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

family buildings

Initiative Frequency: Year round

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

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

Target End Uses: Commercial, institutional and agricultural facilities lighting

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

Additional detail is available:

Schedule C-3

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

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

EXISTING BUILDING COMMISSIONING INCENTIVE INITIATIVE (Schedule C-6)

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

**Initiative Frequency:** Year round June to September

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

**Description:** This initiative offers participants incentives for the following:

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

Targeted End Uses: Chilled water systems for space cooling

**Delivery:** LDC delivered.

Additional detail is available:

Schedule C-6

http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/current\_electricity\_contracts/pdfs/Schedule%20C-6%20Commissioning%20Initiative.pdfand

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

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

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

**Initiative Frequency:** Year round

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

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

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

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

Additional detail is available:

Schedule C-4

http://www.powerauthority.on.ca/sites/default/files/page/ScheduleC-4NewContructionInitiativeV2.pdf and

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

ENERGY AUDIT INITIATIVE (Schedule C-1)

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

Initiative Frequency: Year round

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

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

Targeted End Uses: Various

**Delivery:** LDC delivered.

Additional detail is available:

Schedule C-1

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

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

# **Industrial Program**

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

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

**Initiative Frequency:** Year round

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

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

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

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

Targeted End Uses: Process and systems

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

Additional detail is available:

• Schedule D-1

http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/current\_e lectricity\_contracts/pdfs/Schedule%20D-

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

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

MONITORING & TARGETING INITIATIVE (Schedule D-2)

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

Initiative Frequency: Year round

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

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

Targeted End Uses: Industrial processes requiring monitoring capability

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

Additional detail is available:

• Schedule D-2

http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/current\_e lectricity\_contracts/pdfs/Schedule%20D-

2%20Monitoring%20and%20Targeting%20Initiative.pdf and

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

ENERGY MANAGER INITIATIVE (Schedule D-3)

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

**Initiative Frequency:** Year round

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

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

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

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

Additional detail is available:

• Schedule D-3

http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/current\_electricity\_contracts/pdfs/Schedule%20D-

3%20Energy%20Manager%20Initiative%202011-2014.pdf and

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

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

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

Initiative Frequency: Year round

**Objective:** This initiative offers LDCs the opportunity to access funding for the employment of a KAM in order to support them in fulfilling their obligations related to the PSUI. The KAM is considered to be a key element in assisting the consumer in overcoming traditional barriers related to energy management and help them achieve savings since the KAM can build relationships and become a significant resource of knowledge to the customer.

#### **Description:**

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

**Delivery:** LDC Delivered

Additional detail is available:

• Schedule D-4

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

DEMAND RESPONSE 3 (Schedule D-6)

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

**Initiative Frequency:** Year round

**Objective:** This initiative provides for Demand Response ("DR") payment for service to DR3 participants to compensate them for making available electricity demand response during a demand response event.

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

**Targeted End Uses:** To respond to Demand Response requests for peak energy reduction.

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

Additional detail is available:

Schedule D-6

http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/current\_elect\_ricity\_contracts/pdfs/Schedule%20D-6%20Demand%20Response%203%202011-2014.pdf and

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

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

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

Initiative Frequency: Year round

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

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

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

**Delivery:** LDC delivered.

Additional detail is available:

- SaveONenergy website <a href="https://saveonenergy.ca/Consumer/Home-Assistance.aspx">https://saveonenergy.ca/Consumer/Home-Assistance.aspx</a>
- Schedule E
   <a href="http://www.powerauthority.on.ca/sites/default/files/page/Low%20Income%20Schedule%20-%20redacted%20version.pdf">http://www.powerauthority.on.ca/sites/default/files/page/Low%20Income%20Schedule%20-%20redacted%20version.pdf</a>

