



Horizon Utilities Corporation

Conservation and Demand Management 2011 Annual Report

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

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Executive Summary

On April 23, 2010, the Ontario Energy Board (“OEB” or the “Board”) received a directive from the Minister of Energy and Infrastructure (“MEI”) requiring that mandatory Conservation and Demand Management (“CDM”) targets be established for local distribution companies (“LDCs”) to achieve reductions in electricity consumption (GWh) and peak demand (MW) over a four-year period commencing January 1, 2011 and ending December 31, 2014. Based on that directive, the OEB amended the license of each LDC to make it a condition of such to achieve their respective CDM targets through a mix of CDM programs for all consumer segments (residential, commercial, industrial).

On September 16, 2010, the OEB issued the *Conservation and Demand Management Code for Electricity Distributors* (the “Code”) for LDCs under Section 70.2 of the *Ontario Energy Board Act, 1998* (“the Act”). The Code defines the requirements with which LDCs must comply as a condition of their respective licenses. Such is inclusive of, but not limited to, the achievement of CDM targets (“CDM Targets”). Section 2.2 of the Code defines the requirements for the filing of a CDM Annual Report (the “Report”) each year commencing with September 30, 2012 for 2011 CDM results.

On November 12, 2010, the OEB released the final allocation of LDC-specific CDM Targets (EB-2010-0215/0216). Horizon Utilities’ electricity consumption reduction target was set at 281.42 GWh (4.7% of the provincial target) and its peak demand reduction target was set at 60.36 MW (4.5% of the provincial target).

Since the development and issuance of the aforementioned Code and LDC-specific CDM targets, Horizon Utilities has been working diligently to support the government’s vision of a culture of conservation. Accordingly, Horizon Utilities filed its CDM Strategy with the OEB in compliance with the requirements of the template defined in Appendix B of the Code on November 1, 2010 and a subsequent addendum to its CDM Strategy on February 16, 2011. Horizon Utilities is pleased to file this Report in compliance with the requirements of the template defined in Appendix C of the Code.

Horizon Utilities entered into a contract with the Ontario Power Authority (“OPA”), known as the Master Agreement, on February 1, 2011 to deliver the portfolio of OPA-Contracted Province-Wide Programs to all customer classes. The OPA’s portfolio of OPA-Contracted Province-Wide Programs is anticipated to deliver the

savings required for Horizon Utilities to achieve its targets. Horizon Utilities is actively engaged in the delivery of the OPA's Contracted Province-Wide Programs and is pleased to report a savings of 12.0 MW in net demand reduction and 128.51 GWh in a cumulative energy reduction towards the 2014 target. These results include 5.1 MW of demand response achievements that are subject to the OPA's Evaluation, Measurement and Verification ("EM&V") process and are subject to discount if the Demand Response savings do not persist at the end of 2014.

It is important to note that 2011 was a transition year for CDM activities which allowed for carry forward projects to contribute towards target savings. Horizon Utilities' Electricity Retrofit Incentive Projects ("ERIP") pre-2011 programs contributed significantly to the recognized savings in 2011. These carry over activities resulted in contributions of 3.3 MW of 12.0 MW and 75.8 GWh of 128.51 GWh in CDM savings to the 2011 results, noted above. During the transition year of 2011, it is also important to note that not all OPA-Contracted Province-Wide CDM Programs were available to customers in 2011 for the full year.

As noted in Horizon Utilities' CDM Strategy (EB-2010-0215), Horizon Utilities had originally planned that a component of its CDM programs would be identified as Board-Approved CDM Programs. Both Hydro One Networks Inc. ("Hydro One") and Toronto Hydro-Electric System Limited ("Toronto Hydro") each made applications to the OEB for Board-Approved CDM Programs, (EB-2010-0331/0332 and EB-2010-0011) but were not successful in having them approved as filed. Subsequently, LDCs, Horizon Utilities included, have been implementing the OPA-Contracted Province-Wide Programs to ensure that Horizon Utilities and all other LDCs are able to reach their targets through these means. Further, Horizon Utilities is working collaboratively with the Electricity Distributors Association and the CDM Caucus with the OPA to enhance OPA-Contracted Province-Wide CDM Programs, in order to ensure that Horizon Utilities is best positioned to achieve its CDM target.

Based on a forecast of Horizon Utilities' CDM savings with the benefit of the inclusion of the 2011 Final CDM results from the OPA and projection of 2012-2014 CDM results for OPA-Contracted Province-Wide CDM Programs, Horizon Utilities is committed to implementing CDM programs in an effort to achieve its CDM target.

Background

On March 31, 2010, the Minister of Energy and Infrastructure of Ontario, under the guidance of sections 27.1 and 27.2 of the *Ontario Energy Board Act, 1998*, directed the Ontario Energy Board (“OEB”) to establish Conservation and Demand Management (“CDM”) targets to be met by LDCs.. Accordingly, on November 12, 2010, the OEB amended the distribution license of Horizon Utilities Corporation (“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, inclusive.

In accordance with the same Ministerial directive, the OEB issued the *Conservation and Demand Management Code for Electricity Distributors* (the “Code”) on September 16, 2010. The Code sets out the obligations and requirements with which LDCs must comply in relation to the CDM targets set out in their licenses. To comply with the Code requirements, Horizon Utilities submitted its CDM Strategy on November 1, 2010 which provided, at a high level, Horizon Utilities’ strategy of how Horizon Utilities intended to achieve its CDM targets.

The Code also requires an LDC to file an annual report with the Board. This Annual Report is therefore prepared accordingly and covers the period from January 1, 2011 to December 31, 2011.

1 Board-Approved CDM Programs

1.1 Introduction

On November 12, 2010, the OEB issued its Decision and Order in respect of the Minister's Directive issued by the Minister of Energy and Infrastructure to the OEB regarding a proceeding under section 74 of the *Ontario Energy Board Act, 1998* amending all LDC licenses (EB-2010-0215). In that Decision, the OEB ordered that, (to meet its mandatory CDM targets), *"Each licensed electricity distributor must, as a condition of its license, deliver Board-Approved CDM Programs, OPA-Contracted Province-Wide CDM Programs, or a combination of the two"*.

At this time, the implementation of Time-of-Use ("TOU") Pricing is the only Board-Approved CDM Program that is being offered in Horizon Utilities' service territory.

1.2 TOU Pricing

1.2.1 BACKGROUND

On April 26, 2012 the OEB issued *"Guidelines for Electricity Distributor Conservation and Demand Management"* (the "Guidelines") (EB-2012-0003). The OEB recognized that a portion of the aggregate electricity demand target was intended to be attributable to savings achieved through the implementation of TOU Pricing. The OEB establishes TOU prices and has made the implementation of this pricing mechanism mandatory for all LDCs. On this basis, the OEB determined that LDCs would not have to file a Board-Approved CDM program application regarding TOU pricing. The OEB has deemed the implementation of TOU pricing to be a Board-Approved CDM Program for the purposes of achieving the CDM targets. The costs associated with the implementation of TOU pricing are recoverable through distribution rates, and not through the Global Adjustment Mechanism ("GAM").

In accordance with the aforementioned Ministerial Directive, the OEB has indicated that any evaluations of savings from TOU pricing should be conducted by the OPA for the province, and then allocated to LDCs. Horizon Utilities will report these results upon their receipt from the OPA. As of September 30, 2012, the OPA has not released its preliminary results of TOU savings to LDCs. Therefore, Horizon Utilities is not able to provide any verified savings related to Horizon Utilities' TOU

¹ EB-2010-0215, p.5

program at this time, but does plan to recognize the savings in future years for savings in 2011 and beyond.

1.2.2 TOU PROGRAM DESCRIPTION

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

Initiative Frequency: Year-Round

Objectives: TOU pricing is designed to incent the shifting of energy usage. 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 provincial government’s expectation for 3.6 million RPP consumers to be on TOU pricing by June 2011, and to ensure that smart meters that were being funded through electricity distribution rates being used for their intended purpose.

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

| RPP TOU Effective Date | Rates (cents/kWh) | | |
|---------------------------|-------------------|----------|----------|
| | On Peak | Mid Peak | Off Peak |
| November 1, 2010 | 9.9 | 8.1 | 5.1 |
| May 1, 2011 | 10.7 | 8.9 | 5.9 |
| November 1, 2011 | 10.8 | 9.2 | 6.2 |
| May 1, 2012 | 11.7 | 10.0 | 6.5 |

Delivery: The meters are installed and maintained by the LDC and the rates are set by the OEB. Most of the LDCs have transitioned their customers to TOU billing over time.

Initiative Activities/Progress: Horizon Utilities began transitioning its RPP customers to TOU billing in December 2009. As of the end of 2011, Horizon Utilities is billing 215,485 residential customers and 13,250 General Service <50 kW customers on TOU rates. Such is congruent with Horizon Utilities' smart meter filings with the OEB.

1.3 Horizon Utilities' Application with the OEB

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

2 OPA-Contracted Province-Wide CDM Programs

2.1 Introduction

Effective February 25, 2011, Horizon Utilities entered into a Master Agreement with the OPA to deliver CDM programs from January 1, 2011 to December 31, 2014. The table below identifies those programs for which Horizon Utilities has contracted with the OPA. Horizon Utilities will report results achieved from the programs listed in this table. Horizon Utilities will also report results from projects started pre-2011 which were completed in 2011.

