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BY COURIER

September 28, 2012

Ms. Kirsten Walli
Secretary
Ontario Energy Board
Suite 2700, 2300 Yonge Street
Toronto, ON.
M4P 1E4

Dear Ms. Walli:

Hydro One Networks Inc. Conservation and Demand Management 2011 Annual Report

As per Section 2.2 of the Conservation and Demand Management Code for Electricity Distributors, please find enclosed a paper copy of Hydro One Networks Inc.'s 2011 Conservation and Demand Management Annual Report. This report provides a review of the activities undertaken by Hydro One Networks Inc. from January 1, 2011 to December 31, 2011 in order to achieve its Conservation and Demand Management Targets.

An electronic version of this report has been filed through the Board's Regulatory Electronic Submission System ("RESS").

For more information please contact Anne-Marie Reilly at 416-345-6482.

Sincerely,

ORIGINAL SIGNED BY SUSAN FRANK

Susan Frank

Attach.

Hydro One Networks Inc.

Conservation and Demand Management

2011 Annual Report

Submitted to:

Ontario Energy Board

Submitted on September 30, 2012

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Executive Summary

The CDM Code requires every electricity distributor to file an annual report with the Board that shows the distributor's progress in meeting the 2011-2014 CDM Targets set out in its distribution license. Accordingly, this annual report outlines Hydro One's CDM program activities carried out in 2011 and peak demand and energy savings achieved in 2011. The report also provides details on the activities planned in the coming years to ensure that the 2011-2014 targets of 214 MW demand savings and 1,130 GWh energy savings are met. In its November 1, 2010 Strategy Plan submission to the Ontario Energy Board, Hydro One indicated that it intends to achieve its CDM target for the 2011-2014 period by using a suite of OPA-Contracted Province Wide Initiatives and Board Approved Programs, delivering approximately 80% and 20% of its target respectively. However, Hydro One's results in 2011 were achieved using solely available OPA Programs Initiatives.

The Green Energy Act established a new framework for electricity conservation and demand management where Local Distribution Companies (LDCs) are the primary delivery agents of customer programs in Ontario, which resulted in 2011 being a transitional year from centralized delivery for CDM. Hydro One had been successful at launching all the 2011-2014 OPA-Contracted Province Wide programs made available by the OPA by the end of 2011. These programs spanned across all sectors, including Residential, Commercial and Institutional, and Industrial.

Most of 2011 was spent on the development of programs for Provincial roll-out. Hydro One worked with the OPA to finalize the schedules for some of the OPA-Contracted Province Wide Initiatives, including the Low Income Program and PeakSaver Plus. Hydro One also engaged procurement processes that took most of the year, and played a key role in identifying obstacles and proposing solutions to improve the delivery of Province-Wide initiatives. Only a few OPA-Contracted programs, such as Midstream incentives, Online Home Energy Audit Tool, and Direct Service Cooling were not available to customers by the end of 2011 and continue to be unavailable in 2012.

Hydro One's results for 2011 were 35.1 MW (16.4%) demand savings, and 86 GWh of annual energy savings. These energy savings will produce 335.9 GWh (or 29.7% of cumulative energy savings) towards the 2011-2014 targets. The OPA estimate of demand savings which persist to 2014 is 17.4 MW (or 8.2% of demand savings). These results reflect conservative estimates, assuming that Demand Response 3 and peaksaver projects will persist for only 1 year rather than the more likely assumption of high persistence through 2014 (for example peaksaver thermostats have a twelve year life so it is reasonable to assume that demand savings persist to 2014 and beyond). Hydro One's CDM Strategy Plan, submitted November 1, 2010, forecasted demand savings of 42 MW for 2011 versus the 35 MW achieved. Hydro One expects that this variance of 7 MW can be recovered for 2014. Hydro One's Strategy Plan also forecasted energy savings of 96 GWh for 2011 versus the 86 GWh achieved. This 10 GWh variance is more challenging to recuperate as it has a cumulative effect of approximately 40 GWh by 2014. Hydro One expects that the energy savings variance, though challenging, can be recovered in 2012 to 2014. The above results are discussed in section 3 of this report.

Hydro One's results were a product of its extensive efforts to implement all available Initiatives in an expeditious manner, take full advantage of all available marketing and delivery channels, and to facilitate customer participation. In addition, Hydro One was active in business development and procurement involving large commercial accounts with multiple branch offices which assisted several LDCs in achieving significant savings through implementing the Head Office Model.

Hydro One intends to meet the 2011-2014 cumulative demand and energy savings target by looking at different options. These include, but are not limited to, the following alternatives:

1) Realize savings from enhanced and new OPA-Contracted Province Wide Initiatives
2) Realize savings from potential new Board Approved Programs
3) Leverage other initiatives (such as province-wide marketing activities and savings from Time-of-Use rates)

As we go forward, and to better serve our customers, clarity about the future of CDM beyond 2014 is needed as sustained programs will be more economical in the longer term.

Background

On March 31, 2010, the Minister of Energy and Infrastructure of Ontario, under the guidance of sections 27.1 and 27.2 of the *Ontario Energy Board Act, 1998*, directed the Ontario Energy Board ("OEB") to establish Conservation and Demand Management ("CDM") targets to be met by electricity distributors. Accordingly, on November 12, 2010, the OEB amended the distribution license of Hydro One to require Hydro One, as a condition of its license, to achieve 1,130 GWh of cumulative energy savings and 214 MW of persistent summer peak demand savings, over the period beginning January 1, 2011 through December 31, 2014.

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

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

This document was developed based a template prepared by Hydro One Networks Inc. The template was reviewed by the Reporting and Evaluation Working Group and the Ontario Power Authority ("OPA") through May and June 2012. OEB Staff were consulted on May 28th, 2012. It was sent to the Electricity Distributors Association ("EDA") on July 17th, 2012, for circulation to all LDCs to use for their reporting requirement to the OEB.

1) Board-Approved CDM Programs

1.1 Introduction

1.1.1 Provide a general overview of all of the Board-Approved CDM Programs that are being offered in the distributor's service area.

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

At this time, the implementation of Time-of-Use ("TOU") Pricing is the only Board-Approved Conservation and Demand Management ("CDM") program that is being offered in Hydro One's service area.

1.2 TOU Pricing

1.2.1 Background

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

In accordance with a Directive dated March 31, 2010 by the Minister of Energy and Infrastructure, the OEB is of the view that any evaluations of savings from TOU pricing should be conducted by the Ontario Power Authority ("OPA") for the province, and then allocated to distributors. Hydro One will report these results upon receipt from the OPA. As of September 30, 2012, the OPA has not released its preliminary results of TOU savings to distributors. Therefore Hydro One is not able to provide any verified savings related to Hydro One's TOU program at this time.

1.2.2 TOU Program Description

Initiative Frequency: Year-Round

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

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

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

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

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

Delivery: OEB set rates; LDC installation and maintenance of the meter, LDC converts customers to Time-of-Use ("TOU") billing.

Initiative Activities/Progress:

Hydro One began transitioning its RPP customers to TOU billing on May 1, 2010. As of the end of December 2011, Hydro One had about 1,060,000 RPP customers on TOU billing.

According to OPA's preliminary estimates, as of April 2010, TOU savings were estimated to be 308 MW province-wide[1]. If we apply Hydro One's percentage share of the total provincial demand target, 49 MW of TOU demand savings would be attributed to Hydro One[2] **.**

The CDM Guideline indicates that LDCs would be able to attribute savings achieved through the implementation of TOU prices towards their conservation targets.

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[1] 2011-2014 LDC-OPA Province-wide Programs: Portfolio Roll-up 1 Forecast Presentation to EDA CDM Caucus. April 27, 2010.

[2] Methodology for calculating Hydro One's share of TOU allocation is by applying Hydro One's share of the Provincial Peak Demand Savings Target (214 MW / 1330 MW=16%) to the estimated Province-Wide 308 MW TOU savings (308 MW x 16% = 49 MW).

1.3 Hydro One's Application with the OEB

In its Strategy Plan submitted on November 1, 2010, Hydro One included a description of how it intends to achieve its CDM target over the 2011-2014 period. Together with the Strategy Plan, Hydro One submitted an application to the OEB seeking an order granting approval of approximately $32 million in funding for six individual Board-Approved CDM programs. Hydro One's Board-Approved Programs were expected to provide Hydro One with 49 MW and 179 GWh (approximately 20% of Hydro One's target) in savings over the period 2011 to 2014, and 12 MW and 19 GWh for 2011.

An oral hearing of the application occurred on March 4, 2011. On March 7, the OEB provided its oral Decision on the issues discussed at the hearing. In their decision, the OEB stated that Hydro One had not developed a complete Evaluation, Monitoring and Verification ("EM&V") plan. They also stated that it must be determined whether the OPA-Contracted Province-Wide Programs had been established and "taken-up" such that the OEB could determine that Hydro One's proposed Board-Approved Programs were non-duplicative. A letter from the OEB dated March 8, 2011 ordered that Hydro One:

1) File complete TRC models of all cost effectiveness calculations.

2) File a full concordance or mapping of all its proposed Board Approved Programs to the OPA-Contracted Province-Wide Programs, discussing the similarities and differences of each program.

3) File complete evaluation plans for each program, based on the OPA's EM&V protocols.

4) File complete budgetary and staffing level information for its CDM department.

Hydro One responded to the OEB in a letter dated March 10. The letter expressed concern that Hydro One would take a considerable amount of time to fulfil the OEB's request regarding evaluation plans for each program. As a result, Hydro One indicated that it would withdraw its application for Board-Approved Programs at this time.

Hydro One's November 1, 2010 Strategy Plan proposed a suite of six Board-Approved Programs to help supplement OPA contracted programs. These programs were:

- Neighbourhood Benchmarking
- Community Education
- Monitoring and Targeting
- Small Commercial Energy Management and Load Control
- Municipal and Hospital Energy Efficiency Performance
- Double Return Plus

Hydro One's proposed Board-Approved Programs continued to be evaluated in 2011. Since Hydro One's proposed Board Approved Programs were based on a solid program design, OPA stated its intention to adopt four of them on a province-wide basis and to the benefit of all Ontario customers. By adopting these programs, OPA would be leveraging Hydro One's expertise in developing CDM programs in Ontario, as well as Hydro One's extensive involvement in the design of programs with the OPA, Electricity Distributors Association, and its consultations with the Coalition of Large Distributors, Enbridge Gas Distribution and Union Gas Limited.

The four programs are Neighbourhood Benchmarking Program, Community Education, Monitoring and Targeting, and Small Commercial Energy Management and Load Control Program. However, these programs have not been in market in 2011.

