Hydro One Networks Inc.

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Susan Frank Vice President and Chief Regulatory Officer Regulatory Affairs



BY COURIER

September 30, 2014

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

Dear Ms. Walli:

Hydro One Networks Inc. Conservation and Demand Management 2013 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 2013 Conservation and Demand Management Annual Report. This report provides a review of the activities undertaken by Hydro One Networks Inc. from January 1, 2013 to December 31, 2013 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 Erin Henderson at 416-345-4479.

Sincerely,

ORIGINAL SIGNED BY SUSAN FRANK

Susan Frank

Attach.

Hydro One Networks Inc.

Conservation and Demand Management

2013 Annual Report

Submitted to:

Ontario Energy Board

Submitted on September 30, 2014

Hydro One 2013 CDM Annual Report

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Executive Summary

Background

This annual report is submitted by Hydro One Networks Inc. ("Hydro One") in accordance with the filing requirements set out in the Conservation and Demand Management Code (Ontario Energy Board File No. EB-2010-0215), specifically Appendix C Annual Report Template, as a progress report and modification to Hydro One's Strategy. Accordingly, this report outlines Hydro One's Conservation and Demand Management ("CDM") activities for the period of January 1, 2013 to December 31, 2013. It includes peak demand and energy savings achieved from 2011, 2012 and 2013, discussion of CDM program activities, successes and challenges, as well as forecasted savings to the end of 2014.

As noted in the CDM guidelines, released April 26, 2012, the Ontario Energy Board ("OEB" or "Board") has deemed Time-of-Use ("TOU") pricing a Province-wide Board-Approved CDM Program. The Ontario Power Authority ("OPA") is to provide measurement and verification on TOU. As of September 30, 2014, the OPA has not released any verified results of TOU savings to Hydro One. Hydro One expects the OPA to allocate savings results to Hydro One and other Local Distribution Companies (LDCs), and that these savings contribute toward the achievement of our CDM targets for 2014. Hydro One did not apply for any other Board-Approved CDM Programs during 2013.

Since 2011, Hydro One has been working with the OPA to deliver a portfolio of OPA-Contracted Province-Wide CDM Programs ("OPA CDM Programs") to all customer segments including residential, agricultural, commercial, institutional, industrial and low income. These programs were rolled-out by the OPA in June 2011. In 2011 Program activities were centered on building a foundation for full program execution over the next three years of the program term. This work continued into 2012, with addition of key delivery elements. In 2013 all CDM programs hit full stride, evidenced by the increased customer participation in most initiatives, increased spending, and increased results towards targets in terms of both energy savings and peak demand reductions.

2013 Activities and Achievements

For 2013, Hydro One invested \$30.7M in CDM, resulting in new energy savings of over 159 GWh and incremental peak demand reduction savings of 84 MW. More than 150,000 residential customers participated in our programs. Over 6,000 projects were completed for businesses.

In 2013 Hydro One continued to deliver all available OPA CDM programs to its residential, agricultural, business, and industrial customers. Residential programs were heavily promoted through a variety of marketing initiatives, including bill inserts, newsletters, e-Blasts, radio advertising, as well as various retail and community events. While some initiatives, such as Appliance Pick Up experienced diminishing results due to stringent requirements on age of appliances collected, others such as the *Heating and Cooling* initiative generated significant uptake. The low income Home Assistance Program also began to build momentum in 2013, with the addition of Social Housing as eligible participants. In total, the Residential and Low Income Programs generated 16.5 MW of incremental peak demand savings and 20.3 GWh of incremental energy savings in 2013.

The commercial portfolio of Initiatives benefited from considerable momentum. In 2012, Hydro One procured Union Gas to act as Commercial Key Account Managers in delivering commercial programs to Hydro One customers. This important partnership allowed Hydro One to bundle its delivery of several programs through one

vendor which helped increase program uptake. In 2013 Union Gas was instrumental in the delivery of a large amount of projects in the business sector. Overall, Hydro One experienced increased Commercial Program results as compared with 2012, delivering 12.4 MW of incremental peak demand savings and 50.7 GWh of incremental energy savings in 2013.