Table 1: Programs, Initiatives and Schedules

| Initiative | Schedule | Date Schedule Posted | Customer Class |
|-------------------------------------|-------------------------|-----------------------------|------------------------------|
| Residential Program | | | |
| Appliance Retirement | Schedule B-1, Exhibit D | Jan 26 2011 | All residential rate classes |
| Appliance Exchange | Schedule B-1, Exhibit E | Jan 26 2011 | All residential rate classes |
| HVAC Incentives | Schedule B-1, Exhibit B | Jan 26 2011 | All residential rate classes |
| Conservation Instant Coupon Booklet | Schedule B-1, Exhibit A | Jan 26 2011 | All residential rate classes |
| Bi-Annual Retailer Event | Schedule B-1, Exhibit C | Jan 26 2011 | All residential rate classes |
| Residential Demand Response | Schedule B-3 | Aug 22 2011 | All general service classes |
| New Construction Program | Schedule B-2 | Jan 26 2011 | All residential rate classes |

| Initiative | Schedule | Date Schedule Posted | Customer Class |
|--|-----------------|-----------------------------|-------------------------------|
| Commercial & Institutional Program | | | |
| Efficiency: Equipment Replacement | Schedule C-2 | Jan 26 2011 | All general service classes |
| Direct Install Lighting | Schedule C-3 | Jan 26 2011 | General Service < 50 kW |
| Existing Building Commissioning Incentive | Schedule C-6 | Feb2011 | All general service classes |
| New Construction and Major Renovation Initiative | Schedule C-4 | Feb 2011 | All general service classes |
| Energy Audit | Schedule C-1 | Jan 26, 2011 | All general service classes |
| Commercial Demand Response (part of the Residential program schedule) | Schedule B-3 | Jan 26, 2011 | All general service classes |
| Demand Response 3 (part of the Industrial program schedule) | Schedule D-6 | May 31, 2011 | General Service 50 kW & above |
| Industrial Program | | | |
| Process & System Upgrades | Schedule D-1 | May 31, 2011 | General Service 50 kW & above |
| Monitoring & Targeting | Schedule D-2 | May 31, 2011 | General Service 50 kW & above |
| Energy Manager | Schedule D-3 | May 31, 2011 | General Service 50 kW & above |
| Efficiency: Equipment Replacement Incentive (part of the C&I program schedule) | Schedule C-2 | May 31, 2011 | General Service 50 kW & above |
| Demand Response 3 | Schedule D-6 | May 31, 2011 | General Service 50 kW & above |
| Home Assistance Program | | | |
| Home Assistance Program | Schedule E-1 | May 9, 2011 | All residential rate classes |
| Pre-2011 Programs completed in 2011 | | | |
| Electricity Retrofit Incentive Program | n/a | n/a | All general service classes |
| High Performance New Construction | n/a | n/a | All general service classes |
| Multifamily Energy Efficiency Rebates | n/a | n/a | All general service classes |

The OPA has communicated that the initiatives listed in the table below were not in market in 2011 and that they represent a very small percentage of the forecasted energy and demand savings. During the 2011 program year, the OPA placed emphasis on supporting the implementation of initiatives that would offer the greatest ratepayer value and greatest amount of persisting savings.

Table 2: Initiatives Not In Market

| Initiative Not in Market in 2011 | Objective | Status |
|---|---|---|
| Residential Program | | |
| Midstream Electronics | The objective of this initiative is to encourage retailers to promote and sell high efficiency televisions, and for distributors to distribute high efficiency set top boxes. | Not launched to market |
| Midstream Pool Equipment | The objective of this initiative is to encourage pool installers to sell and install efficient pool pump equipment in residential in-ground pools. | Not launched to market |
| First Nations Program | First Nations programs are delivered by OPA and results are attributed to LDCs for reporting. | Not launched to market |
| Home Energy Audit Tool | This is a provincial online audit tool to engage customers in conservation and help drive customer participation to CDM programs. | Not launched to market |
| Commercial & Institutional Program | | |
| Direct Service Space Cooling | The objective of this initiative is to offer free servicing of air conditioning systems and refrigeration units for the purpose of achieving energy savings and demand reduction. | Not launched to market in 2011. The OPA has no plans to launch this initiative 2012 |
| Demand Response 1 | 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 |
| Industrial Program | | |
| Demand Response 1 | As above | No customer uptake for this initiative |

2.2 Program Descriptions

2.2.1 Consumer Program Initiatives

2.2.1.1 Appliance Retirement (Exhibit D)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

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

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

Additional detail is available:

- Schedule B-1, Exhibit D
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf and
- saveONenergywebsite
<https://saveonenergy.ca/Consumer/Programs/Appliance-Retirement.aspx>

Initiative Activities/Progress: Horizon Utilities' uptake/participation for decommissioned appliances was 3,034 units.

Gross Savings:

- The incremental peak demand savings was 350 kW and the incremental energy savings was 2,495,649 kWh

Net Savings:

- The incremental peak demand savings is 172 kW and the incremental energy savings was 1,238,865 kWh

Contribution to Targets:

- The 2011 net peak demand savings that contributes to the 2014 demand target was 167 kW
- The program to date 2011-2014 net cumulative energy savings was 4,951,619 kWh

Province-Wide Participation:

- Total province-wide appliances uptake/participation was 56,110 units, of which Horizon Utilities contributed 3,034 or 5.4% to the provincial results

Marketing Tactics Used:

In 2011, Horizon Utilities provided marketing support for this initiative through:

- Bill Inserts - three waves, over 340,000 (cross program promotion with HVAC, Coupons and Demand Response)
- Promotion on bill envelope – over 800,000
- Promotion on bill statement messaging - over 800,000
- Television advertising (co-branded with Hydro One and some Golden Horseshoe area LDCs) - 3 two week time slots (in March, June and September), 156 commercials with over 6 million viewers
- Website promotion - all year
- Promotion at 21 retail events
- Promotion at 21 community events (including 4 home shows)
- Collateral and fridge magnet handouts - all year
- Promotion using door hangers – 120,000 pieces/units distributed; cross promotion with **peaksaver®**
- Promotion on billboards - all year
- Promotion at Community Arenas - all year
- Radio advertising – 70, 30 second commercials, one week flights, April, July, October and November
- Print newspapers advertising - all year (co-promotion with Heating and Cooling Incentive and coupons), 4 different local papers, approximately 5,245,332 impressions

- Online banner advertising - April to June, 333,950 impressions
- Email advertising - 2,000 customers contacts

In Market Date: January 26, 2011

Lessons Learned:

- The Appliance Retirement Initiative is a continuation of The Great Refrigerator Round-Up Initiative offered by LDCs since 2007. The successful execution of the previous rendition of this program by the LDCs has resulted in reduced potential for the 2011-2014 initiative. While the OPA and the LDCs have reviewed this initiative to assess whether to include other products, appliances have a natural life cycle and the initiative cannot be expected to continually deliver the high level of results in perpetuity. These lower expectations have been incorporated when developing conservation portfolios
- This initiative now faces some competition from independent retailers and municipalities
- Appliance Retirement participant results are aligned to province-wide advertising
- Moving forward in 2013, the age eligibility requirements for the primary appliance increases to 20 years. As a consequence, the number of types of eligible equipment will be reduced and is expected to result in reduced uptake

2.2.1.2 Appliance Exchange (Exhibit E)

Target Customer Type(s): Residential Customers

Initiative Frequency: Spring and Fall

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

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

Targeted End Uses: Window air conditioners and portable dehumidifiers

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

Additional detail is available:

- Schedule B-1, Exhibit C
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf and
- saveONenergy website <https://saveonenergy.ca/Consumer.aspx>

Initiative Activities/Progress:

2011 Results:

Horizon Utilities' uptake/participation for the Appliance Exchange Initiative was 186 units.

Gross Savings:

- The incremental peak demand savings was 35 kW and the incremental energy savings was 41,598 kWh

Net Savings:

- The incremental peak demand savings was 18 kW and the incremental energy savings was 21,438 kWh

Contribution to Targets:

- The 2011 net peak demand savings that contributes to the 2014 demand target was 6 kW
- The program to date 2011-2014 net cumulative energy savings was 74,562 kWh

Province-Wide Participation:

- Total province-wide Appliances Exchange uptake/participation was 3,688 units of which Horizon Utilities contributed 186 or 5% to the provincial results

Marketing Tactics Used:

In 2011, Horizon Utilities provided marketing support for this initiative through:

- Website promotion - all year

- Promotion at 21 retail events

In Market Date: January 26, 2011

Lessons Learned:

- The Spring 2011 event had the participation of 3 retailers through 300 – 400 locations across the province. However, the Fall 2011 event had no retailer participation; savings budgeted by LDCs were not realized
- The initiative may be achieving market saturation
- The type of unit turned in is very dependent upon what is promoted by the retailers
- The Fall 2011 event had no retail participants

2.2.1.3 HVAC Incentives (Exhibit B)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

Targeted End Uses: Central air conditioners and furnaces

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

Additional detail is available:

- Schedule B-1, Exhibit B
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf and
- saveONenergy website <https://saveonenergy.ca/Consumer.aspx>

Initiative Activities/Progress:

2011 Results:

Horizon Utilities' uptake/participation for HVAC incentives was 6,097 units.