Neighbourhood Benchmarking Program:
Hydro One is assisting OPA in launching a Neighborhood Benchmarking Pilot which mirrors Hydro One's proposed Board Approved Program with potentially new enhanced features. Each report recipient has their energy consumption compared to a control group of undisclosed neighbours and is provided recommendations for energy conservation. The pilot may be paper or web based with the next generation of the program using social media (e.g.: Facebook) allowing customers to form their own peer groups and/or competitions.

The OPA is expected to issue an RFP in October, 2012 with contracting finalized by OPA in late 2012. Hydro One is named in the OPA RFP process. Other LDCs participating in the RFP are Milton Hydro and PowerStream. This Pilot is expected to start by the end of 2012 / early 2013.

Community Education: Hydro One's application highlighted the importance and benefit of customer education to our electricity customers. While the OPA did not set out "customer education" as a separate program, it ensured that customer education could be funded under its current Program Administrative Budget (e.g. marketing).

Monitoring and Targeting: Monitoring and Targeting was first introduced by Hydro One as a Board-Approved Program, followed by Toronto Hydro's application to the Board. The LDCs have requested, through the Change Management process, that M&T be added as an eligible measure for the existing ERII province-wide initiative; this has now been implemented in 2012.

Small Commercial Energy Management and Load Control: This program was first introduced as part of Hydro One's Board Approved Program Application, November 1, 2010, and then by Toronto Hydro as part of its proposed suite of Board-Approved Programs on January 10, 2011. The OPA indicated that it expects to introduce this program to market on a province-wide basis by the end of 2012.

Hydro One will continue to identify gaps between the OPA-Contracted Province Wide initiatives and the specific customer base in its service territory. Based on this review, Hydro One may come forward to the OEB with future request for Board-Approved Programs. For example, Hydro One may reapply for the Double Return Plus Program, or, the Residential Voltage Reduction Program as referred to by Hydro One's Strategy Plan.

2) OPA-Contracted Province-Wide CDM Programs

2.1 Introduction

Provide a general overview of all of the OPA-Contracted Province-Wide CDM Programs that are being offered in the distributor's service area.

Effective January 1, 2011, Hydro One entered into an agreement with the OPA to deliver CDM programs extending from January 1, 2011 to December 31, 2014, which are listed below. In addition, results will be reported from projects started pre 2011 which completed in 2011:

LDC to strike through Initiative(s) for which the LDC did not register an agreement.

Initiative	Schedule	Date schedule posted	Customer Class
Residential Program			
Appliance Retirement	Schedule B-1, Exhibit D	*Jan 26 2011*	*All residential rate classes*
Appliance Exchange	Schedule B-1, Exhibit E	*Jan 26 2011*	*All residential rate classes*
HVAC Incentives	Schedule B-1, Exhibit B	*Jan 26 2011*	*All residential rate classes*
Conservation Instant Coupon Booklet	Schedule B-1, Exhibit A	*Jan 26 2011*	*All residential rate classes*
Bi-Annual Retailer Event	Schedule B-1, Exhibit C	*Jan 26 2011*	*All residential rate classes*
Retailer Co-op		*Jan 26 2011*	*All residential rate classes*
Residential Demand Response	Schedule B-3	*Jan 26 2011*	*All general service classes*
New Construction Program	Schedule B-2	*Jan 26 2011*	*All residential rate classes*
Commercial & Institutional Program			
Efficiency: Equipment Replacement	Schedule C-2	*Jan 26 2011*	*All general service classes*
Direct Install Lighting	Schedule C-3	*Jan 26 2011*	*General Service < 50 kW*
Existing Building Commissioning Incentive	Schedule C-6	*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*

Residential 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*
~~Toronto Comprehensive~~	~~n/a~~	~~*n/a*~~	~~*All general service classes*~~
Multifamily Energy Efficiency Rebates	n/a	*n/a*	*All general service classes*
~~Data Centre Incentive Program~~	~~n/a~~	~~*n/a*~~	~~*All general service classes*~~
~~EnWin Green Suites~~	~~n/a~~	~~*n/a*~~	~~*All general service classes*~~

Several initiatives that were included in the schedules were not in market in 2011. 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.

Initiative Not in Market in 2011	Objective	Status
Residential Program		
Midstream Electronics (Schedule B-1)	The objective of this initative is to encourage retailrs to promote, and sell, high efficency televisions, and for distributors to distribute high efficiency set top boxes.	Not launched to market
Midstream Pool Equipment (Schedule B-1)	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 (Schedule B-1)	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 (Schedule C-5)	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 in 2012.
Demand Response 1 (Schedule D-5)	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 (Schedule D-5)	As above	No customer uptake for this initiative

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

2.2 Program Descriptions

Programs that are being offered in the distributor's service area. For each program, include the targeted customer type(s) for the OPA-Contracted Province-Wide CDM Program, the objectives of the OPA-Contracted Province- Wide CDM Program, and any activities associated with the OPA-Contracted Province-Wide CDM Program.

2.2.1 RESIDENTIAL PROGRAM

Hydro One strongly supported the distribution of the discount coupon booklets for energy efficient products throughout 2011. Hydro One printed and distributed over 2.2 million additional coupon booklets beyond those distributed by the OPA, while also making them available online and by request through its Call Centre.

Hydro One participated at a wide variety of community events across our service territory (almost 30 events) – increasing customer awareness of our CDM programs and developing a relationship with customers on how they could take actions to reduce their energy consumption.

Hydro One also participated in 55 retail events in order to support the two month long campaigns with participating retailers in order to encourage customers to purchase energy efficient products.

In Fall 2011, through an RFP process, Hydro One hired four firms to support the delivery of Residential CDM programs. We hired a creative development firm to assist with the development of marketing materials to support the programs. We also hired a roster of three event management firms to provide us with the staffing to allow our participation at Community and Retail events across our service territory.

Hydro One's Residential results in 2011 were 31.75 GWh saved and 7.5 MW saved.

2.2.1.1 APPLIANCE RETIREMENT INITIATIVE (Exhibit D)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

Description: This is an energy efficiency Initiative that offers individuals and businesses free pick-up and decommissioning of refrigerators and freezers which are operating, over 15 years old and between 10 and

27 cubic feet in size. Window air conditioners and portable dehumidifiers will also be picked up if a freezer or refrigerator is being collected. (if operating and over 10 years old)

Targeted End Uses: Refrigerators, Freezers, window air conditioners and portable dehumidifiers

Delivery: OPA centrally contracts for call centre, appliance pick-up and decommissioning process. The OPA provided some provincial advertising in 2011. 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
- Saveonenergy website https://saveonenergy.ca/Consumer/Programs/Appliance-Retirement.aspx

Initiative Activities/Progress:

- In 2011, Hydro One provided marketing support for this initiative through:
    - Bill inserts – 4.1 million of Appliance Retirement only inserts, 1 million of a two program insert, and another 1.1 million as part of a broader residential programs insert.
    - Promotion on billing envelope - 2.6 Million
    - Promotion in customer newsletter -1 Million
    - Television advertising (co-branded with some Golden Horseshoe area LDCs) - three two-week flights (in March, June and September)
    - Website promotion – all year
    - Direct mail – 170,000 (all seasonal & all French customers)
    - Promotion at 55 retail events
    - Promotion at just under 30 community events
    - Results reported by OPA for 2011 were 17,400 appliances removed. This number of units has been trending downward over the last few years (was 21,950 in 2010) due to saturation of the program. This decline is expected to continue as the minimum age of appliances increases to 20 years in 2013 (from 15 years).

- In 2011, however, Hydro One still maintained a strong 31% share of the provincial results for this initiative, which surpassed Hydro One's proportionate share of eligible customers.

In Market Date: January 26, 2011

Lessons Learned:

- The Appliance Retirement Initiative (previously The Great Refrigerator Round-Up) has been offered by LDCs since 2007. This initiative is approaching market saturation. Hydro One has had over 100,000 units picked up from its customers' homes since offering this program under Market Adjusted Revenue Requirement ("MARR") funding in 2006. While the province experienced a 17% decrease in volume, the decrease from Hydro One customer base was 21%.

- 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 taken into account when developing conservation portfolios.

- This initiative now faces some competition from independent retailers and municipalities.

- Results are responsive to province wide advertising.

2.2.1.2 APPLIANCE EXCHANGE INITIATIVE (Exhibit E)

Target Customer Type(s): Residential Customers

Initiative Frequency: Spring and Fall

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

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

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:

- This Initiative was promoted on Hydro One's website.
- For the Spring 2011 Exchange event Hydro One held in-store events in 10 retail stores, which comprised of 24 event days.
- Hydro One had planned to participate in-store at the Fall 2011 event but the only participating retailer withdrew from any involvement shortly before the start date and thus the Fall phase was cancelled.

In Market Date: April 2011

Lessons Learned:

- The spring event had the participation of 3 retailers with 300 – 400 locations across the province. However, the Fall 2011 event had no retailer participation, therefore savings budgeted by the LDCs did not materialize.
- Evaluation, Measurement, and Verification ("EM&V") results indicated that the value of savings for retired room AC has dropped.
- The initiative may be achieving market saturation.
- The type of unit turned in is very dependent upon what is promoted by the retailers.

2.2.1.3 HVAC INCENTIVES INITIATIVE (Exhibit B)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

Objective: The objective of this Initiative is to encourage the replacement of existing heating systems with high efficiency furnaces equipped with an Electronically Commutated Motor ("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 ECMs) and Energy Star qualified central air conditioners by approved Heating, Refrigeration, and Air Conditional Institute ("HRAI") qualified contractors.

Targeted End Uses: Central air conditioners and furnaces

Delivery: OPA contracts centrally for delivery of the program and contractor network recruitment and administration. LDCs are encouraged to convince additional local contractors to participate in the Initiative.

Additional detail is available:

- Schedule B-1, Exhibit Bhttp://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:

- Hydro One promoted this initiative in 2011 through:
    - Bill inserts – 4.1 million stand-alone inserts, 1 million two program inserts, and another 1.1 million as part of a broader residential programs insert
    - Bill messaging - up to 0.9 Million
    - Website promotion – all year
    - Direct mail – 170,000 (all seasonal & all French customers)
    - Promotion at 55 retail events
    - Promotion at just under 30 community events.
- Hydro One's results increased by 20% in 2011 (from 11,700 units in 2010 to 14,000 units in 2011 for furnaces and central AC).
- Relative to other LDCs, Hydro One's customers had lower participation due to the overall lower prevalence of central air conditioning and forced air furnaces in its service area. The premium price of these high efficiency products is, even after the application of the rebate, relatively pricy for most of Hydro One's customers.

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 to maintain a positive relationship between consumers, contractors, the OPA, and the participating LDC.

- There appears to be an unreported 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 need to be attributed to the appropriate LDC.

2.2.1.4 CONSERVATION INSTANT COUPON BOOKLET INITIATIVE (Exhibit A)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

Objective: The objective of this Initiative is to encourage households to purchase energy efficient products by offering instant 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 on Hydro One's and the OPA's websites.