For Industrial Programs, Hydro One hired additional Key Account Managers in July 2013. Hydro One focused on customers with an average demand of 1MW or more. Key Account Managers' role was to contact these customers, educate them on the conservation programs and provide them with a targeted energy assessment of the customer's facility. In 2013 30% of the target customers had been contacted and were engaged in discussions regarding participation in Conservation Programs. This has led to 38 conservation projects. In addition, two embedded energy managers were hired by our industrial customers. This proved to be very successful resulting in 6 more customers hiring Embedded Energy Managers in 2013, for a total of 8 EEMs. Hydro One also collaborated with third party Demand Response Providers which generated significant uptake of the DR3 program in 2013.

In October 2012, all Process and Systems Upgrade Initiative (PSUI) applications that were requesting incentives for Cogeneration projects were put on hold. In June 2013 the hold was removed and customers were allowed to apply for Cogeneration project funding utilizing PSUI. In 2013 we had one project approved for an incentive representing 7.4MW of demand and 48 GWh of energy. An additional seven projects were approved for studies and would receive incentives in 2014. These projects represent 14MW of demand reduction and 115 GWh of potential energy savings. Collectively these projects represent 10.0% and 14.4% of Hydro One's demand and energy targets respectively.

The industrial programs delivered 54.7 MW of incremental peak demand savings and 5.3 GWh of incremental energy savings in 2013. Significantly increased results, especially energy, are expected in 2014 as Program and System Upgrade Initiative ("PSUI") projects, in particular large co-gen projects, are completed.

In summary during 2013, Hydro One achieved new 84.2 MW of net incremental peak demand savings and 80.1 GWh, with cumulative effect of 159 GWh, of net new incremental energy savings. Including incremental results from 2011 and 2012, Hydro One has achieved 114.4 MW of peak demand savings and 673.5 GWh of cumulative energy savings towards its 2014 targets. This is approximately 53.6% and 59.6% of the 214 MW peak demand and 1,130 GWh energy targets, respectively.

Progress towards the 2014 CDM Targets

Based on Hydro One's results to date, we expect to achieve 95-100% of our peak demand target by the end of 2014. However, achieving our peak demand target will depend upon the expected TOU savings determined by the OPA to be delivered and the OPA First Nations program delivering the anticipated results. As disclosed in last year's report to the OEB, not including potential energy savings from TOU pricing, Hydro One will likely achieve 80% of the cumulative energy target. There are several reasons for this as previously stated, and they are discussed below. In addition, for Hydro One to achieve 80% of its energy target, it is dependent on the OPA approving PSUI projects submitted in 2012, 2013 and 2014. These PSUI co-generation projects will account for 75 GWh or 6.6 % of Hydro One's energy targets.

Hydro One will continue its efforts to achieve the 1,130 GWh energy target and we are taking the following actions to fill the potential gap (i.e. about 20% of our energy target):

• Work with the OPA to enhance results from OPA provincial CDM programs through:

 improved program measures (e.g. fine-tune unit savings to appropriately reflect Hydro One customer profiles); and

- expanding customer eligibility for programs (i.e. change management).
- Continue to work with the OPA and other LDCs to improve the effectiveness of current OPA provincial CDM programs;
- Work with the OPA to extend the Social Benchmarking Pilot Program to more customers; and
- Apply customer segmentation (i.e. ability to target customers more effectively) to generate more customer participation and results.

Hydro One will continue to update and revise its CDM savings forecast as the CDM landscape evolves.

Background

On March 31, 2010, the Minister of Energy and Infrastructure of Ontario, under the guidance of sections 27.1 and 27.2 of the *Ontario Energy Board Act, 1998*, directed the OEB to establish CDM targets to be met by electricity distributors. Accordingly, on November 12, 2010, the OEB amended the distribution license of Hydro One to require it, as a condition of its license, to achieve 1,130.21 GWh of energy savings and 213.66 MW of 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 ("CDM Code") on September 16, 2010. The CDM 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 CDM Code requirements, Hydro One submitted its CDM Strategy on November 1, 2010 which provided a high level description of how Hydro One planned to achieve its CDM targets.

The CDM Code also requires a distributor to file annual reports with the Board. This is the second Annual Report by Hydro One and has been prepared in accordance with the CDM Code requirement and covers the period from January 1, 2012 to December 31, 2012.

Hydro One submitted its 2011 Annual Report on September 28, 2012, which summarized the CDM activities, successes and challenges experienced by Hydro One for the January 1, 2011 to December 31, 2011 period. In our 2011 Annual Report to the OEB, Hydro One identified that the delayed roll out of the full suite of OPA CDM Programs, and the absence of some programs negatively impacted the final 2011 results for the distributors as well as the 2014 cumulative results. This issue was also highlighted in Volumes I & II of the Environmental Commissioner's Report on Ontario's Annual Energy Conservation Progress.