Gross Savings:

- The incremental peak demand savings was 2,798 kW and the incremental energy savings was 5,121,925 kWh

Net Savings:

- The incremental peak demand savings is 1,693 kW and the incremental energy savings was 3,070,047 kWh

Contribution to Targets:

- The 2011 net peak demand savings that contributes to the 2014 demand target was 1,693 kW
- The program to date 2011-2014 net cumulative energy savings was 12,280,188 kWh

Province-Wide Participation:

- Total province-wide HVAC incentives uptake/participation was 111,587 units of which Horizon contributed 6,097 or 5.5% to the provincial results

Marketing Tactics Used:

In 2011, Horizon Utilities provided marketing support for this initiative through:

- Print newspaper advertising - all year (standalone plus co-promotion with Appliance Retirement initiative, coupon initiatives, 1,907,500 impressions
- Yellow pages advertising - all year
- Website promotion - all year
- Promotion at 21 retail events

- Promotion at over 21 community events (including 4 home shows)
- Collateral handouts - all year
- Bill Inserts - three waves, over 340,000 (cross program promotion with Appliance Retirement, Coupons and Residential Demand Response)
- Online banner advertising- 154,405 impressions,

In Market Date: January 26, 2011

Lessons Learned:

- Channel engagement is a highly effective method of connecting with customers. However channel partners require timeliness of the rebate process in order to maintain a positive relationship between consumers, contractors, the OPA, and the participating LDC
- There appears to be spillover from non-HRAI contractors who are ineligible for this initiative. There are cases where smaller independent 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 are not being attributed to any LDC
- The rebate process has been slow, resulting in frustration for customers and contractors

2.2.1.4 Conservation Instant Coupon Booklet (Exhibit A)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

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

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

Additional detail is available:

- Schedule B-1, Exhibit A
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf and
- saveONenergy website <https://saveonenergy.ca/Consumer.aspx>

Initiative Activities/Progress:

2011 Results:

Horizon Utilities’ uptake/participation for coupon booklet was 21,540 units.

Gross Savings:

- The incremental peak demand savings was 44 kW and the incremental energy savings was 735,082 kWh

Net Savings:

- The incremental peak demand savings is 50 kW and the incremental energy savings was 810,293 kWh

Contribution to Targets:

- The 2011 net peak demand savings that contributes to the 2014 demand target was 50 kW
- The program to date 2011-2014 net cumulative energy savings was 3,241,174 kWh

Province-Wide Participation:

- Total province-wide coupon booklet uptake/participation was 559,462 units of which Horizon Utilities contributed 21,540 or 3.9% to the provincial results

Marketing Tactics Used:

In 2011, Horizon Utilities provided marketing support for this initiative through:

- Website promotion - all year
- Promotion at 21 retail events
- Promotion at over 21 community events (including 4 home shows)
- Collateral handouts - all year
- Bill Inserts - two waves, over 165,000 (program co-promotion with Appliance Retirement and HVAC)
- Print newspaper advertising – (co-promotion with Appliance Retirement and Heating and Cooling Incentive) 317,000 impressions
- Promotion using unaddressed direct mail – 10,791
- Online banner advertising- 125,000 impressions
- Radio advertising - 75 thirty second commercials, March to May, 2011 - 1,500,000 impressions

In Market Date: January 26, 2011.

Lessons Learned:

- The downloadable coupons proved to be more successful than the mailed out booklets
- This initiative may benefit from an enabler such as a Conservation Card/ Loyalty Card to increase customer participation
- The timeframe for retailer submission of redeemed coupons vary from retailer to retailer. This delays the results reporting, which in turn limits the OPA and LDC abilities to react and respond to initiative performance or changes in consumer behavior
- Uptake by consumers was significantly less than what was originally projected by the OPA. As a result, this initiative has been placed “on hold” for (all of/most of) 2012
- Development work on Conservation Card has not moved forward

2.2.1.5 Bi-Annual Retailer Event (Exhibit C)

Target Customer Type(s): Residential Customers

Initiative Frequency: Bi-annual events

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

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

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

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

Additional detail is available:

- Schedule B-1, Exhibit C
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf and
- saveONenergy website <https://saveonenergy.ca/Consumer.aspx>

Initiative Activities/Progress:

2011 Results:

Horizon Utilities' uptake/participation for the bi-annual retailer event was 35,186 units.

Gross Savings:

- The incremental peak demand savings was 61 kW and the incremental energy savings was 1,087,497 kWh

Net Savings:

- The incremental peak demand savings is 68 kW and the incremental energy savings was 1,188,091 kWh

Contribution to Targets:

- The 2011 net peak demand savings that contributes to the 2014 demand target was 68 kW
- The program to date 2011-2014 net cumulative energy savings was 4,752,365 kWh

Province-Wide Participation:

- Total province-wide bi-annual retailer event uptake/participation was 870,332 units, of which Horizon Utilities contributed 35,186 or 4% to the provincial results

Marketing Tactics Used:

In 2011, Horizon Utilities provided marketing support for this initiative through:

- Website promotion - all year
- Promotion at 21 retail events
- Promotion at over 21 community events (including 4 home shows)

In Market Date: January 26, 2011

Lessons Learned:

- The Product list has changed very little over the past four 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
- A review conducted by the EDA's CDM Residential Working Group (a committee established by the EDA CDM Caucus) in Q4 2011 identified three areas of need for initiative evolution: 1) introduction of product focused marketing; 2) enhanced product selection and, 3) improved training for retailers
- Point of presence did not match the eligible product on the shelf
- Little opportunity for consumer education on products being promoted

2.2.1.6 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.

Initiative Activities/Progress:

In Market Date: Did not offer this

Lessons Learned:

- The availability of retailer and/or LDC staff with product knowledge and the ability to conduct demonstrations in store during the events would be an asset. This could be a valuable role for LDCs
- Several mid-size and small LDCs do not have the time or staff resources to accommodate these types of events
- Uptake has been limited and the OPA has been slow in their approval process

2.2.1.7 Residential New Construction (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_electricity_contracts/pdfs/Schedule%20B-2%20New%20Construction%20Program.pdf and
- saveONenergy website <https://saveonenergy.ca/Consumer.aspx>

Initiative Activities/Progress:

2011 Results:

Horizon Utilities' uptake/participation for Residential New Construction was 0.

Gross Savings:

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

Net Savings:

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

Contribution to Targets:

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

In Market Date: Horizon Utilities did not promote this initiative due to complexity of the program requirements which generated little interest from the building community. Program design is recognized by both the LDCs and the OPA as a barrier to this program for market entry. This initiative is undergoing the change management process through the EDA Residential Working Group and the OPA.

Lessons Learned:

- Provincially, there were limited (7) participants in this program initiative. Since the online application system is a one to one relationship, this program was only practical for custom builders who were building one home at a time. This type of application process is an administrative challenge for builders who are building multiple houses in a subdivision, therefore program interest is low
- Administrative requirements must align with perceived stakeholder payback. Changes are being processed through change management for 2012
- Lengthy application process, coupled with limited incentive amounts have resulted in limited uptake
- Payment of incentives to builders directly by the OPA reduces the role and exposure of LDCs

2.2.1.8 Residential Demand Response (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 real-time consumption information on an In Home Display (“IHD”). LDCs were given the choice to continue to offer the standard load control program (programmable thermostat or switch with a \$25 bill credit) for the first 8 months of 2011 (referred to as *peaksaver*®Extension). After August 2011, the *peaksaver*®Extension ended and the program (including marketing) ceased until new IHD products were available.

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

Delivery: LDCs recruit customers and procure technology

Additional detail is available:

- Schedule B-1, Exhibit C
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/SCHEM_2011_ResDR_B_3_110727%28MJB%29v15_redacted.pdf and
- saveONenergy website <https://saveonenergy.ca/Consumer.aspx>

Initiative Activities/Progress:

2011 Results:

Horizon Utilities’ uptake/participation for *peaksaver*®Extension installations was 1,952 units.

Gross Savings:

- The incremental peak demand savings was 1,093 kW and the incremental energy savings was 2,830 kWh

Net Savings:

- The incremental peak demand savings is 1,093 kW and the incremental energy savings was 2,830 kWh

Contribution to Targets:

- The 2011 net peak demand savings that contributes to the 2014 demand target was 0 kW
- The program to date 2011-2014 net cumulative energy savings was 2,830 kWh

Province-Wide Participation:

- Total province-wide *peaksaver*® Extension uptake/participation was 19,577 units of which Horizon Utilities contributed 1,952 or 10% to the provincial results

Marketing Tactics Used:

In 2011, Horizon Utilities provided marketing support for this initiative through:

- Website promotion throughout the duration of program
- Promotion at 14 retail events
- Promotion at 16 community events (including 3 home shows)
- Collateral handouts - duration of program
- Promotion using door hangers – 120,000 pieces; this was in cross promotion with appliance retirement
- Online banner advertising - April 157,239 impressions
- Promotion using Direct Mail - 100,000 addressed households
- Bill Inserts - June/July 120,000 (co-promotion with HVAC and Appliance Retirement initiatives)

In Market Date: August 22, 2011

Lessons Learned:

- The schedule for **peaksaver®PLUS™**, was posted in August 2011, but this did not provide adequate time for product procurement for 2011, and part of 2012. The product procurement process uncovered that the IHDs that communicate with installed smart meter technology were still in development and not ready for market deployment. Consequently, LDCs could not be in market with the **peaksaver®PLUS™**, program until 2012
- Cumulative energy savings associated with the programmable thermostat device were not accounted for in the 2011 Final Results. We believe that cumulative energy savings, based on the most recent measures and assumptions list, associated with the installation of 1,952 internet enabled programmable thermostats should have been captured in the OPA 2011 Final Results report. Horizon Utilities will continue to work with the OPA to have these savings recognized
- Introduction of new technology requires incentives for the development of such technology. Appropriate lead times for LDC analysis and assessment, product procurement, and testing and integration into the Smart Meter environment are also required. Making seemingly minor changes to provincial technical specifications can create significant issues when all LDCs attempt to implement the solution in their individual environments
- Where a provincial solution is not available to all participants, attention to addressing specific LDC concerns is needed
- Stopping and starting the program has impacted customer enrollments and uptake in the program
- Due to the delay in program design, and consequent product procurement, LDCs were given the choice to continue to offer the standard load control program (programmable thermostat or switch) for the first 8 months of 2011

2.2.2 Commercial and Institutional Program Initiatives

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

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

Initiative Frequency: Year round

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

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

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

Delivery: LDC delivered.