Targeted End Uses: ENERGY STAR® qualified standard and specialty Compact Fluorescent Lights (CFLs); ENERGY STAR® qualified Light Fixtures lighting control products; weatherstripping; hot water pipe wrap; electric water heater blanket; heavy duty plug-in Timers; Advanced power bars, clotheslines; baseboard programmable thermostats, motion sensors, timers, dimmers, and Energy Star ceiling fans.

Delivery: OPA contracts centrally for the distribution of the coupon booklets across Ontario. LDC distributes 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:

- Hydro One strongly supported this initiative. In addition to the Coupon booklets produced and distributed by the OPA, Hydro One printed additional coupon books and included booklets in customer mailings related to introduction of TOU rates (1 Million).

- The coupons were also included in Fall direct mailings to all seasonal customers and all French customers (170,000).

- The coupon booklet was also reformatted (as a roll-fold) and printed as a bill insert which was sent to all customers (1 Million).

- Coupon books were inserted in community newspapers as part of the promotion of the Fall Retail Event.

- Coupon program was promoted through a bill insert covering all Residential programs (1 Million) and a program specific bill insert (0.7 Million).

- Coupon books were distributed at over 80 retail and community events.

- Coupons were downloadable from the Hydro One website (as a booklet or individual coupons).

- Coupon books were available upon request from Hydro One's main Call Centre and from its Energy Conservation Team, a team of highly trained employees within the main Call Centre.

- Hydro One's provincial share of product sales as a result of annual coupons was a strong 34% due to its efforts to promote the Hydro One bar-coded coupons.

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 behaviour.

- With few Residential Initiatives in-market, and most in-market initiatives being very targeted, the annual coupons were a very useful offering that provided LDCs with a broad-based Initiative and allowed them to have an energy-efficiency offering for all customers.

2.2.1.5 BI-ANNUAL RETAILER EVENT INITIATIVE (Exhibit C)

Target Customer Type(s): Residential Customers

Initiative Frequency: Bi-annual events

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

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

Targeted End Uses: Same as the conservation instant coupon booklet initiative

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

- Hydro One arranged for staffing for in-store booths in four participating retail stores spanning 8 event days during the Spring in order to promote the discounted products while also cross-promoting the other CDM Initiatives.

- Hydro One was on-site in 25 retail stores during the Fall event in October and in another 16 stores shortly after the event in November.

- Newspaper ads promoting the event and our presence at their local store on specific dates were placed in local community newspapers (along with insertion of the discount coupon book). Coupon booklets were also included in these newspapers at the same time.

In Market Date: April 2011 and October 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 Residential Working Group in Q4 2011 identified three areas of need for initiative evolution: 1) introduction of product focused marketing; 2) enhanced product selection and 3) improved training for retailers.

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 (and go above-and-beyond the traditional Bi-Annual Coupon Events).

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

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:

Hydro One worked with a major retailer to customize their Home Tune-Up Initiative for Hydro One customers in late Fall 2011. This would have provided Hydro One customers with the opportunity to have a basic home energy audit done and have some energy efficiency measures installed at no cost. Approval was late for this initiative and ultimately it was decided to wait until 2012. Hydro One is hoping that the initiative will be re-approved by the OPA for 2012 and that it will be able to implement this initiative.

In Market Date: Not in market

Lessons Learned:

- The availability of retailer and/or LDC staff with product knowledge and the ability to conduct demonstration in store during the events would be an asset. This could be a valuable role for LDCs.

- Retailer Co-op Initiatives need to be approved by the OPA early in the year in order to allow time for the LDC and the Retailer to work together to develop, market, and implement the Initiative within the one year approval window.

2.2.1.7 NEW CONSTRUCTION PROGRAM (Schedule B-2)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

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

Targeted End Uses: All off switch, ECM motors, ENERGY STAR qualified central a/c, lighting control products, lighting fixtures, Energuide 83, and Energuide 85 home performance levels.

Delivery: Local engagement of builders will be the responsibility of the LDC and will be supported by OPA air coverage driving builders to their LDC for additional information.

Additional detail is available:

- 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:

- Hydro One promoted this initiative to customers to encourage them to request energy efficient features from builders when purchasing a new home.
- A program specific bill insert was produced and sent to all customers (1 Million).
- The Initiative was also promoted at over 80 retail and community events.
- Promoted on Hydro One's website.
- There has been low participation from builders to date. Discussions have been held with builders regarding the barriers to their participation in the program. Builders found the administrative process to be very time-consuming, onerous, and not cost-effective. They also found the incentive levels to be too low. Due to these challenges, results were limited in 2011.
- Hydro One has championed changes in the initiative processes which are to be implemented in Fall 2012 to address concerns of all builders, and which should lead to greater uptake in the program.

In Market Date: January 26, 2011

Lessons Learned:

- There were limited (5) participants in the program. Because 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. Tract builders who might build 250 homes in a single phase would have to submit 250 applications to qualify for incentives. This administrative challenge has deterred all tract builders from participating in the program to date.

- Administrative requirements must align with perceived stakeholder payback. Based on builder input changes to administrative forms and processes are being developed and implemented through change management for 2012.

2.2.1.8 RESIDENTIAL DEMAND RESPONSE PROGRAM (Schedule B-3)

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

Initiative Frequency: Year round

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

Description*:* In ***peaksaver*** PLUS ™ 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 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: LDC's 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/SCHED_2011_ResDR_B_3_110727%28MJB%29v15_redacted.pdf and

- Saveonenergy website https://saveonenergy.ca/Consumer.aspx

Initiative Activities/Progress:

- ***peaksaver®*** extension was marketed through an on-bill message.

- ***peaksaver®*** extension was also promoted through the ***peaksaver®*** website.

- Marketing activities like direct mail and bill inserts were not utilized under the anticipation that ***peaksaver*** PLUS™ would be launching soon. This contributed to very low participation level for the year 2011.

- ***peaksaver*** PLUS™ was not marketed due to the delay in program design and initiative schedule outlining the specification of the devices under the offer and consequential procurement process.

- There were less than 2,000 residential participants for 2011 and we received zero participation from small commercial customers.

- 2011 represented the lowest program penetration rate since the program was launched in 2006. This was the result of expiring ***peaksaver®*** extension at the end of August 2011 and the forced cessation of the program. Throughout 2011, a curtailed marketing campaign needed to be adopted to manage customer expectations during the transition period of the program. Going forward we expect significantly higher participation in 2012 and beyond.

In Market Date: January 26, 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 In Home Display units that communicate with installed smart meter technology were still in development and not ready for market deployment. Consequently, LDCs, including Hydro One, could not be in market with the peaksaver PLUS™ program in 2011.

- 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.

2.2.2 COMMERCIAL AND INSTITUTIONAL PROGRAM

In 2011, the commercial portfolio of Initiatives benefited from considerable momentum and success that had been developed in previous years. Hydro One's marketing efforts in 2010 resulted in a total of about 880 ERIP applications being submitted to Hydro One at program close on December 31, 2010. Due to timing and the standard business cycles of 6 to 18 months, many of these projects were not completed until 2011. Of the 880 applications received, 349 were completed in 2011. The ERII Initiative was off to a good start.

The better than average start was not sustainable as 2011 was a year spent mostly on procuring resources required to deliver the OEB mandated energy savings targets. Targets that were significantly higher than in previous years required a more strategic approach to CDM delivery such as bundling of similar services across various initiatives for delivery by a single vendor. This strategy also created cost efficiencies and a one stop shop for customers. Another aspect of the overall strategy involved engaging the Gas companies as they were already working with many of our customers and with similar initiatives or services.

The detailed assessment of the CDM services required for each initiative resulted in 5 RFP's being released dedicated to Commercial and Institutional ("C&I"): Commercial Account Management, Marketing, Evaluation Services, DIL Program Delivery, and HPNC Program Delivery. The RFPs did not close until Q3 / Q4 of 2011, with many of the services not being fully in market by Q4 2011. In addition to this, several staff resources were also hired in 2011.

Hydro One's Commercial and Institutional Program results in 2011 were 27.20 GWh and 8.65 MW saved.

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

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

Initiative Frequency: Year round

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

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

Targeted End Uses: lighting, space cooling, ventilation and other measures.

Delivery: LDC delivered.

Additional detail is available:

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

- Saveonenergy website https://saveonenergy.ca/Business/Program-Overviews/Retrofity-for-Commercial.aspx

Initiative Activities/Progress:

Marketing Strategy:

In 2011 Hydro One continued to build on its key marketing strategy, by strengthening our relationships with trade allies and vendor channels. The same strategy had provided record results in 2010. Key elements of this strategy are:

- Top down – Bottom up Marketing: The ERII Initiative is marketed to Hydro One customers by engaging them directly through a tailored Account Management process or a mass market approach (Top Down). Hydro One also leveraged specific trade allies and vendor channels in order to work with our customers during the CDM project sales cycle (Bottom Up).

- Customer segmentation: Identifying and marketing to key segments such as municipalities, school boards, and farm customers.

- Mid-market alliances: Working with trade allies such as electrical wholesalers, consultants, and CDM service providers and leveraging their client relationships is a cornerstone of the ERII marketing strategy. Key aspects are the provision of training and upsell opportunities as well as sales tools.

- Increasing Awareness: Creating heightened awareness through direct mail campaigns and customer workshops directed at Hydro One's largest customers (approximately 1000).

- Leverage and Bundle: Cross promote and integrate initiatives wherever possible to create increased awareness and cost efficiencies.

- Face to Face Customer Engagement: At program launch Hydro One did not have resources available to sufficiently engage its largest customers adequately in order to provide face to face meetings and engagement. Due to Hydro One's large geographic area and low customer density, a cost effective strategy was devised that would engage customers between 200 kW and 5 MW in size. Commercial Key Account Managers ("CKAM"s) would be given responsibility for calling upon Hydro One customers in specific geographic regions. Larger customers (500 kW+) would benefit from personal visits by the CKAM to promote CDM projects within their facilities and assist them with the Initiative application process. Smaller customers would also receive customized services, but typically by telephone and electronically.

Resourcing:

In order to execute the 2011 marketing strategy several key resources needed to be put into place. For example, contracting marketing services, Key Account Managers, etc.

Our resourcing strategy included outsourcing all aspects of ERII project evaluation to address the growing uptake of the Retrofit program in recent years. The success of this Initiative (formerly PBIP & ERIP) is approaching approximately 900 applications received by Hydro One annually.

Due to lengthy procurement, some of the resources were not in place at year end.