On December 21, 2012, the Minister of Energy directed the OPA to fund CDM programs which meet the definition and criteria for OPA-Contracted Province-Wide CDM Programs for an additional one-year period from January 1, 2015 to December 31, 2015.

The Ministerial Directive did not explicitly amend the timelines for distributors to achieve their energy savings and demand savings targets. The main focus for Hydro One remains the achievement of CDM targets by December 31, 2014.

On March 31, 2014 the Minister of Energy issued a directive to the OPA, and one to the OEB, providing instruction for continuing Conservation and Demand management for the period 2015 to 2020, and as forecast in the Long Term Energy Plan. This new directive is not expected to have an impact on results for 2014.

1 Conservation Framework

1.1 Current Framework

Ontario's current CDM framework is a key step towards creating a culture of conservation in the Province. The Government's Directive to the OEB to establish CDM targets that would be met by electricity distributors recognizes the importance of CDM for both electricity customers and the electricity system. CDM helps customers manage rising energy costs, support the provincial integrated supply plan, as well as address local distribution and transmission supply constraints. The current framework was intended to enable customers to benefit from a suite of both Board-Approved and OPA Province-Wide programs and be a portfolio that would meet both broad and specific customer needs.

1.2 Future Framework

Hydro One is supportive of the Ontario Government's renewed commitment for conservation and demand management. Hydro one will work with the government and other stakeholders to develop the Province's CDM framework for 2015-2020.

2 Board-Approved CDM Programs

2.1 Introduction

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

The implementation of TOU Pricing has been deemed as a Board-Approved CDM program and is being offered in Hydro One's service area.

2.2 TOU Pricing

2.2.1 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 OPA for the province, and then allocated to distributors.

The OPA has been working with the evaluation contractor and an expert panel on the analysis. The initial evaluations were conducted with 5 LDCs – Hydro One, Toronto Hydro, Hydro Ottawa, Thunder Bay Hydro and Newmarket Hydro. In 2013, more LDC's (Sudbury Hydro and Cambridge & North Dumfries Hydro) smart meter data have been added to the study to improve sample for estimate provincial impact.

As of September 30, 2014, the OPA has not released any verified results of TOU savings to Hydro One. Therefore, Hydro One is not able to provide any verified savings related to its TOU program at this time. It is expected that the verified TOU savings will become available in the third quarter of 2015.

2.2.2 TOU PROGRAM DESCRIPTION

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

Initiative Frequency: Year-Round

Objectives: TOU pricing is designed to incent the shifting of energy usage. 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. 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	
November 1, 2012	11.8	9.9	6.3	
May 1, 2013	12.4	10.4	6.7	
November 1, 2013	12.9	10.9	7.2	
May 1, 2014	13.5	11.2	7.5	

Delivery: The OEB set the rates; LDCs install and maintain the smart meters; LDCs convert customers to TOU billing.

Initiative Activities/Progress:

Hydro One began transitioning its RPP customers to TOU billing in 2010. As of December 31st, 2013, about 1.1 million Hydro One customers were on TOU billing.

2.3 Hydro One's Application with the OEB

Hydro One did not submit any applications for Board-Approved Programs in 2012. In 2010, Hydro One designed and proposed six Board-approved CDM programs¹. These programs were expected to account for about 20% of Hydro One's targets. Hydro One, subsequently withdrew its application for Board-Approved Programs due to timing concerns to fulfill the OEB's request regarding evaluation plans and clarity about program non-duplication. Most of these programs (4 out of 6) have been transferred to the OPA to make them available provincially. Specifically:

[•] Social Benchmarking Pilot was not launched in 2012. It is expected to be in the market in 2014.

¹ For details of Hydro One's 2011 application for Board-Approved Programs, please refer to Hydro One's 2011 Annual Report.

- M&T was introduced as a measure for ERII and PSUI in the fourth quarter of 2012.
- Community Education was not introduced as a CDM Program but the OPA allowed LDCs to include Community Education expenses as part of its Program Administration Budget.
- Small Commercial DR was not introduced in 2012 but was subsequently introduced in early 2013.
- Municipal and Hospital Energy Efficiency Performance Program ("MHEEP") could not be introduced in a timely manner due to the introduction of new provincial regulations introduced in July 2013.
- Double Return Plus Program was not reintroduced as it mainly enhanced demand but not energy savings.