Additional detail is available:

- Schedule C-2
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20C-2%20ERII%20Initiative.pdf and
- saveONenergy website <https://saveonenergy.ca/Business/Program-Overviews/Retrofit-for-Commercial.aspx>

Initiative Activities/Progress:

2011 Results:

The following results include both the business and the industrial program activity.

Horizon Utilities’ uptake/participation for ERII was 86 projects.

Gross Savings:

- The incremental peak demand savings was 1,286 kW and the incremental energy savings was 7,024,166 kWh

Net Savings:

- The incremental peak demand savings is 927 kW and the incremental energy savings was 5,208,443 kWh

Contribution to Targets:

- The 2011 net peak demand savings that contributes to the 2014 demand target was 927 kW
- The program to date 2011-2014 net cumulative energy savings was 20,833,771 kWh

Province-Wide Participation:

- Total province-wide ERII projects was 2,949 units, of which Horizon Utilities contributed 86 or 2.9% to the provincial results

Marketing Tactics Used:

In 2011, Horizon Utilities provided marketing support for this initiative through:

- Channel Partner Promotion role and events

In Market Date: This initiative was launched in January 26, 2011 using a paper-based application process.

Lessons Learned:

- ERII (previously Equipment Replacement Incentive Program – ERIP) has been offered by LDCs for many years. It is a high performing, cost-effective program, and there were many pre-2011 projects completed in 2011 (via ERIP)
- A major challenge for the ERII program in 2011 was payment delays; the centralized electronic processes were not ready as required by the Master Agreement. Payment delays were caused by automated payment processes not being in place, as well as a greater than expected volume of pre-2011 projects completed in 2012. Based on the lessons learned in the 2011 process, the centralized process review used for 2012 project payment has been streamlined
- In March 2011, the revised iCON system was launched by the OPA. This is the major online application system implemented to aid the 2011-2014 ERII application process. With system applications of this size and functionality, it was expected that there would be various issues identified at the time of the launch of the new application as well as on-going, to prove that the system

was "ready for market." Unfortunately, the resolution of these issues, with the corresponding time lags and workarounds, was a barrier to some customer participation in the 2011 program year. In addition, there were also on-going issues and limitations with the back-end Customer Relations Management ("CRM") system that affected LDCs' ability to effectively review and approve applications. Some LDCs (and their third party service providers) have developed parallel systems to monitor their applications

2.2.2.2 Direct Install Lighting ("DIL") (Schedule C-3)

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

Initiative Frequency: Year round

Objective: The objective of this initiative is to offer a free installation of eligible lighting and water heating measures of up to \$1,000 to eligible owners and tenants of commercial, institutional and agricultural facilities and multi-family buildings, for the purpose of achieving electricity savings and peak demand savings.

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

Target End Uses: 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>

Initiative Activities/Progress:

2011 Results:

Horizon Utilities' uptake/participation for direct install lighting was 693 projects.

Gross Savings:

- The incremental peak demand savings was 617 kW and the incremental energy savings was 1,823,667 kWh

Net Savings:

- The incremental peak demand savings is 661 kW and the incremental energy savings was 1,693,346 kWh

Contribution to Targets:

- The 2011 net peak demand savings that contributes to the 2014 demand target was 544 kW
- The program to date 2011-2014 net cumulative energy savings was 6,364,007 kWh

Province-Wide Participation:

- Total province-wide direct install lighting participation was 20,297 projects of which Horizon contributed 693 or 3.4% to the provincial results

Marketing Tactics Used:

In 2011, Horizon Utilities provided marketing support for this initiative through:

- Website promotion - all year

In Market Date: This initiative was in market from January 1st, 2011

Lessons Learned:

- DIL is a continuation of the Power Saving Blitz initiative offered by LDCs from 2008-2010. Successful execution of the previous version of this initiative has resulted in diminished potential for the 2011-2014 initiative. The inclusion of a standard incentive for additional measures increased the project size and drove higher energy and demand savings results

- Price volatility in the cost of materials has resulted in reduced margins for the electrical contractors and has led to a reduction in vendor channel participation
- Due to backlogs in the payment system, participant incentive payment from the OPA to the LDC, and therefore to the customer, was often delayed
- To address these issues, LDCs have been working with the OPA through the Change Management process to address:
 - Extending the target initiative population to include small agricultural customers;
 - Increasing the incentive envelope of \$1,000 to \$1,500 to ensure ongoing marketability of the program; and
 - Reviewing the eligible measure price list to support contractor participation

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

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

Initiative Frequency: Year round

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

Description: This Initiative offers participants incentives for the following:

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

Targeted End Uses: Chilled water systems for space cooling

Delivery: LDC delivered.

Additional detail is available:

- Schedule C-6
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20C-6%20Commissioning%20Initiative.pdfand
- saveONenergy website <https://saveonenergy.ca/Business/Program-Overviews/Existing-Building-Commissioning.aspx>

Initiative Activities/Progress:

There was no activity for this initiative by Horizon Utilities or any other LDC in Ontario in 2011.

In Market Date: There was no activity for this initiative due to lack of customer interest or service provider activity.

Lessons Learned:

- There was no customer uptake for this initiative. It is suspected that the scope of the initiative being limited to space cooling contributed to the lack of participation. Accordingly, chilled water systems used for other purposes should be made eligible and considered through the OPA Change Management Process
- The customer expectation is that the program may be expanded to include broader building improvements for a more holistic approach to building recommissioning
- The major challenge for this initiative is the extremely small window of opportunity. The 60-day data collection period is only slightly less than the 90-day window in which to perform the measurements. Technology to perform the necessary measurement in less than two weeks exists but this is not acceptable to the current OPA schedule

2.2.2.4 New Construction and Major Renovation (“HPNC”) (Schedule C-4)

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

Initiative Frequency: Year round

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

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

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

Delivery: LDC delivers to customers and design decision makers.

Additional detail is available:

- Schedule C-4
<http://www.powerauthority.on.ca/sites/default/files/page/ScheduleC-4NewConstructionInitiativeV2.pdf> and
- saveONenergy website <https://saveonenergy.ca/Business/Program-Overviews/New-Construction.aspx>

Initiative Activities/Progress:

2011 Results:

Horizon Utilities did not have any eligible HPNC projects in 2011.

Gross Savings:

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

Net Savings:

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

Contribution to Targets:

- The 2011 net peak demand savings that contributes to the 2014 demand target was 0 kW

- The program to date 2011-2014 net cumulative energy savings was 0 kWh

Province-Wide Participation:

- Total province-wide HPNC projects was only 10 projects of which Horizon Utilities did not contribute to the provincial results

Marketing Tactics Used:

- In 2011, Horizon Utilities provided marketing support for this initiative through:
- Securing the services of Enbridge Gas Distribution Inc. (“Enbridge”) for the delivery of this program

In Market Date: This initiative was not in market in 2011.

Lessons Learned:

- This is a continuation of the High Performance New Construction program previously delivered by Enbridge under contract with the OPA (and subcontracted to Union Gas Limited), which ran until December 2010
- For 2011, new industry participation was limited due to the delays in redesign of certain aspects of the initiative such as:
 - 2011 prescriptive incentives needed to be aligned with ERII incentives
- In the cases of delivering large projects (i.e. custom applications),
 - 2011 participation was limited due to:
 - 1) Building code changes and
 - 2) Level of documentation required
- Complex custom applications resulted in limited uptake

2.2.2.5 Energy Audit (Schedule C-1)

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

Initiative Frequency: Year round

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

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

Targeted End Uses: Various

Delivery: LDC delivered.

Additional detail is available:

- Schedule C-1
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20C-1%20Energy%20Audit%20Initiative.pdf and
- saveONenergy website <https://saveonenergy.ca/Business/Program-Overviews/Audit-Funding.aspx>

Initiative Activities/Progress:

2011 Results:

Horizon Utilities had 5 energy audit applications but no audit activities in 2011.

Gross Savings:

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

Net Savings:

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

Contribution to Targets:

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

Province-Wide Participation:

- The total province-wide number of Energy Audits was only 103 projects of which Horizon Utilities contributed 5 or 5% to the provincial results

Marketing Tactics Used:

- Horizon Utilities provided marketing support for this initiative through channel partner development

In Market Date: This initiative was in market starting in April 2011.

Lessons Learned:

- Customer uptake in the beginning of 2011 was slow, and increased later in the year. Audits represent potential CDM savings that can only be achieved if retrofits are completed. Savings for 2011 were not recognized but savings are expected in 2012
- Customers expect a greater connection with other CDM initiatives as a result of completing the Energy Audit. The initiative should be reviewed under the Change Management process for the means to readily incent participants with audits in hand to implement other electricity savings Initiatives

2.2.3 Industrial Program Initiatives

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

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

Initiative Frequency: Year round

Objectives: The objectives of this initiative are to:

- Offer LDCs’ customers capital incentives and enabling initiatives to assist with the implementation of large projects and project portfolios
- Implement system optimization project in systems which are intrinsically complex and capital intensive; and

- Increase the capability of distribution customers to implement energy management and system optimization projects

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

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

Targeted End Uses: Process and systems

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

Additional detail is available:

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

Initiative Activities/Progress:

2011 Results:

Horizon Utilities did not have any eligible PSUI projects in 2011.