Online Application Portal (iCON):

The late launch of the Online Application Portal had a direct impact on overall success of the RETROFIT Initiative in 2011. This, combined with a new and overly complex application process, contributed to some initial market backlash among Hydro One customers and the CDM market in general. Customer applications to ERII were down significantly in the first 3 months of 2011. With less than 100 ERII applications submitted in the first 3 months.   Hydro One was also able to track an abandonment rate of almost 25% in the iCON system. Hydro One received a considerable amount of feedback from customers and trade allies throughout 2011 that conveyed general market displeasure with the functionality of the iCON system.

Change Management:

The Initiative Schedule contained known operational issues that were to be addressed through the Change Management process in 2011. A significant portion of internal staff resources were spent on Change Management and working with the OPA on remedies with the iCON online application system.

Success and Activities:

Many of the iCON issues were starting to be resolved by Q3 2011 and at the same time it appeared that RETROFIT applicants were also becoming more familiar with the online system. By year end 665 ERII applications had been submitted to Hydro One in iCON. This was significantly less than the 880 paper applications received in 2010 with a similar marketing effort.

A mailing to customers in Q3 along with several workshops helped to strengthen the results.

Throughout the year Hydro One worked with many of its large customers. A focus on large chain accounts yielded large RETROFIT projects with Sears Canada, M&M Meats and Pattison Signs in a Head Office representative capacity. Providing a one stop shop for these customers and representing all participating Ontario LDCs greatly simplified the Application process and reduced the administrative burden for these customers.

Through Hydro One's extensive efforts of promoting ERII and working with customers, as well as assisting other LDCs through the Head Office Model, 737 projects were completed in 2011 (including 2010 ERIP applications). This represents the highest yearly volume of completed projects since ERIP was first introduced in 2007.

In Market Date: January 26, 2011

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 completing 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. The lack of having these automated processes, exasperated by a greater than expected volume of pre-2011 projects completing in 2011 caused considerable payment delays. 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 release, and 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 seen to be 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 CRM system that affected LDCs ability to effectively review and approve applications. Hydro One (and their third party service providers) have developed parallel systems to monitor their applications. Prior to the iCON system attaining basic functionality; Hydro One was unable to maintain service levels to its customers when processing ERII applications. In 2010, paper applications that were processed in several days took considerable more time in 2011 due to the lack of proper functionality of the iCON system. This created customer applications backlogs of several months. The backlog could only be cleared once Hydro One's vendor had completed building a parallel IT system as a work around that was able to properly handle the volume of ERII applications.

2.2.2.2 DIRECT INSTALL INITIATIVE (DIL) (Schedule C-3)

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

Initiative Frequency: Year round

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

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

Targeted End Uses: Lighting, water heating devices

Delivery: Participants can enroll directly with the LDC, or would 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:

- A multi-tiered marketing approach was used to promote this Initiative:

  Phone Calls: There was a strong outreach program in place via Hydro One's contracted outbound call centre. In 2011, over 29,000 calls were placed to Hydro One's business customers resulting in contact with approximately 15,000 customers. There were a total of 4,000 customer assessments booked via the call centre.

  Door to Door Campaign: Hydro One assessors visited about 4,050 customers to offer a no obligation assessment (audit) of their lighting system. About 2,460 assessments were carried out during the door to door campaign.

  Total Assessments: 6,460 customer assessments were carried out in 2011.

- Hydro One's turnkey vendor created formal alliances within local communities with 180 electrical contracting companies that completed nearly 4,300 installations in 2011.

- In the 2009-2010 program years, the vendor was able to complete 17,000 installations in Hydro One's service territory, compared to approximately only 4,300 installations in 2011. High penetration rates in specific areas within Hydro One's territory resulted in overall reduction of customer participation due to market saturation. This resulted in the redeployment of assessors in certain geographic regions.

- In Q4 a plan was devised for localized marketing in order to improve participation rates.

- At the end of 2011, approximately 25% (since 2008) of Hydro One's eligible small business customers (GS<50 kW) had participated in the program and received $1,000 in free energy-efficient lighting upgrades.

In Market Date: January 26, 2011

Lessons Learned:

- The Direct Installed Lighting Initiative is a continuation of the Power Saving Blitz Initiative offered by LDCs from 2008-2010. Successful execution of the previous rendition of this Initiative has resulted in diminished potential for the 2011-2014 Initiative.

- The inclusion of a standard incentive for additional measures increased project size and drove higher energy and demand savings results.

- The cost of materials has experienced price volatility, reducing the margins of the electrical contractors, and has led to a reduction in vendor channel participation in some regions.

- Due to backlogs in the payment system, participant incentive payment from the OPA to the LDC, and therefore to the customer, was commonly delayed.

- To address these issues, the LDCs have been working with the OPA through Change Management 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 measures 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.pdf and

- Saveonenergy website https://saveonenergy.ca/Business/Program-Overviews/Existing-Building-Commissioning.aspx

Initiative Activities/Progress:

- This Initiative was promoted during all of Hydro One's outreach events.
- Chilled water systems for space cooling are not prevalent in Hydro One territory. Such systems are typically found in large office or multi-family residential buildings located in large urban centres. This is not typical of Hydro One's customer base.
- Uptake has been affected due to the limited size of facilities in Hydro One's territory. There is also limited potential for savings with this initiative. We estimate that there are approximately 200 Hydro One customers who may benefit from this initiative.

In Market Date: February 2011

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 Change Management.
- The customer expectation is that the program be expanded to include broader building improvements for a more holistic approach to building recommissioning.

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

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

Initiative Frequency: Year round

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

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

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

Delivery: LDC delivers to customers and design decision makers.

Additional detail is available:

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

- Saveonenergy website https://saveonenergy.ca/Business/Program-Overviews/New-Construction.aspx

Initiative Activities/Progress:

- Hydro One continued to process 2010 HPNC applications to ensure completion in 2011.

- A prolonged Change Management process slowed the implementation of this Initiative such that there was very limited participation in 2011. However, to maintain progress of the Initiative, Hydro One accepted applications during the Change Management process.

- In 2011, Hydro One customers accounted for 60% of the HPNC projects that were completed across the province.

In Market Date: February 2011

Lessons Learned:

- This is a continuation of the High Performance New Construction program previously delivered by Enbridge Gas under contract with the OPA (and subcontracted to Union Gas), which ran until December 2010.

- For 2011, new industry participation was limited due to the delays in the 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.

2.2.2.5 ENERGY AUDIT INITIATIVE (Schedule C-1)

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

Initiative Frequency: Year round

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

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

Targeted End Uses: Various

Delivery: LDC delivered.

Additional detail is available:

- 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:

- This Initiative was promoted at all customer outreach events.
- Hydro One anticipated about 50 Audit applications and received 76 in 2011.
- A direct mail piece was sent to 7000 customers during Q3 of 2011 to increase awareness of this initiative.

In Market Date: January 26, 2011

Lessons Learned:

- Customer uptake in the beginning of 2011 was slow, and increased later in the year.
- Customers expect a greater connection with other CDM Initiatives as a result of completing the Energy Audit. The Initiative should be reviewed under Change Management for the means to readily incent Participants with Audits in hand to implement other electricity savings Initiatives.

2.2.3 INDUSTRIAL PROGRAM

2011 was a transitional year for industrial CDM programs. Demand Response 3 was the most successful industrial program in 2011 resulting in a total of 14.5 MW of demand reduction between Hydro One's industrial and C&I customers. This program was delivered by Demand Response Providers under contract to the OPA. Hydro One met with all of the Demand Response Providers over the course of 2011.

Industrial ERII was available to industrial customers who implemented projects which would save 350 MWh or less annually. In 2012, this Initiative is undergoing Change Management to allow projects which receive up to a $500,000 incentive to be eligible. This will be a significant benefit and provide flexibility to customers implementing projects with greater than 350 MWh, but are reluctant to enter into a 5-10 year commitment as required under the Process & Systems Upgrade Initiative ("PSUI").

In 2011, several large customers had expressed interest in participating in PSUI. Three of the projects that were brought to Hydro One's attention were cogeneration load-displacement projects. These large-scale projects involved displacing the facilities' electrical load with electricity generated on-site with a natural gas fired generator. Waste heat collected from this process would also be used to create steam to be used in various plant processes. Due to long lead times, these projects are not likely to be In-service until late 2013 / 2014.

Hydro One's Industrial Program results in 2011 were 3.9 GWh and 14.04 MW saved.

2.2.3.1 PROCESS & SYSTEMS UPGRADE INITIATIVE (PSUI) (Schedule D-1))

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

Initiative Frequency: Year round

Objectives: The objectives of this Initiative are to:

- Offer distribution connected customers capital incentives and enabling initiatives to assist with the implementation of large projects and project portfolios;
- Implement system optimization projects 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 project costs;

c) The amount that would provide a project payback of one year.

Targeted End Uses: Processes 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:

- In mid-2011, three industrial customers expressed their interest in participating in PSUI to secure funding for their load displacement cogeneration projects. The OPA confirmed that these three projects, which would combine for a total of about 16 MW in peak demand reduction in 2014, would be considered eligible under the Initiative rules. Hydro One has continued to work with these customers to move them through the various stages of the program and to ensure that they receive the necessary approvals to connect their load displacement facilities before the December 31, 2014 deadline. One of these customers submitted an application and received approval for Detailed Engineering Study funding in 2011.

- Industrial CDM staff delivered a presentation to Hydro One's Large Distribution Account ("LDA") Representatives to educate them on PSUI and other industrial CDM initiatives. The LDA Representatives were encouraged to leverage their existing relationship with Hydro One's large industrial customers to promote CDM participation during site visits. CDM staff provided the LDA Representatives with a fact sheet that included details about the various industrial initiatives to share with customers.

- CDM staff also visited 5 industrial customers at their plant site to discuss opportunities for them to participate in PSUI. 5 other customers were given presentations on PSUI via webinars.

- The Monitoring and Targeting and Energy Manager Initiatives were discussed and promoted along with PSUI at all meetings and events.

- CDM staff received around a dozen inquiries from customers and consultants interested in obtaining more information about the Industrial programs. As a result, a toll-free phone line and dedicated mailbox was established for interested parties to call to speak directly with a Hydro One staff member in the industrial CDM group.

- Hydro One was an exhibitor at the Canadian Manufacturers and Exporters ("CME") "A Lean and Green Future: Energy 2011" on November 29 and 30. This event provided CDM staff the opportunity to meet with prospective participants and inform them about PSUI as well as other industrial and commercial CDM initiatives.

- Hydro One acted as the representative LDC (on behalf of Hydro One Networks Inc., Hydro One Brampton Networks Inc., Veridian Connections Inc., and Kingston Hydro) in an application for Key Account Manager ("KAM") funding. Funding for four KAMs was allocated to Hydro One. The KAMs will be engaged in 2012 and will be assigned to promoting PSUI to Hydro One's 88 LDAs.

- The focus of this year was to build awareness in the market and to encourage customers to begin preparing for Detailed Engineering Studies ("DES"). With one DES application already submitted in 2011 for a very large project and more expected in 2012, Hydro One is well positioned to continue building momentum for this Initiative beyond 2011.