3. OPA-Contracted Province-Wide CDM Programs

3.1 Introduction

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. Program details are included in Appendix A. In addition, results include projects started pre 2011 which were completed in 2011:

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	n/a	n/a	All residential rate classes
Residential Demand Response	Schedule B-3	Aug 22, 2011	All residential rate 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	Feb 2011	All general service classes
New Construction and Major Renovation	Schedule C-4	Feb 2011	All general service classes
Energy Audit	Schedule C-1	Jan 26, 2011	All general service classes
Commercial Demand Response (part of the Residential program schedule)	Schedule B-3	Aug 22, 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
Key Account Manager ("KAM")	Schedule D-4	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

In addition, results were realized towards LDC's 2011-2014 target through the following pre-2011 programs:

Pre-2011 Programs			
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

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

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

The Master CDM Program Agreement includes program change management provision in Article 3. Collaboration between the OPA and the Local Distribution Companies (LDCs) commenced in 2011, and continued in 2012, 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.

3.2 **Program Descriptions**

Full OPA-Contracted Province-Wide CDM Program descriptions are available on the OPA's website at http://www.powerauthority.on.ca/ldc-province-wide-program-documents and additional initiative information can be found on Hydro One's website at www.hydroone.com/saveenergy and the OPA's saveONenergy website at https://saveonenergy.ca. The targeted customer types, objectives, and individual descriptions for each Program Initiative are detailed in Appendix A.

3.2.1 RESIDENTIAL PROGRAMS

Description: Provides residential customers with programs and tools to help them understand and manage the amount of energy they use throughout their entire home and help the environment.

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

Discussion:

The inclusion of LED technology into the Biannual Retailers events in 2012 and the annual coupons in 2013, as well as some LDC custom coded coupons, has had a positive effect on consumer engagement. The revamped PeaksaverPLUS program is the main Residential Initiative which drives savings for LDCs and has been well received by consumers.

The Heating and Cooling Incentive has provided strong results although the relationship with this channel is not closely linked to the LDCs, and is instead managed centrally by OPA.

The Residential Program Portfolio is predominately a carryover of Initiatives from previous programs. Three new initiatives were never launched and subsequently removed from schedule in 2013 with no new additions. Delays in communication with regards to Initiative offerings and results reporting have hampered LDCs abilities to engage customers and promote participation. OPA provincial advertising has provided limited value due to non-specific messaging and, in some cases, promotion of a different offering than HONI is offering.

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

3.2.1.1 Appliance Retirement Initiative (Exhibit D)

Initiative Activities/Progress:

In spite of Hydro One's efforts, the total number of appliances retired decreased from 10,137 in 2012 to 6,274 in 2013. Hydro One provided strong multi-media marketing support to this initiative through:

- Bill inserts 900,000 all-program inserts.
- E-mail blast 110,000 customers

Two Campaigns consisting of:

- Free standing inserts and teaser ads in 88 newspapers to about 700,000 customers
- Radio ads on 25 radio stations over a 4 week campaign
- Online advertising 4 week campaign
- Billboards 6 boards
- Contest Promoted across all media
- Retail events promoted at 127 events (spring & fall coupon events & appliance exchange events)
- Community events promoted at 69 community events across Ontario
- Website promotion

Additional Comments:

- Due to the duration of the program, and the revised eligibility requirements to a minimum of 20 years old, and the average life of today's refrigerators and freezers, this Initiative has reached market saturation.
- Rather than strictly remove this Initiative from the schedules, the LDCs together with OPA could review what opportunities there are to include other measures such as stoves, dishwashers, washers and dryers. The framework of this Initiative may be a suitable foundation for a more holistic residential appliance retirement program. As such, the Residential portfolio could be strengthened through program evolution rather than weakened through diminished program offerings.