Gross Savings:

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

Net Savings:

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

Contribution to Targets:

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

Province-Wide Participation:

- There was no PSUI activity in Ontario in 2011

In Market Date: This initiative was in market starting in August 2011.

Lessons Learned:

- The PSUI program targets large customers that are undertaking large capital projects. There is typically a long sales cycle to sell these projects, and then a long project development cycle. As such, results from PSUI did not appear in 2011. Limited results are expected to appear in 2012. Majority of the results are expected in 2013-2014, and will contribute to cumulative energy savings targets
- Steps are being taken in the 2012 Change Management Process to simplify and streamline the micro-project application process and to allow smaller projects to be directed to the ERII stream
- Given the size of the projects involved, the contract required for PSUI is a lengthy and complicated document. Attempts are being made through the Change Management Process in 2012 to simplify the document while still protecting the ratepayer
- With the considerable customer interest in on-site load displacement projects, the initiative should be reviewed to ensure that these projects may be accepted as part of the PSUI
- This program relies on a Technical Reviewer which was not contracted by the OPA until November, 2011. This delay has resulted in CDM savings being foregone in 2011, which has affected Horizon Utilities cumulative savings

- The OPA’s PSUI contract with customers for capital incentives is a barrier because the contract term is too long and contains other complicated provisions

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

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

Initiative Frequency: Year round

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

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

Targeted End Uses: Industrial processes requiring monitoring capability

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

Additional detail is available:

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

Initiative Activities/Progress:

2011 Results:

Horizon Utilities did not have any eligible M&T projects in 2011.

Gross Savings:

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

Net Savings:

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

Contribution to Targets:

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

Province-Wide Participation:

- There was no M&T activity in the province in 2011

In Market Date: This initiative was in market in August 2011.

Lessons Learned:

- The M&T initiative was originally targeted at larger customers with the capacity to review the M&T data. This review requires the customer facility to employ an Energy Manager, or a person with equivalent qualifications, which has been a barrier for some customers. Through the OPA change management process in 2012, changes are being made to both the M&T schedule and ERII to allow smaller facilities to employ M&T systems
- Only LDCs with large industrial facilities who engage an energy manager can benefit from this Initiative

2.2.3.3 Energy Manager (Schedule D-3)

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

Initiative Frequency: Year round

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

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

Targeted End Uses:

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>

Initiative Activities/Progress:

2011 Results:

Horizon Utilities did not have any eligible Energy Manager activity in 2011.

Gross Savings:

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

Net Savings:

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

Contribution to Targets:

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

Province-Wide Participation:

- There was no Energy Manager activity in the province in 2011

In Market Date: This initiative was in market on August 2011.

Lessons Learned:

- The Energy Managers have proven to be a popular resource
- At the beginning, it took longer than expected to set up the Energy Manager application process
- Some LDCs are reporting difficulties in hiring capable Roving Energy Managers (“REM”)
- LDCs that are too small to qualify for their own REM are teaming up with other LDCs to hire an REM
- Long process to finalize legal documents with the OPA
- Some LDCs do not have customers who meet the minimum requirements
- Large Use customers are having difficulty acquiring this resource due to limited availability

2.2.3.4 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

Initiative Activities/Progress:

2011 Results:

Horizon Utilities, working with eight other LDCs, put a team of three Key Account Managers in place. The KAM team began servicing the Large User customers in the 9 LDC service territories starting in August 2011.

In Market Date: This initiative was in market in August 2011.

Lessons Learned:

- Customers appreciate dealing with a single contact to interface with an LDC, a resource that has both the technical and business background who can communicate easily with the customer and the LDC. Finding this type of skill set has been difficult, resulting in longer lead times to acquire the right resource.

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

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

Initiative Frequency: Year round

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

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

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

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

Additional detail is available:

- Schedule D-6
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20D-6%20Demand%20Response%203%202011-2014.pdf and
- saveONenergy website <https://saveonenergy.ca/Business.aspx>

Initiative Activities/Progress:

2011 Results:

Horizon Utilities’ uptake/participation for DR3 was 6 contracts.

Gross Savings:

- The incremental peak demand savings was 4,858 kW and the incremental energy savings was 226,282 kWh

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Net Savings:

- The incremental peak demand savings is 4,033 kW and the incremental energy savings was 226,282 kWh

Contribution to Targets:

- The 2011 net peak demand savings that contributes to the 2014 demand target was 0 kW
- The program to date 2011-2014 net cumulative energy savings was 226,282 kWh

Province-Wide Participation:

- Total province-wide DR3 uptake/participation was 282 contracts of which Horizon Utilities contributed 11 or 4% to the provincial participation and 5.8% of the gross MW capacity signed on

Marketing Tactics Used:

In 2011, Horizon Utilities provided marketing support for this initiative through:

- Channel Partner development and strategic alliances
- Website promotion - all year

In Market Date: This initiative was in market in January 2011.

Lessons Learned:

- Customer data is not provided by the OPA on an individual customer basis due to contractual requirements with the aggregators. This limits LDCs' ability to effectively market to prospective participants. LDCs are now approaching the Aggregators individually and working to develop agreements in order to identify potential customers of this initiative
- LDCs have limited visibility to their DR3 participants. Customer meter number, contracted amount, and contract term are not provided by the OPA on an individual customer basis. This makes it difficult to understand who is benefiting from these programs and it limits the LDCs' ability to effectively market them to prospective participants

2.2.4 Low Income Program Initiative

2.2.4.1 Home Assistance Program (Schedule E)

Target Customer Type(s): Income Qualified Residential Customers

Initiative Frequency: Year Round

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

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

Targeted End Uses: End uses based on results of audit

Delivery: LDC delivered.

Additional detail is available:

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

Initiative Activities/Progress:

In Market Date: There was no activity for this initiative for the province of Ontario in 2011

Lessons Learned:

- Difficulty identifying eligible customers
- This CDM Program Schedule E was finalized later (May 2011) than the rest of the OPA initiatives; in 2011 only 2 LDCs were in market

- Centralized payment processes were not developed in 2011, but were in place mid-2012. This resulted in some LDCs delaying their launch to market, or for some pulling out of the market until the payment processes were completed.
- The financial scope, complexity, and customer privacy requirements of this initiative resulted in a lengthy procurement process. Investigation of joint delivery with a gas company was conducted and a proposal was evaluated. However, the joint delivery was determined not to be cost effective based on the evaluation of the competitive proposals received.

2.2.5 Pre-2011 Programs Competed in 2011

2.2.5.1 Electricity Retrofit Incentive Program

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

Initiative Frequency: Year Round

Objective:

Description: Refer to section 2.2.2.1

Targeted End Uses:

Delivery: LDC delivered

Initiative Activities/Progress:

2011 Results:

Horizon Utilities' uptake/participation for ERIP was 118 completed project applications.

Gross Savings:

- The incremental peak demand savings was 5,876 kW and the incremental energy savings was 33,885,712 kWh

Net Savings:

- The incremental peak demand savings is 3,066 kW and the incremental energy savings was 17,700,219 kWh

Contribution to Targets:

- The 2011 net peak demand savings that contributes to the 2014 demand target was 3,066 kW
- The program-to-date 2011-2014 net cumulative energy savings was 70,800,874 kWh

Province-Wide Participation:

Total province-wide participation was 2,023 projects of which Horizon Utilities contributed 118 projects or 5.8% of the provincial results

Total province-wide ERIP demand savings was 21,550 kW of which Horizon Utilities contributed 14.2 % to the provincial results

Total province-wide ERIP energy savings was 481,970,197 kWh of which Horizon contributed 14.7 % to the provincial results

In Market Date: Carryover activity for this initiative was supported for the entire year of 2011. Horizon Utilities were required to finalize the completion of all pre-2011 project activities by March 31, 2012.

Lesson Learned:

- The flexibility of the ERIP program made participation relatively easy but put the onus on the LDC to ensure that all checks and balances were in place to guarantee a seamless process. The regimented process for ERIP proved to be more cumbersome upfront but does provide downstream advantages

2.2.5.2 High Performance New Construction

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

Initiative Frequency: Year round

Objective: To provide financial assistance/offset to capital costs

Description: Refer to section 2.2.2.5

Targeted End Uses: Financial incentives

Delivery: By Enbridge

Additional detail is available:

Initiative Activities/Progress:

2011 Results:

Horizon Utilities' uptake/participation in HPNC was 7 projects.

Gross Savings:

- The incremental peak demand savings was 485 kW and the incremental energy savings was 2,489,177 kWh

Net Savings:

- The incremental peak demand savings is 242 kW and the incremental energy savings was 1,244,589 kWh

Contribution to Targets:

- The 2011 net peak demand savings that contributes to the 2014 target was 242 kW
- The program to date 2011-2014 net cumulative energy savings was 4,978,355 kWh

Province-Wide Participation:

- Total province-wide participation was 145 projects of which Horizon Utilities submitted 7 projects or 4.8%
- Total province-wide HPNC demand savings was 5,098 kW of which Horizon contributed 4.7 % to the provincial results
- Total province-wide HPNC energy savings was 104,742,366 kWh of which Horizon contributed 1.2% to the provincial results

In Market Date: Carryover activity was supported for the entire 2011 year.

Lesson Learned:

- Customers interested in the High Performance New Construction Program were referred to Enbridge so that they could be eligible for the incentives offered by the OPA

2.2.5.4 Multifamily Energy Efficiency Rebates

Target Customer Type(s): Residential customers living in multifamily buildings, including rental buildings, condominiums and assisted social housing.