- Clarity about CDM future beyond 2014 is needed now for continued uptake of PSUI projects which have long engineering and application phases (because incentives are not available to customers beyond 2014).

In Market Date: May 31, 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. The majority of the results are expected in 2013-2014, with a much reduced benefit 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 change management in 2012 to simplify the document while still protecting the ratepayer.

- With considerable customer interest in on-site Load Displacement projects, this Initiative should be reviewed to ensure that these projects may be accepted as part of the PSUI Initiative.

- This program relies on Technical Reviewers which were not contracted by the OPA until November, 2011. As a result, no engineering study applications were reviewed until this time, thus preventing any projects from receiving project incentive approval in 2011.

2.2.3.2 MONITORING & TARGETING INITIATIVE (Schedule D-2)

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

Initiative Frequency: Year round

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

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:

Refer to Section 2.2.3.1 (PSUI)

In Market Date: May 31, 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 was a barrier for some customers. Through the Change Management process changes are being made to both the M&T schedule and ERII to allow smaller facilities to employ M&T systems.

2.2.3.3 ENERGY MANAGER INITIATIVE (Schedule D-3)

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

Initiative Frequency: Year round

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

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

Targeted End Uses: Various

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:

Refer to Section 2.2.3.1. (PSUI)

In Market Date: May 31, 2011

Lessons Learned:

- The energy managers have proven to be a popular resource.

- At the beginning, it took longer than expected to set it up the energy manager application process.

- Some LDCs are reporting difficulties in hiring capable roving energy managers ("REM"s).

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.

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:

Refer to Section 2.2.3.1. (PSUI)

In Market Date: May 31, 2011

Lessons Learned:

- Customers appreciate dealing with a single contact or 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 (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: Demand Response 3 ("DR3") is a demand response Initiative for commercial and industrial customers, of 50 kW or greater to reduce the amount of power being used during certain periods of the year. The DR3 Initiative is a contractual resource that is an economic alternative to procurement of new generation capacity. DR3 comes with specific contractual obligations requiring participants to reduce their use of electricity relative to a baseline when called upon. This Initiative makes payments for participants to be on standby and 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.

Delivery: DR3 is delivered by Demand Response Providers ("DRP"s), 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_e

lectricity_contracts/pdfs/Schedule%20D-6%20Demand%20Response%203%202011-2014.pdf and

- Saveonenergy website https://saveonenergy.ca/Business.aspx

Initiative Activities/Progress:

- 15 commercial and 21 industrial customers, totaling 0.9 MW and 13.6 MW, respectively, in contracted demand reduction potential participated in DR3 in Hydro One's service territory in 2011.

- Hydro One staff coordinated with meter technicians and aggregators to plan interval meter and KYZ pulse installations for DR3 participants who did not have the appropriate metering equipment.

- DR3 was promoted through customer site visits at 5 industrial facilities. Hydro One staff also hosted 5 individual webinars for customers who expressed an interest in demand response and other conservation opportunities. DR3 is also promoted on Hydro One's website which provides contact information for the all active DRPs responsible for enrolling participants in the initiative.

- Hydro One CDM had an exhibit booth at the 2011 Canadian Manufacturers and Exporters ("CME") Conference "A Lean and Green Future: Energy 2011" on November 29 and 30. This event provided CDM staff the opportunity to meet with prospective participants and inform them about DR3 as well as other industrial and commercial CDM initiatives.

- DR3 proved to be a very successful program, contributing to over 40% of Hydro One's peak demand savings in 2011.

In Market Date: May 31, 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.

2.2.4 LOW INCOME INITIATIVE (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 Weatherization 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:

- The Home Assistance Program ("HAP") went through a number of changes in program elements through the OPA, as well as the Low Income Working Group, resulting in delays in implementation.

- Hydro One worked with CLD members to develop a HAP RFP template. Hydro One customized this RFP to address its unique needs in order to contract with a delivery firm responsible for executing the home audits and installing measures. Subsequently a deliberate RFP selection process began at the end of the year.

- The program was launched in mid-2012.

In Market Date: 2012

Lessons Learned:

- This Initiative Schedule was finalized later (May 2011) than the rest of the OPA Initiatives and in 2011 only 2 LDCs were in market.

- Centralized payment processes were not developed in 2011, and were still not implemented at the end of Q2 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. Some LDCs must adhere to very transparent procurement processes which meant that delivery of the program did not start in 2011.

- Some segments of the target market are not easily identified, and tend not to self-identify. However, Hydro One does have a significant list of Low-Income Energy Assistance Program (“LEAP”) participants from the last 12 months with which it has initiated its outreach activities.

2.2.5 PRE-2011 PROGRAMS COMPLETED IN 2011

Hydro One’s results from pre-2011 programs completed in 2011 were 23.1 GWh and 4.9 MW in savings.

2.2.5.1 ELECTRICITY RETROFIT INCENTIVE PROGRAM

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

Initiative Frequency: Year Round

Objective: Refer to Section 2.2.2.1

Description: Refer to Section 2.2.2.1

Targeted End Uses: Refer to Section 2.2.2.1

Delivery: LDC delivered

Initiative Activities/Progress: Hydro One employed a similar strategy to promote ERIP as it is currently employing under the ERII Initiative. Hydro One combined a top down approach working directly with customers, as well as a bottom up approach working with trade allies. Utilizing this combined approach, the program saw immense growth from 2007 to 2010.

In Market Date: October 2007.

Lessons Learned:

- Annual reviews of measure incentive levels to maintain alignment with market conditions proved to be very important.

- The application process should be kept simple to encourage participation.

2.2.5.2 HIGH PERFORMANCE NEW CONSTRUCTION

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

Initiative Frequency: Year Round

Objective: Refer to Section 2.2.2.4

Description: Refer to Section 2.2.2.4

Targeted End Uses: Refer to Section 2.2.2.4

Delivery: This program was managed by the OPA. Enbridge Gas Distribution was contracted by the OPA to deliver this Initiative.

In Market Date: 2008

2.2.5.3 TORONTO COMPREHENSIVE INITIATIVE

Target Customer Type(s): Commercial and Institutional Customers

Initiative Frequency: Year Round

Description: This Initiative is specific to Toronto Hydro and was not offered in Hydro One's service territory.

2.2.5.4 MULTIFAMILY ENERGY EFFICIENCY REBATES

Target Customer Type(s): Multifamily buildings of six units or more

Initiative Frequency: Year Round

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

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

Delivery: This program was managed by the OPA. GreenSaver was contracted by the OPA to deliver this Initiative.

In Market Date: 2008 to December 2010

2.2.5.5 DATA CENTRE INCENTIVE PROGRAM

Initiative Frequency: Year Round

Description: This Initiative is specific to Powerstream and was not offered in Hydro One's service territory.

2.2.5.6 ENWIN GREEN SUITES

Initiative Frequency: Year Round

Description: This Initiative is specific to EnWin's Utilities and was not offered in Hydro One's service territory.

2.3 Participation

Include the detailed participation levels (i.e., the number of participants by customer type) for each of the OPA-Contracted Province-Wide CDM Programs that the distributor offered in its service area. This section is to be populated with OPA EM&V results for 2011 specific to the LDC as provided by the OPA on August 31st, 2012

Table 1: Participation

#	Initiative	Activity Unit	Uptake/ Participation Units
Consumer Program			
1	Appliance Retirement	Appliances	17,394
2	Appliance Exchange	Appliances	939
3	HVAC Incentives	Equipment	14,044
4	Conservation Instant Coupon Booklet	Products	190,168
5	Bi-Annual Retailer Event	Products	260,915
6	Retailer Co-op	Products	0
7	***peaksaver***® extension	Devices	1,956
10	Residential New Construction	Houses	0
Business Program			
11	Equipment Replacement Incentive (ERII)	Projects	294
12	Direct Installed Lighting	Projects	4,291
14	Building Commissioning	Buildings	0
15	New Construction	Buildings	6
16	Energy Audit	Audits	3
17	***peaksaver***® extension	Devices	0
19	Demand Response 3	Facilities	15
Industrial Program			

#	Initiative	Activity Unit	Uptake/ Participation Units
20	Process & System Upgrades*	Projects	
#	**Initiative**	**Activity Unit**	**Uptake/ Participation Units**
	a) Preliminary Engineering Study		0
	b) Detailed Engineering Study		1
	c) Project Incentive		0
21	Monitoring & Targeting	Projects	0
22	Energy Manager	Managers	0
23	Equipment Replacement Incentive (ERII)	Projects	55
25	Demand Response 3	Facilities	21
Home Assistance Program			
26	Home Assistance Program	Units	0
Pre 2011 Programs Completed in 2011			
27	Electricity Retrofit Incentive Program	Projects	388
28	High Performance New Construction	Projects	53
29	Toronto Comprehensive	Projects	N/A
30	Multifamily Energy Efficiency Rebates	Projects	0
31	Data Centre Incentive Program	Projects	N/A
32	EnWin Green Suites	Projects	N/A

2.4 Spending

Describe and detail the funds the distributor spent, both cumulatively and in the one year period applicable to the Annual Report, on each of the OPA-Contracted Province-Wide CDM Programs that the distributor offered in its service area.

Table 2: 2011 Spending

#	Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
Consumer Program						
1	Appliance Retirement	$209,097	0	0	0	$209,097
2	Appliance Exchange	$117,461	0	0	0	$117,461
3	HVAC Incentives	$189,277	0	0	0	$189,277
4	Conservation Instant Coupon Booklet	$389,414	0	0	0	$389,414
5	Bi-Annual Retailer Event	$297,704	0	0	0	$297,704
6	Retailer Co-op	0	0	0	0	0
7	***peaksaver®*** Extension	$631,083		$48,900	0	
10	Residential New Construction	$121,554	0	0	0	$121,554
Business Program						
11	Equipment Replacement Incentive	$764,367	0	$643,830	0	$1,408,197
12	Direct Installed Lighting	$454,550		$3,929,891	0	
14	Building Commissioning	$610	0	0	0	$610
15	New Construction	$31,757	0	0	0	$31,757

#	Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
16	Energy Audit	$14,060	0	$9,170	0	$23,230
17	***peaksaver®*** Extension	0	0	0	0	0
19	Demand Response 3	$7,221	0	0	0	$7,221
Industrial Program						
20	Process & System Upgrades	$182,545	0	0	0	$182,545
	a) Preliminary Engineering Study	0	0	0	0	0
	b) Detailed Engineering Study	0	0	0	0	0
	c) Project Incentive	0	0	0	0	0
21	Monitoring & Targeting	0	0	0	0	0
22	Energy Manager	0	0	0	0	0
23	Equipment Replacement Incentive	$72,940	0	0	0	$72,940
25	Demand Response 3	$33,687	0	0	0	$33,687
Home Assistance Program						
26	Home Assistance Program	$95,819	0	0	0	$95,819
Pre 2011 Programs Completed in 2011						
27	Electricity Retrofit Incentive Program	0	0	$2,780,401	0	$2,780,401
28	High Performance New Construction	0	0	0	0	0
29	Toronto Comprehensive	0	0	0	0	0

#	Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
30	Multifamily Energy Efficiency Rebates	0	0	0	0	0
31	Data Centre Incentive Program	0	0	0	0	0
32	EnWin Green Suites	0	0	0	0	0
	TOTAL Province-wide CDM PROGRAMS	**$3,613,146**	**$1,953,667**	**$7,412,192**	**0**	**$12,979,005**

Describe and detail the allocation of funds, both cumulatively and in the one year period applicable to the Annual Report, on each of the following OPA-Contracted Province-Wide CDM Programs that over the course of 2011 were Not In Market.