3.2.1.2 Appliance Exchange Initiative (Exhibit E)

Initiative Activities/Progress:

In 2013, 2,313 appliances were exchanged, more than doubling the 1,039 units in 2012. Hydro One provided marketing support to this initiative through:

- Free-standing insert and teaser ad 31 newspapers 426,000 distributed
- Radio ads 16 radio stations 1 week campaign both Spring and Fall
- Online advertising
- In-store events 21 stores in Spring, and 21 stores in Fall

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• Website promotion

Additional Comments:

- This Initiative, eligible measures and incentive amounts are influenced by the retail partner with no direct involvement from the LDCs. The restrictive, limited and sometimes non-participation of local stores can diminish the savings potential for this Initiative.
- To date there has only been one retailer participant in the Appliance Exchange Initiative, which has had limited promotional support from the retailer.
- Notification regarding retailer participation and eligible measures continues to be delayed. Improved communications will aid in appropriate resource allocation and marketing of the Initiative.
- This Initiative may benefit from the disengagement of the retailer and allowing LDCs to conduct these events, possibly as part of a larger community engagement effort, with the backing of ARCA for appliance removal.
- The initiative requires more promotion from retailers and LDCs and/or an enhanced offer/incentive.

3.2.1.3 HVAC Incentives Initiative (Exhibit B)

Initiative Activities/Progress:

In 2013, 14,476 equipment were installed as part of the HVAC Incentives Initiative, up 16% from 12,507 in 2012. Hydro One provided strong multi-media marketing support to this initiative through:

- Bill inserts 1.8 million HVAC specific inserts (and 900,000 all-program inserts)
- Promotion in customer newsletter 2 million

Spring Campaign

- Free-standing insert and teaser ad 88 newspapers 700,000 customers
- Radio ads on 25 radio stations over a 4 week campaign
- Online Ads
- Segmented Direct Mail to three targeted customer segments total of 83,000 customers
- Fall Campaign
- Free-standing insert and teaser ad 88 newspapers 700,000 customers
- Radio ads on 25 radio stations over a 4 week campaign
- Billboards 6 boards

- Online Ads
- Retail events promotion at 127 events (coupon events and appliance exchange events)
- Community events promotion at 69 events across Ontario
- Website promotion

Additional Comments:

- The 2012 results reported an adjustment to Hydro One's 2011 results, which lowered the participation numbers by 2,549 units. This adjustment was made retroactively by the OPA to account for HVAC installations that were deemed ineligible about two years after they were installed. This has reduced Hydro One's cumulative energy results by 5.6 GWh.
- Incentive levels appear to be insufficient to prompt Participants to upgrade HVAC equipment prior to end of useful life. Air Miles incentive was added in 2013 and may have provided some help.
- This Initiative is contractor driven with LDCs responsible for marketing efforts to customers. More engagement with the HVAC contractor channel should be undertaken to drive a higher proportion of furnace and CAC sales to eligible units.
- Channel partners require timeliness of the Rebate process to maintain a positive relationship between consumers, contractors, the OPA, and the participating LDC. In an effort to build capacity, mandatory training has been instituted for all participating HVAC contractors. This could present too much of a barrier for participation for some contractors as the application process already presents a restriction to contractor sales.
- There are cases where non-participating contractors are offering their own incentives (by discounting their installations to match value of the OPA incentive) to make the sale. As this occurs outside of the Initiative, these installations are not attributed to the appropriate LDCs, but should be.

3.2.1.4 Conservation Instant Coupon Initiative (Exhibit A)

Initiative Activities/Progress:

In 2013, 103,995 coupons (annual coupons) were redeemed in Hydro One's service territory, up dramatically from 9,261 in 2012, due to availability of coupons throughout 2013. Hydro One provided marketing support to this initiative through:

- Coupon booklets with HONI bar codes were produced and distributed 30,000
- Annual Coupons were promoted in the all-program brochure
- Website promotion

Additional Comments:

- The timeframe for retailer submission of redeemed coupons vary from retailer to retailer and in some cases has been lengthy. The delays and incomplete results reporting limits the ability to react and respond to Initiative performance or changes in consumer behaviour. Without Provincial coupon distribution, and delay in Initiative launch, consumers may not have been aware of the online coupons. This Initiative could benefit from provincial marketing as a substitute to distribution.
- The product list could be distinctive from the Bi-Annual Retailer Event Initiative in order to gain more consumer interest and uptake.
- Program evolution, including new products and review of incentive pricing for the coupon Initiatives, should be a regular activity to ensure continued consumer interest.