Initiative Frequency: Year round

Objective: To provide financial incentives

Description: OPA's Multifamily Energy Efficiency Rebates ("MEER") initiative applies to multifamily buildings of six units or more, including rental buildings, condominiums, and assisted social housing. The OPA contracted with GreenSaver to deliver the MEER initiative outside of the Toronto Hydro service territory. Activities delivered in Toronto were contracted with the City of Toronto.

Similar to ERII and ERIP, MEER provides financial incentives for prescriptive and custom measures, but also funds resident education. Unlike ERII, where incentives are paid by the LDC, all incentives through MEER are paid through the contracted partner (i.e. GreenSaver).

Targeted End Uses: To provide financial assistance for custom energy efficiency efforts.

Delivery: Through GreenSaver

This program initiative was not offered in Horizon Utilities' service territory in 2011.

Initiative Activities/Progress:

No activities to report.

In Market Date: This initiative was not offered through Horizon Utilities.

Lesson Learned:

No lessons learned to report.

2.3 Participation

Table 3 below indicates the participation levels in the OPA-Contracted Province-Wide programs offered in Horizon Utilities' service territory.

Table 3: Participation

| # | Initiative | Activity Unit | Uptake/ Participation Units |
|-------------------------|--|---------------|-----------------------------|
| Consumer Program | | | |
| 1 | Appliance Retirement | Appliances | 3,034 |
| 2 | Appliance Exchange | Appliances | 186 |
| 3 | HVAC Incentives | Equipment | 6,097 |
| 4 | Conservation Instant Coupon Booklet | Coupons | 21,540 |
| 5 | Bi-Annual Retailer Event | Coupons | 35,186 |
| 6 | Retailer Co-op | Items | 0 |
| 7 | <i>peaksaver</i> ® Extension | Devices | 1,952 |
| 8 | Midstream Electronics | Items | 0 |
| 9 | Midstream Pool Equipment | Items | 0 |
| 10 | Residential New Construction | Houses | 0 |
| Business Program | | | |
| 11 | Equipment Replacement Incentive (ERII) | Projects | 71 |
| 12 | Direct Installed Lighting | Projects | 693 |
| 13 | Direct Service Space Cooling | Equipment | 0 |
| 14 | Building Commissioning | Buildings | 0 |
| 15 | New Construction | Buildings | 0 |
| 16 | Energy Audit | Audits | 5 |
| 17 | <i>peaksaver</i> ® Extension | Devices | 0 |
| 18 | Demand Response 1 | Facilities | 0 |
| 19 | Demand Response 3 | Facilities | 5 |

| Industrial Program | | | |
|--|--|------------|-----|
| 20 | Process & System Upgrades* | Projects | 0 |
| | a) preliminary study | | 0 |
| | b) engineering study | | 0 |
| | c) project incentive | | 0 |
| 21 | Monitoring & Targeting | Projects | 0 |
| 22 | Energy Manager | Managers | 0 |
| 23 | Equipment Replacement Incentive (ERII) | Projects | 15 |
| 24 | Demand Response 1 | Facilities | 0 |
| 25 | Demand Response 3 | Facilities | 6 |
| Home Assistance Program | | | |
| 26 | Home Assistance Program | Unit | 0 |
| Pre 2011 Programs Completed in 2011 | | | |
| 27 | Electricity Retrofit Incentive Program | Projects | 118 |
| 28 | High Performance New Construction | Projects | 7 |
| Enabling Initiatives | | | |
| 33 | Home Energy Assessment Tool | Units | 0 |

2.4 Spending

The following Table 4 details the funds spent by Horizon Utilities on the OPA-Contracted Province-Wide initiatives. Horizon Utilities has included the expenditures on the **peaksaver**® Extension activities in the table. The Program Administration Budget (“PAB”) and funding was provided by the OPA to a specific

program sector such as consumer, business, industrial, low income and peaksaver®Extension . Therefore, program administration budget and funding provided for program initiatives that were not in market will be redistributed to those CDM initiatives that have produced results or are gaining momentum in the market.

Table 4: Spending

| # | Initiative | Program Administration Budget (PAB) | Participant Based Funding (PBF) | Participant Incentives (PI) | Capability Building Funding (CBF) | TOTAL |
|-------------------------|-------------------------------------|-------------------------------------|---------------------------------|-----------------------------|-----------------------------------|-----------|
| Consumer Program | | | | | | |
| 1 | Appliance Retirement | 153,750 | | | | 153,750 |
| 2 | Appliance Exchange | 14,722 | | | | 14,722 |
| 3 | HVAC Incentives | 36,033 | | | | 36,033 |
| 4 | Conservation Instant Coupon Booklet | 67,469 | | | | 67,469 |
| 5 | Bi-Annual Retailer Event | 44,236 | | | | 44,236 |
| 6 | Retailer Co-op | 0 | | | | 0 |
| 7 | peaksaver® Extension | 486,059 | 655,361 | 51,050 | | 1,192,470 |
| 8 | Midstream Electronics | 0 | | | | 0 |
| 9 | Midstream Pool Equipment | 0 | | | | 0 |
| 10 | Residential New Construction | 28,447 | | | | 28,447 |
| Business Program | | | | | | |
| 11 | Equipment Replacement Incentive | 192,807 | | 240,035 | | 432,842 |
| 12 | Direct Installed Lighting | 199,238 | 140,800 | 621,383 | | 961,421 |
| 13 | Direct Service Space Cooling | 0 | | | | 0 |
| 14 | Building Commissioning | 44,357 | | | | 44,357 |
| 15 | New Construction | 36,916 | | | | 36,916 |

| | | | | | | |
|--|--|-----------|---------|-----------|---------|-----------|
| 16 | Energy Audit | 41,736 | | | | 41,736 |
| 17 | peaksaver [®] Extension | 0 | | | | 0 |
| 18 | Demand Response 1 | 0 | | | | 0 |
| 19 | Demand Response 3 | 0 | | | | 0 |
| Industrial Program | | | | | | |
| 20 | Process & System Upgrades | | | | | |
| | a) preliminary study | 3,139 | | | 27,010 | 30,149 |
| | b) engineering study | 3,602 | | | 26,733 | 30,335 |
| | c) program incentive | 20,417 | | | 63,653 | 84,070 |
| 21 | Monitoring & Targeting | 5,366 | | | 5,923 | 11,289 |
| 22 | Energy Manager | 0 | | | 0 | 0 |
| 23 | Equipment Replacement Incentive | 0 | | | 0 | 0 |
| 24 | Demand Response 1 | 3,218 | | | 0 | 3,218 |
| 25 | Demand Response 3 | 11,965 | | | 5,923 | 17,888 |
| Home Assistance Program | | | | | | |
| 26 | Home Assistance Program | 21,325 | | | | 21,325 |
| Pre 2011 Programs Completed in 2011 | | | | | | |
| | Electricity Retrofit Incentive Program | 376,433 | | 3,883,072 | | 4,259,505 |
| 28 | High Performance New Construction | | | | | |
| Enabling Initiatives | | | | | | |
| | TOTAL OPA PROGRAMS | 1,791,237 | 796,161 | 4,795,540 | 129,242 | 7,512,180 |

Table 4a indicates the expenditures on the initiatives not in market.

Table 4a: Allocation of PAB funding for Programs Not In Market

| # | Initiative | Program Administration Budget (PAB) |
|----------------------------------|--|-------------------------------------|
| Initiatives Not In Market | | |
| 8 | Midstream Electronics | 0 |
| 9 | Midstream Pool Equipment | 0 |
| 13 | Demand Service Space Cooling | 0 |
| 18 | Demand Response 1 (Commercial) | 0 |
| 19 | Demand Response 1 (Industrial) | 0 |
| 33 | Home Energy Audit Tool | 0 |
| | TOTAL OPA-Contracted Province-Wide Programs Not In Market | 0 |

2.4 Evaluation

The following table provides the OPA-Contracted Province-Wide Program evaluation findings. Horizon Utilities notes that the evaluation findings for program #7, Residential Demand Response have not taken into consideration the internet enabled programmable thermostat that is used as the load control device. Horizon Utilities will be working with the OPA to ensure that these savings are recognized in future evaluations.

2.5.1 Evaluation Findings

Table 5: Evaluation Findings

| Table 5: OPA Province-Wide Evaluation Findings | | |
|--|----------------------|--|
| # | Initiative | OPA Province-Wide Key Evaluation Findings |
| Consumer Program | | |
| 1 | Appliance Retirement | Overall participation continues to decline year over year |
| | | Participation declined 17% from 2010 (from over 67,000 units in 2010 to over 56,000 units in 2011) |
| | | 97% of net resource savings achieved through the home pick-up stream |
| | | Measure Breakdown: 66% refrigerators, 30% freezers, 4% Dehumidifiers and window air conditioners |
| | | 3% of net resource savings achieved through the Retailer pick-up stream |
| | | Measure Breakdown: 90% refrigerators, 10% freezers |
| | | Net-to-Gross ratio for the initiative was 50% |
| | | Measure-level free ridership ranges from 82% for the retailer pick-up stream to 49% for the home pick-up stream |
| | | Measure-level spillover ranges from 3.7% for the retailer pick-up stream to 1.7% for the home pick-up stream |
| 2 | Appliance Exchange | Overall eligible units exchanged declined by 36% from 2010 (from over 5,700 units in 2010 to over 3,600 units in 2011) |
| | | Measure Breakdown: 75% window air conditioners, 25% dehumidifiers |
| | | Dehumidifiers and window air conditioners contributed almost equally to the net energy savings achieved |
| | | Dehumidifiers provide more than three times the energy savings per unit than window air conditioners |
| | | Window air conditioners contributed to 64% of the net peak demand savings achieved |
| | | Approximately 96% of consumers reported having replaced their exchanged units (as opposed to retiring the unit) |
| | | Net-to-Gross ratio for the initiative is consistent with previous evaluations (51.5%) |