Table 2a: Allocation of PAB funding for Programs Not In Market

#	Initiative	Program Administration Budget (PAB)
Initiatives Not In Market		
8	Midstream Electronics	$23,801
9	Midstream Pool Equipment	$31,128
13	Demand Service Space Cooling	$2,951
18	Demand Response 1 (Commercial)	$20,907
19	Demand Response 1 (Industrial)	$40,287
33	Home Energy Assessment Tool	$2,492
	TOTAL Province-wide CDM PROGRAMS Not In Market	**$121,566**

2.5 Evaluation

Provide a detailed discussion that reports on the EM&V results for each of the distributor's OPA-Contracted Province-Wide CDM Programs using the OPA EM&V Protocols for peak demand savings (kW) and electricity savings (kWh).

2.5.1 Evaluation Findings

Table 3: Evaluation Findings—The following are province wide results and reflect provincial totals or averages.

#	Initiative	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

#	Initiative	Evaluation Findings
		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

#	Initiative	Evaluation Findings
		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	***peaksaver***® extension	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
10	Residential New Construction	Initiative was not evaluated in 2011 due to limited uptake Business case assumptions were used to calculate savings
Business Program		
11	Retrofit	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

#	Initiative	Evaluation Findings
		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
12	Direct Installed 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

#	Initiative	Evaluation Findings
		savings
14	Building Commissioning	Initiative was not evaluated in 2011, no completed projects in 2011
15	New Construction	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)
16	Energy Audit	The evaluation is ongoing. The sample size for 2011 was too small to draw reliable conclusions.
17	***peaksaver***® extension	See residential demand response (#7)
19	Demand Response 3	See Demand Response 3 (#20)
Industrial Program		
20	Process & System Upgrades	Initiative was not evaluated in 2011, no completed projects in 2011
21	Monitoring & Targeting	Initiative was not evaluated in 2011, no completed projects in 2011
22	Energy Manager	Initiative was not evaluated in 2011, no completed projects in 2011
23	Retrofit (Industrial Buildings)	See Efficiency: Equipment Replacement (#9)
25	Demand Response 3	Program performance for Tier 1 customers increased with DR-3 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
Home Assistance Program		
26	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		
27	Electricity Retrofit Incentive Program	Initiative was not evaluated Net-to-Gross ratios used are consistent with the 2010 evaluation findings (multifamily buildings

#	Initiative	Evaluation Findings
		99% realization rate and 62% net-to-gross ratio and C&I buildings 77% realization rate and 52% net-to-gross ratio)
28	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%)
29	Toronto Comprehensive	Initiative was not evaluated Net-to-Gross ratios used are consistent with the 2010 evaluation findings
30	Multifamily Energy Efficiency Rebates	Initiative was not evaluated Net-to-Gross ratios used are consistent with the 2010 evaluation findings
31	Data Centre Incentive Program	Initiative was not evaluated
32	EnWin Green Suites	Initiative was not evaluated

2.5.2 Evaluation Results

Table 4: Evaluation Results- The following results for Hydro One are based on the province-wide adjustment percentages. The adjustments are not LDC-pecific.

#	Initiative	Total Adjustments to Net Savings		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	51%	52%	2,093	14,273,538	1,045	7,306,925	1,007	29,193,946
2	Appliance Exchange	52%	52%	185	226,591	95	116,777	36	414,016
3	HVAC Incentives	60%	60%	7,092	13,575,382	4,255	8,101,055	4,255	32,404,220
4	Conservation Instant Coupon Booklet	115%	112%	434	6,678,166	497	7,415,670	497	29,662,680
5	Bi-Annual Retailer Event	113%	110%	451	8,064,075	504	8,810,008	504	35,240,033
6	Retailer Co-op	n/a	n/a	0	0	0	0	0	0
7	***peaksaver***® extension	n/a	n/a	1,095	2,836	1,095	2,836	0	2,836
10	Residential New Construction	n/a	n/a	0	0	0	0	0	0
Business Program									
11	Retrofit	73%	75%	3,201	17,735,323	2,346	13,286,676	2,346	53,146,706
12	Direct Installed Lighting	93%	93%	4,946	14,679,124	5,296	13,630,141	3,361	49,125,164
13	Direct Service Space Cooling	n/a	n/a	0	0	0	0	0	0
14	Building Commissioning	n/a	n/a	0	0	0	0	0	0

#	Initiative	Total Adjustments to Net Savings		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)	Peak Demand Savings	Energy Savings
15	New Construction	50%	50%	174	504,015	87	252,008	87	1,008,030
16	Energy Audit	n/a	n/a	0	0	0	0	0	0
17	***peaksaver***® extension	n/a	n/a	0	0	0	0	0	0
19	Demand Response 3	n/a	n/a	1,218	36,069	921	36,069	0	36,069
Industrial Program									
20	Process & System Upgrades	n/a	n/a	0	0	0	0	0	0
21	Monitoring & Targeting	n/a	n/a	0	0	0	0	0	0
22	Energy Manager	n/a	n/a	0	0	0	0	0	0
23	Industrial Electricity Retrofit	72%	74%	627	4,203,617	453	3,097,420	453	12,389,680
25	Demand Response 3	n/a	n/a	16,125	797,689	13,590	797,689	0	797,689
Home Assistance Program									
26	Home Assistance Program	n/a	n/a	0	0	0	0	0	0
Pre-2011 Programs completed in 2011									
27	Electricity Retrofit Incentive Program	52%	52%	5,345	23,759,675	2,784	12,387,111	2,784	49,548,680
28	High Performance New Construction	50%	50%	4,174	21,439,878	2,087	10,719,939	2,087	42,879,755
29	Toronto Comprehensive		*Not Applicable to Hydro One Service Territory*						
30	Multifamily Energy Efficiency Rebates	n/a	n/a	0	0	0	0	0	0
31	Data Centre Incentive Program		*Not Applicable to Hydro One Service Territory*						
32	EnWin Green Suites		*Not Applicable to Hydro One Service Territory*						

Table 5: 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)
Residential Program Total	11,351	42,820,589	7,491	31,753,271	6,298	126,917,731
Commercial & Institutional Program Total	9,539	32,954,530	8,650	27,204,894	5,794	103,315,969
Industrial Program Total	16,752	5,001,306	14,042	3,895,109	453	13,187,370
Home Assistance Program Total	0	0	0	0	0	0
Pre-2011 Programs completed in 2011 Total	9,519	45,199,552	4,871	23,107,050	4,871	92,428,199
Total OPA Contracted Province-Wide CDM Programs	**47,162**	**125,975,978**	**35,054**	**85,960,324**	**17,416**	**335,849,268**

2.6 Additional Comments

Provide any additional information related to the OPA-Contracted Province-Wide CDM Programs that the distributor feels is appropriate.

2.6.1 2011 - A Transitional Year

Hydro One's 2011 results were achieved using the OPA-Contracted Province Wide programs made available by the OPA by the end of that year. This has been a transitional year for Conservation and Demand Management in Ontario, most of which was spent on the development of programs for Provincial roll-out.

Hydro One played a key role in addressing several of the obstacles which hindered Initiative implementation throughout 2011. Hydro One was engaged in the development of schedules, preparing innovative arrangements for procurement of products and services, and developing solutions to address concerns with payment and results tracking processes.

2.6.2 Procurement of Products and Services

Hydro One's procurement process must comply with provincial rules. Currently, the process can take up to six to eight months depending on the complexity of the services/products being procured. Due to the length of the process it is critical that OPA approved programs be released in a timely manner to facilitate the procurement process.

In 2011, Hydro One issued seven public Requests for Proposals (RFPs) for services and products in support of Hydro One's CDM Program Initiatives. Five of the RFP's were developed and/or issued in conjunction with members of the Coalition of Large Distributors ("CLD") and/or EDA Working Groups for enhanced efficiency.

The following table provides a list of public RFPs issued by Hydro One in 2011:

Table 6: List of Hydro One public RFPs

CDM RFPs	Comment	On-Street Release	Closed	Evaluation Complete	Contract Signed
Direct Install Lighting	**For Hydro One Delivery Services**	**May 2/11**	**May 16/11**	**May 31/11**	**Aug 24/11**

CDM RFPs	Comment	On-Street Release	Closed	Evaluation Complete	Contract Signed
Pre/Post Evaluations	**Participating CLD utilities develop common Terms of Reference for ERII and other Commercial Initiative Evaluations**	**Jun 7/11**	**Jun 27/11**	**Sep 23/11**	**Jan 31/12**
Peaksaver IHD Procurement	**Members of EDA DR Working Group act as Technical Advisors during product evaluation**	**Jul 15/11**	**Aug 15/11**	**--**	**--**
Industrial Key Account Managers (KAM)	**Hydro One acts as "Representative LDC" in procuring services on behalf of Hydro One and four other LDCs**	**Aug 12/11**	**Sep 8/11**	**Nov 11/11**	**Apr 25/12**
Commercial Account Managers	**Issued in conjunction with KAM RFP noted above**	**Aug 12/11**	**Sep 8/11**	**Nov 11/11**	**Mar 14/12**
Marketing Services	**Hydro One Creative Marketing and Event Management services**	**Sep 21/11**	**Oct 27/11**	**Dec 22/11**	**Mar 7/12**
Home Assistance Program	**A common Terms of Reference developed and used by several LDCs**	**Sep 30/11**	**Dec 30/11**	**Mar 12/12**	**Jun 26/12**

The procurement process for these products and services required relatively longer procurement lead time for several reasons. First, these RFPs were very diverse in scope, complexity, and degree of confidentiality. Second, Hydro One acted as the lead on behalf of other LDCs whereby a framework for procurement was developed to ensure that several LDCs could benefit from a streamlined competitive procurement process. This framework required upfront development time to engage and reflect the needs of other LDCs. Third, some RFPs required procurement of leading-edge technologies which are not commonly available. For example, finding an In-Home-Display (IHD) technology that met the OPA's mandatory specifications and that would integrate with the Hydro One Smart Meters required extensive engagement from Hydro One's Smart Meter team, Smart Meter supplier, IT resources, and vendors.