3.2.1.5 Bi-Annual Retailer Event Initiative (Exhibit C)

Initiative Activities/Progress:

In 2013, Hydro One customers redeemed 283,231 items at Bi-Annual Retailer Events, down slightly from 318,045 in 2012 (but very similar to 2011). Hydro One provided strong multi-media marketing support to this initiative through:

- Bill inserts 1.3 million (Spring)
- Free-standing insert and teaser ad Fall 88 newspapers 700,000 distributed (Spring & Fall)
- Radio ads 25 stations 4 week campaign (Spring & Fall)
- Online ads 4 week campaign (Spring & Fall)
- In-store events held 40 retail events in Spring and 45 in Fall
- E-mail blast Spring 110,000 customers Website promotion

Additional Comments:

- This Initiative is strongly influenced by the retailer participation and has no direct involvement from the LDCs.
- The Product list has changed very little over the past four years.
- Limited engagement of local retailers can restrict the savings potential for this Initiative.
- Program evolution, including new products and review of incentive pricing for the coupon Initiatives, must be a regular activity to ensure continued consumer interest.
- The Product list could be distinctive from the Conservation Instant Coupon Initiative in order to gain more consumer interest and uptake.

- OPA Communications regarding retailer participation continues to be delayed. Improved communications will aid in appropriate resource allocation and marketing of the Initiative.
- This Initiative may benefit from a more exclusive relationship with a retailer appropriate to the program. There should be a value proposition for both the retailer and LDC.

3.2.1.6 Retailer Co-op

Initiative Activities/Progress:

• There were no retailer co-op initiatives offered by OPA in 2013.

Additional Comments:

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

3.2.1.7 New Construction Program (Schedule B-2)

Initiative Activities/Progress:

- The New Home Construction program had limited participation as builders found the administrative requirements of the initiative onerous. Steps were taken to simplify the application process in 2013 which yielded minimal peak 0.12 kW of demand savings for twelve homes. A new streamlined application and process was implemented in early 2013 in an attempt to reduce the administrative burden deterring builders from participating in the program. Though this change increased participation with smaller builders, it has yet generated the interest of larger builders.
- In an effort to raise awareness with builders, marketing campaigns were launched throughout the year with the Ontario Home Builder Association (OHBA) and their Ontario Home Builder magazine. Additional marketing include mailing inserts to customers and letters builders alike as well as website online resources. The initiative was also promoted in an all-program bill insert sent to about 900,000 residential customers.

Additional Comments:

• Prescriptive incentives are generally not sufficient in order to obtain the attention of the builder community in large numbers.

- This Initiative provides incentives to home builders for incorporating energy efficiency measures into their buildings. To support this, LDCs need to provide education to the consumers regarding the importance of choosing the energy efficient builder upgrade options without an immediate benefit to the consumer.
- Participation levels are expected to grow but there will be a lag to when results materialize as homes preapproved could take a year or more to be completed. Administrative requirements, in particular individual home modeling, must align with perceived stakeholder payback. As per the Electricity Distributors Association ("EDA") Working Groups, changes are being processed through change management. However, the lengthy change management process has resulted in continued non-participation from larger builders.

3.2.1.8 Residential Demand Response Program (Schedule B-3)

Initiative Activities/Progress:

- In 2013 Hydro One delivered an integrated marketing campaign to both residential and small commercial customers.
- Residential marketing campaign continued to be based on the segmentation study. Marketing channels used during the campaign were direct mails, reminder post cards, speaking to customers at various events and outbound marketing calls.
- In 2013, Hydro One began marketing the program to small commercial customers separately as a standalone initiative. This campaign involved sending a program introduction letter, cross-promotional piece to a group of customers who had previously participated in the Direct Install Lighting program. The small commercial customers also received outbound phone call encouraging them to enroll in the program.
- Program participation in 2013 was 9,855 in the residential sector and 261 in the small commercial sector. The cumulative (2011-2013) participation for year-end 2013 is 23,055 for the residential sector and 286 for the small commercial sector. In 2013, 69 customers in the residential sector received an AMI integrated In-Home Display (IHD).
- Incremental demand savings associated with a load control device for year-end 2013 was 11,374 kW for residential sector and 183 kW for the commercial sector. The incremental energy savings for year-end 2013 is 35,856 kWh for the residential sector and 27 kWh for the commercial sector.
- Evaluation performed on the IHDs deployed by LDC's yielded no significant energy savings. Because Hydro One did not have a significant number of IHD deployed a separate evaluation was not performed to determine the energy savings.

Additional Comments:

• 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 (IHD) units that communicate with installed smart meter technology were still in development

and not ready for market deployment. Consequently, LDCs could not be in market with the Peaksaver Plus program until 2012, or later which has resulted in delayed energy and demand savings.