| | | |
|---|-------------------------------------|--|
| 3 | HVAC Incentives | Total air conditioner and furnace installations increased by 14% (from over 95,800 units in 2010 to over 111,500 units in 2011) |
| | | Measure Breakdown: 64% furnaces, 10% tier 1 air conditioners (SEER 14.5) and 26% tier 2 air conditioners (SEER 15) |
| | | Measure breakdown did not change from 2010 to 2011 |
| | | The HVAC Incentives initiative continues to deliver the majority of both the energy (45%) and demand (83%) savings in the consumer program |
| | | Furnaces accounted for over 91% of energy savings achieved for this initiative |
| | | Net-to-Gross ratio for the initiative was 17% higher than 2010 (from 43% in 2010 to 60% in 2011) |
| | | Increase due in part to the removal of programmable thermostats from the program, and an increase in the net-to-gross ratio for both Furnaces and Tier 2 air conditioners (SEER 15) |
| 4 | Conservation Instant Coupon Booklet | Customers redeemed nearly 210,000 coupons, translating to nearly 560,000 products |
| | | Majority of coupons redeemed were downloadable (~40%) or LDC-branded (~35%) |
| | | Majority of coupons redeemed were for multi-packs of standard spiral CFLs (37%), followed by multi-packs of specialty CFLs (17%) |
| | | Per unit savings estimates and net-to-gross ratios for 2011 are based on a weighted average of 2009 and 2010 evaluation findings |
| | | Careful attention in the 2012 evaluation will be made for standard CFLs since it is believed that the market has largely been transformed |
| 5 | Bi-Annual Retailer Event | Customers redeemed nearly 370,000 coupons, translating to over 870,000 products |
| | | Majority of coupons redeemed were for multi-packs of standard spiral CFLs (49%), followed by multi-packs of specialty CFLs (16%) |
| | | Per unit savings estimates and net-to-gross ratios for 2011 are based on a weighted average of 2009 and 2010 evaluation findings |
| | | Standard CFLs and heavy duty outdoor timers were reintroduced to the initiative in 2011 and contributed more than 64% of the initiative's 2011 net annual energy savings |
| | | While the volume of coupons redeemed for heavy duty outdoor timers was relatively small (less than 1%), the measure accounted for 10% of net annual savings due to high per unit savings |
| | | Careful attention in the 2012 evaluation will be made for standard CFLs since it is believed that the market has largely been transformed. |
| 6 | Retailer Co-op | Initiative was not evaluated in 2011 due to low uptake. Verified Bi-Annual Retailer Event per unit assumptions and free-ridership rates were used to calculate net resource savings |
| 7 | Residential Demand Response | Approximately 20,000 new devices were installed in 2011 |
| | | 99% of the new devices enrolled controlled residential central AC (CAC) |
| | | 2011 only saw 1 atypical event (in both weather and timing) that had |

| | | |
|-------------------------|-----------------------------------|---|
| | | limited participation across the province |
| | | The ex-ante impact developed through the 2009/2010 evaluations was maintained for 2011; residential CAC: 0.56 kW/device, commercial CAC: 0.64 kW/device, and Electric Water Heaters: 0.30 kW/device |
| 8 | Residential New Construction | Initiative was not evaluated in 2011 due to limited uptake |
| | | Business case assumptions were used to calculate savings |
| Business Program | | |
| 9 | Efficiency: Equipment Replacement | Gross verified energy savings were boosted by lighting projects in the prescriptive and custom measure tracks |
| | | Lighting projects overall were determined to have a realization rate of 112%; 116% when including interactive energy changes |
| | | On average, the evaluation found high realization rates as a result of both longer operating hours and larger wattage reductions than initial assumptions |
| | | Low realization rates for engineered lighting projects due to overstated operating hour assumptions |
| | | Custom non-lighting projects suffered from process issues such as: the absence of required M&V plans, the use of inappropriate assumptions, and the lack of adherence to the M&V plan |
| | | The final realization rate for summer peak demand was 94% |
| | | 84% was a result of different methodologies used to calculate peak demand savings |
| | | 10% due to the benefits from reduced air conditioning load in lighting retrofits |
| | | Overall net-to-gross ratios in the low 70's represent an improvement over the 2009 and 2010 ERIP program where net-to-gross ratios were in the low 60's and low 50's, respectively. |
| | | Strict eligibility requirements and improvements in the pre-approval process contributed to the improvement in net-to-gross ratios |
| 10 | Direct Install Lighting | Though overall performance is above expectations, participation continues to decline year over year as the initiative reaches maturity |
| | | 70% of province-wide resource savings persist to 2014 |
| | | Over 35% of the projects for 2011 included at least one CFL measure |
| | | Resource savings from CFLs in the commercial sector only persist for the industry standard of 3 years |
| | | Since 2009 the overall realization rate for this program has improved |
| | | 2011 evaluation recorded the highest energy realization rate to date at 89.5% |
| | | The hours of use values were held constant from the 2010 evaluation and continue to be the main driver of energy realization rate |
| | | Lights installed in "as needed" areas (e.g., bathrooms, storage areas) were determined to have very low realization rates due to the difference in actual energy saved vs. reported savings |

| | | |
|---------------------------|--|--|
| 11 | Existing Building Commissioning Incentive | Initiative was not evaluated in 2011, no completed projects in 2011 |
| 12 | New Construction and Major Renovation Incentive | Initiative was not evaluated in 2011 due to low uptake |
| | | Assumptions used are consistent with preliminary reporting based on the 2010 Evaluation findings and consultation with the C&I Work Group (100% realization rate and 50% net-to-gross ratio) |
| 13 | Energy Audit | The evaluation is ongoing. The sample size for 2011 was too small to draw reliable conclusions. |
| 14 | Commercial Demand Response (part of the Residential program schedule) | See residential demand response (#7) |
| 15 | Demand Response 3 (part of the Industrial program schedule) | See Demand Response 3 (#20) |
| Industrial Program | | |
| 16 | Process & System Upgrades | Initiative was not evaluated in 2011, no completed projects in 2011 |
| 17 | Monitoring & Targeting | Initiative was not evaluated in 2011, no completed projects in 2011 |
| 18 | Energy Manager | Initiative was not evaluated in 2011, no completed projects in 2011 |
| 19 | Efficiency: Equipment Replacement Incentive (part of the C&I program schedule) | See Efficiency: Equipment Replacement (#9) |
| 20 | Demand Response 3 | Program performance for Tier 1 customers increased with DR3 participants providing 75% of contracted MW for both sectors |
| | | Industrial customers outperform commercial customers by provide 84% and 76% of contracted MW, respectively |
| | | Program continues to diversify but still remains heavily concentrated with less than 5% of the contributors accounting for the majority (~60%) of the load reductions. |

| | | |
|--|--|---|
| | | By increasing the number of contributors in each settlement account and implementation of the new baseline methodology the performance of the program is expected to increase |
| 21 | Home Assistance Program | Initiative was not evaluated in 2011 due to low uptake |
| | | Business Case assumptions were used to calculate savings |
| Pre-2011 Programs completed in 2011 | | |
| 22 | Electricity Retrofit Incentive Program | Initiative was not evaluated |
| | | Net-to-Gross ratios used are consistent with the 2010 evaluation findings (multifamily buildings 99% realization rate and 62% net-to-gross ratio and C&I buildings 77% realization rate and 52% net-to-gross ratio) |
| 23 | High Performance New Construction | Initiative was not evaluated |
| | | Net-to-Gross ratios used are consistent with the 2010 evaluation findings (realization rate of 100% and net-to-gross ratio of 50%) |
| 24 | Toronto Comprehensive | Initiative was not evaluated |
| | | Net-to-Gross ratios used are consistent with the 2010 evaluation findings |
| 25 | Multifamily Energy Efficiency Rebates | Initiative was not evaluated |
| | | Net-to-Gross ratios used are consistent with the 2010 evaluation findings |
| 26 | Data Centre Incentive Program | Initiative was not evaluated |
| 27 | EnWin Green Suites | Initiative was not evaluated |

2.5.2 Evaluation Results

Table 6: OPA-Contracted Province-Wide Program results and contributions to the Horizon Utilities' CDM target.