# Appendix B: Pre-2011 Programs

#### **ELECTRICITY RETROFIT INCENTIVE PROGRAM**

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

Initiative Frequency: Year Round

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

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

**Targeted End Uses**: Electricity savings measures

**Delivery**: LDC Delivered

HIGH PERFORMANCE NEW CONSTRUCTION

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

**Initiative Frequency:** Year round

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

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

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

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

Appendix C: 2013 Events Schedule

Residential Customer Event Interactions 2013			
Date 2013	Event		
28 Feb-3 Mar	Ideal Home & Garden Show (Careport)		
21-Mar	Earth Hour Market Square		
28-Mar	Niagara Spring Home Show (Seymour Hannah Centre)		
6-Apr	Lowes In Store Coupon Event		
20-Apr	Rain Barrel Sale - Mohawk College - Fennell Campus		
20-Apr	Home Depot In Store Coupon Event		
22-Apr	Earth Day St. Catharines - Fairview Mall		
26-Apr	Arbor Group Workshop - Regional Indian Friendship Centre		
27-Apr	Lowes In Store Coupon Event		
5-May	City of Hamilton (Health & Safety Week)		
14-16-May	Children's Water Festival -Sponsorship		
4-Jun	Peaksaver Event - Standard Life CRA		
6-Jun	Peaksaver Event - 55 Bay St N CRA		
8-Jun	Rain Barrel Sale - Seymour Hannah		
14-Jun	Canadian Tire , Louth Street		
14-Jun	Canadian Tire , Upper Gage		
14-Jun	Canadian Tire , Barton		
15-Jun	Canadian Tire , Louth Street		
15-Jun	Movie Night at Gourley Park		
15-Jun	Canadian Tire , Upper Gage		
15-Jun	Canadian Tire , Barton		
15-Jun	Canadian Tire , Upper Gage		
19-Jun	Ontario Works & Ontario Disability Town Hall Meeting, Hamilton Convention Centre		
22-Jun	Family Day at North Central Park		
1-Jul	Arcelormittal Health & Safety Day, Canada Day		
10-Jul	Gore Park Summer Promedade		
2-5-Aug	Rotary Ribfest , Montebello Park		

Residential Customer Event Interactions 2013		
Date 2013	Event	
17-Aug	Grand Opening and Movie Night at William Schwenger Park	
6-8-Sep	Lifestyle for Living Home Show, Seymour Hannah Centre	
20-22-Sep	Ideal Home and Garden Show, Careport Centre	
14-Sep	Canadian Tire, Barton street	
14-Sep	Canadian Tire, Main street	
14-Sep	Canadian Tire, Exchange Events, Welland Ave.	
15-Sep	Canadian Tire , Main Street	
15-Sep	Canadian Tire, Barton Street	
15-Sep	Canadian Tire, Exchange Events, Welland Ave.	
20-22-Sep	Ideal Home & Garden Show (Careport)	
28-Sep	Canadian Tire Coupon Event, Barton	
28-Sep	Canadian Tire Coupon Event, Cootes Drive	
28-Sep	Canadian Tire Coupon Event, Louth	
28-Sep	Carnival & Movie Night	
29-Sep	Canadian Tire Coupon Event, Barton	
29-Sep	Canadian Tire Coupon Event	
29-Sep	Canadian Tire Coupon Event, Louth	
5-Oct	Home Depot In Store Coupon Event , 350 Centennial	
5-Oct	Home Depot In Store Coupon Event , 20 YMCA	
5-Oct	Lowes In Store Coupon Event ,Barton	
6-Oct	Lowes In Store Coupon Event ,Barton	
6-Oct	Home Depot In Store Coupon Event, 350 Centennial	
6-Oct	Home Depot In Store Coupon Event , 20 YMCA	
12-Oct	Canadian Tire Coupon Event, Barton	
12-Oct	Canadian Tire In Store Coupon Event	
12-Oct	Canadian Tire Coupon Event, Welland Ave.	
19-Oct	Home Depot In Store Coupon Event , 350 Centennial	
19-Oct	Home Depot In Store Coupon Event , 20 YMCA	

Residential Customer Event Interactions 2013		
Date 2013	Event	
19-Oct	Lowes In Store Coupon Event , Barton	
20-Oct	Lowes In Store Coupon Event , Barton	
20-Oct	Home Depot In Store Coupon Event , 20 YMCA	
20-Oct	Home Depot In Store Coupon Event , 350 Centennial	
5-6-Nov	Arcelormittal Health & Safety Day	
30-Nov	EcoFest Niagara	

Business Customer Interactions 2013		
Date 2013	Event	
13-Feb	Welland & C&I Conference	
21-Feb	Race to Reduce	
13-Mar	Contractor Event - Niagara Electrical	
20-Mar	Standard/Guillevin Contractor Event	
21-Mar	Sustainable Hamilton	
22-Mar	Customer Appreciation Lunch	
27-Mar	Hamilton District Apartment Association	
7-Apr	Carrier Tradeshow	
9-Apr	Energy into Action	
11-Apr	Carrier Event	
1-May	Air Solutions Contractor Event	
2-May	Standard Products - Lighting Summit	
8-May	Niagara Technology Summit	
8-May	AirOn Contractor Event	
8-May	HDAA Trade Show - 555 Bay Street North	
14-Jun	Torbram Electric BBQ Trade Show - 18-20 Hiscott St	
10-Sep	A/C Incentive Breakfast	
22-Sep	Gerrie Electric BBQ	
23-Sep	Hamilton Waterfront Event- Pro Quip	

Business Customer Event Interactions 2013		
Date 2013	13 Event	
25-Sep	Energy into Action	
24-Oct	NEPA - White Oaks	
22-Oct	Mitigating Energy Costs event at Flamborough Downs	
6-Nov	Carrier Rooftop Launch	
21-Nov	B2B Breakfast	
6-Dec	Chamber of Commerce Lunch & Learn	