Delivery activity for programs requiring RFPs cannot commence until the contract is signed; results for 2011 reflect this. The contracts have been signed for periods of three or four years, and therefore we can expect improvement in participation levels.

2.6.3 Customer Needs

Conservation and Demand Management helps all classes of Hydro One customers better manage their electricity usage and cost. It is important to continue to serve our customers' CDM needs as we go forward, approaching 2014 and beyond through existing, enhanced, and new program offerings.

Several residential programs are nearing market saturation (e.g.: Appliance retirement). Customers need a wide range of enhanced and new initiatives to continue to gauge their interest and participation through the use of technology development and innovation. Business and industrial customers need innovative program offerings that enhance their competitiveness and recognize the nature of their planning and budgeting cycles as well as investment decisions.

Program initiatives need to be dynamic and flexible to accommodate residential and business customers' needs. Clarity about CDM beyond 2014 is critical to ensuring continued customer participation. This would help increase customers' confidence and prevent a "stop and go" environment which would also increase participation levels in 2011-2014. For example, several current Initiatives with long engineering and construction phases, such as High Performance New Construction (HPNC) intrinsically require long lead times. The planning for many large facilities, such as hotels, hospitals, factories, and processing plants must happen very soon for implementation before the end of 2014. This would also apply to PSUI, where applications for Detailed Engineering Studies need to be submitted soon to ensure projects are constructed, commissioned, and placed in-service before the end of 2014.

2.6.4 Conclusion

2011 presented significant transition for the OPA, LDCs, and Hydro One. In spite of this, Hydro One's results for 2011 were only 3.2% and 1.5% below target for peak demand and energy savings, respectively. With our services procured, the OPA-to-LDC reporting processes established and now maturing, and a more efficient change management process, Hydro One is positioned for significant traction and improved results from OPA Initiatives for the 2012-2014 reporting period. Clarity about CDM beyond 2014 would ensure that the needs of our customers are satisfied now and in the future.

2.6.5 Going Forward

Drawing from this experience, there are several lessons learned that would help bridge to a smooth transition for CDM beyond 2014 including a better understanding of the time and effort required to develop and implement new provincial programs. A new program cycle typically takes between 18-36 months to develop and launch. This involves:

- Program design, business case and cost effectiveness analysis, consultation, stakeholdering
- Schedule development with OPA
- RFP development and procurement
- Marketing and education
- Program awareness
- Launch to market
- Customer purchasing cycles

Forward thinking and planning is needed well in advance of 2014 to allow for a seamless transition, continuity in the market, and to ensure the development of new innovative Program Initiatives.

3.1 Progress Towards CDM Targets

Provide a summary of the distributor's progress towards meeting its CDM Targets, an explanation for any significant variances between the annual milestones contained in the distributor's CDM Strategy and the verified results achieved by the distributor for the reporting year, and an explanation of the potential impact that the aforementioned significant variances may have with respect to the distributor meeting its CDM Targets.

[Tables 7 and 8 measure the LDC performance in 2011 against its target for 2011 as set out by its Strategy Submission to the OEB for the same year.]

2011 was a transitional yet successful year for Hydro One. Hydro One's Strategy, which was presented to the OEB on November 1, 2010, had originally assumed all OPA Program Initiatives, schedules, delivery channels, and processes to be in place by January 1, 2011 in order to enable Hydro One to fully deploy Initiatives, proceed with marketing plans and progress with procurement. The Strategy also outlined that Hydro One's target would be achieved using a suite of both OPA-Contracted Province-Wide CDM Programs and Board Approved Programs Providing approximately 80% and 20% of Hydro One's target, respectively.

Hydro One's CDM Strategy Plan forecasted that, between the OPA-Contracted and OEB Approved Programs, 2011 would deliver about 42 MW or 19.6% of Hydro One's 214 MW Peak Demand target and 96 GWh or 8.5% in 2011 (with a cumulative effect of 31.2%) of its 1,130 GWh Energy Savings target. In 2011, Hydro One achieved 35.1 MW and 86.0 GWh, that is, 7 MW and 10 GWh below the 2011 savings forecast. These results were achieved by delivering all Province-Wide Programs made available by the OPA, taking full advantage of new available marketing and delivery channels, and creating workarounds to offset barriers to customer participation. Considering the extensive program set up activities, Hydro One has made significant progress towards its targets.

Hydro One has worked cooperatively with other LDCs, developing joint delivery strategies where possible. In addition, Hydro One was active in procurement and in business development involving large commercial accounts with multiple branch offices which assisted several LDCs in achieving significant savings through implementation of the ERII Head Office Model. The Head Office Model is described in detail in section 3.2.5.3.

Hydro One presents several options to continue to work towards meeting its 2011-2014 peak demand and energy savings targets which are outlined in section 3.2. These include the option to deliver new OPA programs and the opportunity to introduce Board Approved Programs. These options will further increase customer participation, deepen program results, as well as improve customer satisfaction.

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

Implementation Period	Annual (MW)			
	2011	2012	2013	2014
2011 – Verified	35.05	19.45	19.44	17.42
2012				
2013				
2014				
Verified Net Annual Peak Demand Savings in 2014:				17.42
Hydro One 2014 Annual CDM Capacity Target:				213.66
Verified Portion of Peak Demand Savings Target Achieved-2011 (%):				16.4%
[42 MW] - LDC Strategy Milestone submitted for 2011:				19.6%
Variance				**-3.2%**

As compared to its 2011 Strategy forecast of 42 MW, Hydro One delivered 35.1 MW of peak demand savings, or 7 MW below forecast. This represents a negative variance of 3.2% (16.4% - 19.6%) which is expected to be recovered in the years 2012 – 2014 using the range of measures as discussed in Section 3.2.

Hydro One recognizes that the peak demand savings results reported in 2011 for 2012-2014 are conservative. Hydro One anticipates that these results would be respectively higher than reported above to reflect the expected persistence beyond the assumed one-year for DR3 and for peaksaver. Hydro One is confident that the majority of DR3 participants are under contract until the end of 2014. As well, peaksaver thermostats have a twelve year life and demand response capability is expected to predominantly persist throughout the 2012-2014 period.

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

Implementation Period	Annual (GWh)				Cumulative
	2011	2012	2013	2014	2011-2014
2011 – Verified	85.96	85.12	85.10	79.67	335.85
2012					
2013					
2014					
Verified Net Cumulative Energy Savings 2011-2014:					**335.85**
Hydro One 2011-2014 Cumulative CDM Energy Target:					**1,130.21**
Verified Portion of Cumulative Energy Target Achieved (%):					**29.7%**
[96 GWh] - LDC Strategy Milestone submitted for 2011*:					**31.2%**
Variance					**-1.5%**

* The 96 GWh has a cumulative energy savings impact of 353 GWh (when considering that some behavioral programs had an assumed one-year persistency). Therefore, the forecasted energy savings was 31.2% (353 / 1130).

As compared to its 2011 Strategy forecast of 96 GWh, Hydro One delivered 85.96 GWh of energy savings, or 10 GWh below forecast. This represents a negative variance of - 1.5% (29.7-31.2%) by 2014. It is expected that this variance would be recovered in the years 2012 – 2014 using the range of measures as discussed in Section 3.2.

3.2 CDM Strategy Modifications

Detail any changes or planned modifications to the distributor's CDM Strategy. This section is to be populated by the LDC using data provided by OPA-LDC would be able to address the difference of the actual results for the variance in 2011 from the LDC's Strategy milestone submitted for the year 2011, and include a statement regarding how and whether the variance could be offset.

By the end of the year, Hydro One had been successful at launching the 2011-2014 OPA-Contracted Province Wide programs made available by the OPA. The results for 2011 amounted to 35.1 MW in demand savings and 86 GWh in energy savings. This was 7 MW and 10 GWh below the forecast for 2011 as submitted in the Strategy Plan.

Hydro One will continue reviewing the current suite of programs available to its customers, to identify potential energy efficiency opportunities, and to increase customer participation and results. The following are some additional strategic options that may be explored:

- Introduce new and enhanced OPA-Contracted Province-Wide Program Initiatives or measures for immediate implementation by LDCs

- Introduce potential new Board Approved Programs

- Assist OPA to assess and allocate TOU results to LDCs in general, and Hydro One in particular, as they may account for a significant portion of the targets

- Leverage other activities, including:

    - Broaden the provincial air coverage at initiative level, or allocate marketing funds to LDCs to manage
    - Continuous feedback and cooperation on the Change Management recommendations for OPA Contracted Programs
    - Consider enhancing the Head Office model whereby the Lead LDC is rewarded for helping other satellite LDCs reach their targets (please refer to section 3.2.5.3 for more information)
    - Assist the OPA in the launch of their First Nations Program and the attribution of peak demand savings and energy savings back to the LDCs (please refer to section 3.2.5.4 for more information)

- Extending the time frame beyond 2014 to meet customers' needs and business cycles for larger projects.

Hydro One will continue to assess options and work towards meeting the mandated CDM targets using the current OPA initiatives and/or other strategies. The following section provides a discussion of Hydro One's above mentioned possible approaches to meet its target.

3.2.1 Enhance Results from Existing and new OPA Program Initiatives

Hydro One's original plan to meet its target set out by its November 1, 2010 Strategy Plan was based on the availability of ***all*** OPA-contracted programs ***as of January 1, 2011***.

By the end of the year, several of the OPA-Contracted Initiatives which were intended to be in-market for the 2011-2014 period were not launched. Others were introduced in the second half of 2011, or had limited or no customer uptake. This limited the benefit to customers as well as the expected savings from these programs, especially cumulative energy savings which extend beyond 2011 through to 2014.

Hydro One and other LDCs would benefit from the launch of Initiatives not yet brought to market or by other programs introduced in their place. For example, customers would benefit from the **Direct Service Space Cooling** offering which is designed to leverage the Direct Installed Lighting Initiative, and therefore improve cost effectiveness. As such, the Cooling Initiative should be brought to market as soon as possible.

Hydro One will continue to assist the OPA in introducing changes to initiatives to improve customer uptake and to improve current processes.

Additional Suggestions to meet customer's needs and facilitate customer uptake:

- Hydro One will work with the OPA to facilitate customer participation and improve the reporting of results at the LDC level. As an example for the Conservation Instant Coupon Booklet Initiative, Hydro One will provide any assistance to evaluate the option to adopt the Conservation Card which would better track customer use of Conservation Instant Coupon Booklet.

- Hydro One is working with OPA to complete the assessment and adoption of Change Management recommendations proposed in late 2011 to streamline the application processes. Various initiatives' uptake will benefit from these reviews, including the New Construction Initiative (where changes to the current program design will enable tract builders to participate in this program).