| Table 6: Summarized Program Results | | | | | | | | | |
|--|-------------------------------------|--------------------------------------|----------------------------------|--------------------------------------|----------------------------------|--|--|--|--|
| Program | | Gross Savings | | Net Savings | | Contribution to Targets | | | |
| | | Incremental Peak Demand Savings (kW) | Incremental Energy Savings (kWh) | Incremental Peak Demand Savings (kW) | Incremental Energy Savings (kWh) | Program-to-Date: Net Annual Peak Demand Savings (kW) in 2014 | Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh) | | |
| Consumer Program Total | | 4,381 | 9,484,581 | 3,093 | 6,331,565 | 1,983 | 25,302,739 | | |
| Business Program Total | | 2,516 | 8,343,968 | 2,052 | 6,520,199 | 1,401 | 25,608,607 | | |
| Industrial Program Total | | 4,245 | 730,148 | 3,568 | 607,873 | 70 | 1,815,453 | | |
| Home Assistance Program Total | | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Pre-2011 Programs completed in 2011 Total | | 6,361 | 36,374,889 | 3,308 | 18,944,807 | 3,308 | 75,779,229 | | |
| Total OPA Contracted Province-Wide CDM Programs | | 17,503 | 54,933,587 | 12,022 | 32,404,444 | 6,762 | 128,506,027 | | |
| # | Initiative | Realization Rate | | Gross Savings | | Net Savings | | Contribution to Targets | |
| | | Peak Demand Savings | Energy Savings | Incremental Peak Demand Savings (kW) | Incremental Energy Savings (kWh) | Incremental Peak Demand Savings (kW) | Incremental Energy Savings (kWh) | Program-to-Date: Net Annual Peak Demand Savings (kW) in 2014 | Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh) |
| Consumer Program | | | | | | | | | |
| 1 | Appliance Retirement | 100% | 100% | 350 | 2,495,649 | 172 | 1,238,865 | 167 | 4,951,619 |
| 2 | Appliance Exchange | 100% | 100% | 35 | 41,598 | 18 | 21,438 | 6 | 74,562 |
| 3 | HVAC Incentives | 100% | 100% | 2,798 | 5,121,925 | 1,693 | 3,070,047 | 1,693 | 12,280,188 |
| 4 | Conservation Instant Coupon Booklet | 100% | 100% | 44 | 735,082 | 50 | 810,293 | 50 | 3,241,174 |
| 5 | Bi-Annual Retailer Event | 100% | 100% | 61 | 1,087,497 | 68 | 1,188,091 | 68 | 4,752,365 |
| 6 | Retailer Co-op | - | - | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | Residential Demand Response | 0% | 0% | 1,093 | 2,830 | 1,093 | 2,830 | 0 | 2,830 |
| 8 | Residential New Construction | - | - | 0 | 0 | 0 | 0 | 0 | 0 |

| Business Program | | | | | | | | | |
|--------------------------------|--|------|------|-------|-----------|-------|-----------|-----|------------|
| 9 | Efficiency: Equipment Replacement | 95% | 123% | 1,192 | 6,499,364 | 857 | 4,805,916 | 857 | 19,223,664 |
| 10 | Direct Install Lighting | 108% | 90% | 617 | 1,823,667 | 661 | 1,693,346 | 544 | 6,364,007 |
| 11 | Existing Building Commissioning Incentive | - | - | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | New Construction and Major Renovation Incentive | - | - | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | Energy Audit | - | - | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 | Commercial Demand Response (part of the Residential program schedule) | 0% | 0% | 0 | 0 | 0 | 0 | 0 | 0 |
| 15 | Demand Response 3 (part of the Industrial program schedule) | 76% | 100% | 707 | 20,936 | 535 | 20,936 | 0 | 20,936 |
| Industrial Program | | | | | | | | | |
| 16 | Process & System Upgrades | - | - | 0 | 0 | 0 | 0 | 0 | 0 |
| 17 | Monitoring & Targeting | - | - | 0 | 0 | 0 | 0 | 0 | 0 |
| 18 | Energy Manager | - | - | 0 | 0 | 0 | 0 | 0 | 0 |
| 19 | Efficiency: Equipment Replacement Incentive (part of the C&I program schedule) | 92% | 129% | 94 | 524,802 | 70 | 402,527 | 70 | 1,610,107 |
| 20 | Demand Response 3 | 84% | 100% | 4,151 | 205,346 | 3,498 | 205,346 | 0 | 205,346 |
| Home Assistance Program | | | | | | | | | |
| 21 | Home Assistance Program | - | - | 0 | 0 | 0 | 0 | 0 | 0 |

| Pre-2011 Programs completed in 2011 | | | | | | | | | |
|-------------------------------------|--|------|------|-------|------------|-------|------------|-------|------------|
| 22 | Electricity Retrofit Incentive Program | 77% | 78% | 5,876 | 33,885,712 | 3,066 | 17,700,219 | 3,066 | 70,800,874 |
| 23 | High Performance New Construction | 100% | 100% | 485 | 2,489,177 | 242 | 1,244,589 | 242 | 4,978,355 |
| 24 | Toronto Comprehensive | - | - | 0 | 0 | 0 | 0 | 0 | 0 |
| 25 | Multifamily Energy Efficiency Rebates | - | - | 0 | 0 | 0 | 0 | 0 | 0 |
| 26 | Data Centre Incentive Program | - | - | 0 | 0 | 0 | 0 | 0 | 0 |
| 27 | EnWin Green Suites | - | - | 0 | 0 | 0 | 0 | 0 | 0 |

Assumes demand response resources have a persistence of 1 year

2.6 Additional Comments

In Horizon Utilities' efforts to maximize the CDM market potential of the OPA–Contracted Province-Wide CDM Programs Horizon Utilities submits additional comments, as follows.

Change Management Process:

LDCs have requested modifications to some program initiatives through the OPA Change Management Process. These modifications can include improved customer service; CDM calculations and/or operational efficiency measurements, all which can have an impact on cumulative energy savings and demand reduction totals. For example, delays in implementing changes to the enhancement of the Residential New Construction initiative have resulted in a loss of potential demand and energy savings. Expected cumulative energy savings (kWh) will only be achieved commencing in 2013 leaving only 2 years for savings to be recognized and verified. Horizon Utilities is concerned that these delays could have a negative effect on its efforts to implement and sustain conservation efforts. Horizon Utilities lost the opportunity to add to its target through this program in 2011, due to this delay.

Timely and Accurate Reporting:

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

Persistence Measures:

Persistence until 2014 of the current demand response program offerings for the residential, business and industrial sectors is required to meet the demand target. Specifically, the contributions of the DR3 program to Horizon Utilities' demand target are imperative. Should the DR3 program participation levels drop for any reason, such as changes to the program incentives or an economic downturn that impacts production levels for the industrial customers, the opportunity for Horizon Utilities to achieve its demand target would be challenged.

TOU Recognition:

The expected contributions of the TOU rates to Horizon Utilities' CDM targets have yet to be determined. Delays in this allocation make it difficult to determine what effect this has on Horizon Utilities' cumulative energy savings and on its forecasted savings towards its targets.

Sales Cycle:

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

3 Combined CDM Reporting Elements

3.1 Progress Towards CDM Targets

3.1.1

The OPA's 2011 Final CDM Results indicate that while Horizon Utilities is currently is not on target for its estimated forecast for the incremental 2011 milestone for demand savings by 8% it is ahead of its estimated forecast for cumulative energy savings milestone by 13% as compared to its CDM Strategy, filed November 1, 2010 (EB-2010-0215/0216). This comparison suggests that Horizon Utilities is well positioned to achieve its energy savings target based on the 2011 OPA Final Results.

Meeting the demand target will be contingent upon the OPA's commitment to program enhancements through the change management process and the evaluation of the ex-ante contribution of the Demand Response participants going forward to 2014. Horizon Utilities has assumed that the demand response savings noted within its 2011 results will exist within its service territory in 2014.

Table 7: Net Peak Demand Savings at the End User Level (MW)

| Implementation Period | Annual MW | | | |
|--|------------|------|------|--------------|
| | 2011 | 2012 | 2013 | 2014 |
| 2011 – Verified | 12.02 | 6.90 | 6.87 | 6.76 |
| 2012 | | | | |
| 2013 | | | | |
| 2014 | | | | 0.00 |
| Verified Net Annual Peak Demand Savings Persisting in 2014: | | | | 6.76 |
| Horizon Utilities Corporation 2014 Annual CDM Capacity Target: | | | | 60.36 |
| Verified Portion of Peak Demand Savings Target Achieved in 2014(%): | | | | 11% |
| LDC Milestone submitted for 2011 | | | | 28% |
| Variance | -8% | | | -17% |

Table 8: Net Energy Savings at the End-User Level (GWh)

| Implementation Period | Annual | | | | Cumulative |
|--|-------------|-------|-------|-------|---------------|
| | 2011 | 2012 | 2013 | 2013 | 2011-2014 |
| 2011 - Verified | 32.40 | 32.18 | 32.10 | 31.83 | 128.51 |
| 2012 | | | | | |
| 2013 | | | | | |
| 2014 | | | | | |
| Verified Net Cumulative Energy Savings 2011-2014: | | | | | 128.51 |
| Horizon Utilities Corporation 2011-2014 Cumulative CDM Energy Target: | | | | | 281.42 |
| Verified Portion of Cumulative Energy Target Achieved (%): | | | | | 46% |
| LDC Milestone Cumulative GWh submitted for 2011 | | | | | 33% |
| Variance | +13% | | | | +13% |

3.2 CDM Strategy Modifications

As previously noted in this document, Horizon Utilities' strategy to achieve its CDM targets was filed with the OEB in November 2010 outlining a portfolio of CDM programs for all customer classes utilizing a mix of OPA-Contracted Province-Wide Programs and OEB Board-Approved Programs. Working in collaboration with members from the Collation of Large Distributors, Horizon Utilities developed potential CDM programs to be developed later for an application to the OEB for Board-Approved CDM programs. However, due to unfavourable decisions received by Hydro One and Toronto Hydro from the OEB, all work on Horizon Utilities' potential Board-Approved CDM Programs was suspended. Horizon Utilities has focused its efforts working in collaboration with the Electricity Distribution Association and the OPA to enhance the OPA-Contracted Province-Wide Programs in an attempt to garner better results.

Achievements toward the CDM targets are dependent on the continued trending of customer enrolments in the OPA-Contracted Province-Wide Programs and the persistence of the Demand Response programs to 2014.

Horizon Utilities' 2011 CDM results are trending positively. Based on the current results and market conditions, Horizon Utilities forecasts the achievement of 100% of its energy reduction target, 281.42 GWh and 80% of its demand reduction target, 60.36 MW by the end of 2014.