- Hydro One's customers would benefit from the expeditious implementation of new OPA programs. In particular, the Small Commercial Energy Management and Load Control Program would benefit thousands of general service customers.

- Hydro One will work with the OPA to address large industrial customer needs under PSUI. The potential of PSUI can be maximized by enabling load displacement generation projects as soon as possible to accommodate these projects' long lead times. This would deliver significant savings and enhance customers' business competitiveness.

3.2.2 Customer Segmentation and Marketing

Current marketing strategies of provincial Initiatives largely adopt a mass market approach. Hydro One has the largest customer base of all electric utilities in Ontario. With over 900,000 residential customers, there is a diverse customer mix and varying customer needs. Its customers range from rural to urban and are spread over a vast geographic area.

Such a diverse customer base requires targeted marketing strategies that send relevant messages that resonate with its customers. In 2012, Hydro One initiated customer research and analytics to achieve increased customer participation. Hydro One will tailor its marketing channels and messages to increase customer awareness, customer participation and saving results of Program Initiatives which would ultimately better meet customer needs.

3.2.3 Board-Approved Programs

Hydro One continues to be of the view that, under the current framework, a suite of OPA and Board-Approved Programs would help ensure that Hydro One meets its CDM targets in a cost-effective manner that provides value to ratepayers. Hydro One's Strategy application to the Board indicated that Board-Approved Programs were expected to provide Hydro One with 49 MW of peak demand savings and 179 GWh of energy savings over the 2011 to 2014 period, including 12 MW and 19 GWh for 2011.

The six programs submitted for Board approval in Hydro One's Strategy Plan (and forecasted to contribute to 20% of the target) were:

- Neighborhood Benchmarking
- Community Education
- Monitoring and Targeting
- Small Commercial Energy Management and Load Control
- Municipal and Hospital Energy Efficiency Performance
- Double Return Plus

OPA stated its intention to adopt four of the above programs on a province-wide basis to the benefit of all Ontario customers. The four programs are Neighbourhood Benchmarking Program, Community Education, Monitoring and Targeting, and Small Commercial Energy Management and Load Control Program. By adopting these programs, OPA would be leveraging Hydro One's expertise in developing CDM programs in Ontario as well as Hydro One's extensive involvement in the design of programs with the OPA, Electricity Distributors Association, and its consultations with the Coalition of Large Distributors, Enbridge Gas Distribution and Union Gas Limited. When the OPA adopts these programs, they will however be two years later than previously planned.

Hydro One will continue to work with the OPA and assess the possibility to launch some (or all) of the four programs in the coming year as part of the Province-Wide suite of programs. If feasible, Hydro One may also come forward to the OEB with Board-Approved Programs. For example, Hydro One may reapply for the Double Return Plus Program or develop the Residential Voltage Reduction Program referenced in Hydro One's Strategy Plan.

3.2.4 Time-of-Use Allocation

According to OPA's preliminary estimates, as of April 2010, TOU savings were estimated to be 308 MW province-wide. These estimated savings were allocated to LDCs peak demand targets based on the LDCs share of provincial peak demand. As discussed in section 1.2.2, Hydro One's amount of TOU estimated savings included in our 2014 peak demand target was 49 MW (i.e. 308 x (214 MW /1330 MW)).

The CDM Guideline indicates that LDCs would be able to attribute savings achieved through the implementation of TOU prices towards their conservation targets. Hydro One expects that this will be a key component towards achieving its conservation targets.

3.2.5 Leverage other initiatives

3.2.5.1 Air Coverage

The OPA is responsible for province wide advertising (referred to as air coverage) for most Residential Initiatives (i.e. advertising in national newspapers, radio/television ads, etc.). However, this marketing strategy resulted in providing large urban centres with a larger share of advertising frequency as compared to rural communities which represent most of Hydro One's service area. This negatively impacted Hydro One's customer uptake of respective initiatives in 2011. Energy savings losses as a result of this would have a cumulative effect to 2014.

Hydro One will take an expanded role in multi-channel marketing in its service territory whereby it will undertake more extensive advertising in local community newspapers, and more community–outreach to offset less than expected OPA air coverage in its service territory.

3.2.5.2 Streamline Change Management

The change management process as set out by the Master Agreement allows for modifications to the Master Service Agreement and Initiative Schedules as needed. This is intended to give LDCs additional tools and greater flexibility to deliver programs in a way that meets the needs of customers and further drives participation in the initiatives. However, as a result of the slow implementation process, the initiatives which have been directed to Change Management in 2011, as identified in the lessons' learned throughout section 2, would likely not see changes implemented until late 2012.

Challenges with the Change Management process have been recognized by the OPA and an Expedited Change Management process has been proposed - for simple corrections and updates. The timely implementation and enforcement of the new process is critical for the effectiveness of the Change Management process as we go forward.

3.2.5.3 Head Office Model

Customers of chain account facilities want to efficiently manage their portfolio of assets and have found it difficult to deal with several LDCs, especially small LDCs. For ERIP / ERII, customers have approached Hydro One requesting to only deal with one or two LDCs, and that Hydro One lead their application for many facilities across multiple LDC service territories. In response to this customer need, a Head Office Model was developed where a large LDC manages the customer relationship and project application,(ie. the Lead LDC), and the small LDC (ie. satellite LDC) only needs to inspect the customer facility in their territory upon completion of the project. The demand and energy savings are attributed to the LDC service territory where the participating facility was located regardless of the work, effort, and activity invested by the Lead LDC.

Hydro One supported numerous Ontario LDCs to better serve their large customers through application of the Head Office Model. Specifically, Hydro One took the lead role on behalf of other LDCs for implementing the ERII Initiative. This included business development and procurement as well as acting as the main contact for the LDCs' large customers' chain accounts. Hydro One also oversaw project activities of verified documentation, and completed and submitted applications to the OPA. Once the applications were approved, Hydro One monitored project development with the customer, ensured proper incentive payments were awarded, and issued payment to the customer. LDCs benefiting from this model would need to inspect a 10% sample of the final work.

This approach significantly increased customer uptake of ERII initiatives by enabling participants to coordinate several projects through one LDC. Hydro One currently does not receive any credit toward our targets for work done on projects outside of Hydro One's territory. Based on the time and effort expended by Hydro One, CDM results stemming from the Head Office Model should be shared with Hydro One.

Head Office Model results for 2011	**10.4 GWh**	**2.7 MW**	
Hydro One Results	0.7 GWh	0.2 MW	(7%)
Other LDCs Results	9.7 GWh	2.5 MW	(93%)

As can been seen, Hydro One only receives about 7% of the benefit, yet it contributes significantly more than 50% of the work. Hydro One proposes that a portion of the results related to its head office support to other LDCs be attributed to Hydro One in a manner proportional to its support. Results assigned to Hydro One should be determined upfront based on an agreed upon level of Hydro One involvement.

3.2.5.4 First Nations Program

Hydro One currently has over 20,000 First Nations and Métis customers, who are on grid, in its service territory, and they consume about 1.5% of the total electricity delivered by our distribution system. While all residential CDM programs are available to this group of customers (e.g.: Appliance pick-up, coupons, etc.) the more substantial savings opportunity for this group of customers would be the Home Assistance/ Low Income Program. The OPA has accountability for the design and delivery of Programs targeted towards Aboriginal and First Nations groups in the province including those in Hydro One's service territory. These programs are intended to help First Nation customers realize both conservation savings and renewable energy use in First Nations communities.

OPA's Aboriginal Communities Program (Low Income Program) was not in market in 2011 and as such had zero results to be counted for in this reporting year. Hydro One and the OPA agree that the peak and energy savings from OPA's delivery of the Aboriginal Communities Program will be attributed towards our conservation targets in subsequent years to contribute toward 2014 targets. A similar treatment would be afforded to other LDCs.

Hydro One requires that the OPA delivers conservation Program Initiatives that would attribute approximately 3 MW and 16 GWh to Hydro One's peak demand target (equivalent to the 1.5% share of First Nations of Hydro One's total electricity delivered) by 2014.

3.3 CDM Beyond 2011-2014

It is not clear what the next round of CDM targets would be beyond 2014. Customers need to know if there will be continuity in the programs. Large customers in particular need continuity if they are to proceed with large projects or deeper measures. Continuity is needed because these customers pay for the retrofits, since the incentives may be typically 30% to 50% of the projects costs, and customers need to include their share of costs into their budget and business planning cycles. Clarity beyond 2014 is needed now for continued uptake of several Initiatives - currently in the market - with long engineering and construction phases and/or lengthy application processes, such as High Performance New Construction (HPNC) and PSUI. We foresee fewer new large projects undertaken in 2013 if customers cannot have incentives available beyond 2014.

Lack of clarity with respect to the future of these Initiatives beyond 2014 creates a disincentive for customer uptake. Certainty about the future of these Initiatives would help prevent a "stop and go" environment in the future. This would translate to higher customer satisfaction and higher participation levels in the 2011-2014 CDM timeframe which would lead to increased direct and indirect economic activity in Ontario.

Appendix A – Reporting Glossary (Provided by OPA)

Annual: the peak demand or energy savings that occur in a given year (includes resource savings from new program activity in a given year and resource savings persisting from previous years).

Cumulative Energy Savings: represents the sum of the annual energy savings that accrue over a defined period (in the context of this report the defined period is 2011 - 2014). This concept does not apply to peak demand savings.

End-User Level: resource savings in this report are measured at the customer level as opposed to the generator level (the difference being line losses).

Free-ridership: the percentage of participants who would have implemented the program measure or practice in the absence of the program.

Incremental: the new resource savings attributable to activity procured in a particular reporting period based on when the savings are considered to 'start'.

Initiative: a Conservation & Demand Management offering focusing on a particular opportunity or customer end-use (i.e. Retrofit, Fridge & Freezer Pickup).

Net-to-Gross Ratio: The ratio of net savings to gross savings, which takes into account factors such as free-ridership and spillover.

Net Energy Savings (MWh): energy savings attributable to conservation and demand management activities net of free-riders, etc.

Net Peak Demand Savings (MW): peak demand savings attributable to conservation and demand management activities net of free-riders, etc.

Program: a group of initiatives that target a particular market sector (i.e. Consumer, Industrial).

Realization Rate: A comparison of observed or measured (evaluated) information to original reported savings which is used to adjust the gross savings estimates.

Settlement Account: the grouping of demand response facilities (contributors) into one contractual agreement

Spillover: Reductions in energy consumption and/or demand caused by the presence of the energy efficiency program, beyond the program-related gross savings of the participants. There can be participant and/or non-participant spillover.

Unit: for a specific initiative the relevant type of activity acquired in the market place (i.e.

appliances picked up, projects completed, coupons redeemed).