- A large percentage of smart meters installed by most LDCs do not have the capability to communicate directly to an IHD. Those smart meters that can communicate directly with the IHD require integration with the smart meter network (AMI network). When proposing Initiatives that involve existing LDC hardware or technology there should be an extensive consultation process to ensure the proposed solution meets everyone's needs.
- Market-ready IHDs which are not integrated with the AMI network cannot be deployed across the province due to the differences in smart meter technology specifications.
- Introduction of new technology, such as IHDs, 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.
- The variable funding associated with installing a load controllable thermostat is not sufficient unless it is combined with an IHD which might not be possible all the time and when IHDs are optional.
- The option of installing a load controllable switch instead of a load controllable thermostat to bring the cost under the funding level is perceived by customers as being of no value to them when LDCs are unable to install an IHD.
- The IHD is perceived to be of little value to Small Commercial customers as they cannot shift their load to the off-peak period and the IHD has limited range.
- This is the main Initiative within the Residential portfolio that drives peak demand savings for LDCs.
- Given the different LDCs smart meter environments, and needs, each LDC is positioning the Initiative slightly different. As such, greater program flexibility is required to address unique LDC needs.
- Provincial wide marketing needs to be sensitive to the variations of the Initiative and provide solid, consistent messaging.
- There is currently no avenue for participants without the ability to provide demand response capabilities to obtain an IHD and gain energy saving benefits. I.e., IHDs are not available to customers who do not have central A/C, water heaters or pool pumps.

3.2.2 COMMERCIAL AND INSTITUTIONAL PROGRAM

Description: Provides commercial, institutional, agricultural and industrial organizations with energy-efficiency programs to help reduce their electrical costs while helping Ontario defer the need to build new generation and reduce its environmental footprint. Programs to help fund energy audits, to replace energy-wasting equipment or

to pursue new construction that exceeds our existing codes and standards. Businesses can also pursue incentives for controlling and reducing their electricity demand at specific times.

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

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

Discussion:

Throughout 2011- 2013 the Commercial and Institutional (C&I) Working Group has strived to enhance the existing C&I programs and rectify identified program and system deficiencies. This has proven to be a challenging undertaking, normally taking months to complete sometimes relatively minor changes due to the current CDM framework. Overbuilt governance, numerous initiative requirements, complex program structure and lengthy change management have restricted growth without providing the anticipated improved Measurement and Verification results. In addition, Evaluation, Measurement and Verification (EM&V) has not yet achieved transparency. LDCs are held accountable for these results yet are mostly completely removed from the evaluation process.

LDC program management has been hampered by varying rule interpretation, limited marketing ability, a somewhat inflexible online system of checks and balances and revolving OPA support personnel.

Despite these challenges the C&I Working Group, working in cooperation with the OPA, have managed to address many of the issues which could be rectified. In particular, an accomplishment of 2013 was the inclusion of LED measures into the commercial portfolio of programs. LED is seen as a transformative technology with significant energy savings potential.

Looking ahead there is minimal opportunity to make valuable changes to the current program suite and have these changes reflected in LDC 2014 results. LDCs and the OPA should look beyond the current Initiatives and work to launch new programs, built on the strengths of the 2011-2014 programs, which will meet the needs of the industry and consumers.

In 2013, the commercial portfolio of Initiatives benefited from considerable momentum and success that had been developed in previous years. The results were better than average as some of the strategies put into place by HONI previously started to bear fruit. Collaboration with the Gas Companies continued in 2013. This strategy created cost efficiencies for HONI and also a one-stop shop for customers. Another contributor to success in 2013 was the ongoing commercialization and customer adoption of new LED technology, in particular in the small business and agriculture customer segments. Hydro One's Business Program results in 2013 were 50.7 GWh and 12.4 MW saved.

3.2.2.1 Efficiency: Equipment Replacement Incentive (ERII) (Schedule C-2)

Initiative Activities/Progress:

• Success: In 2013 HONI, once again, deployed a multi-tiered marketing strategy that built on the existing momentum of the ERII initiative, resulting in record engagement of customers and overall interest in the ERII

program. A total of 995 project applications were received and processed in 2013, which represents an increase over our previous record of 958 customer applications received in 2012. This new record intake of applications in 2013 once again provided excellent potential for project completions during the year as well as later in 2014.

- A total of 1,102 ERII retrofit projects were completed by year end. The 2013 ERII results were buoyed from significant customer application volume to the program in 2012 that ultimately resulted in a new record for completed projects in 2013.
- Application volumes increased steadily as our Commercial Key Account Managers (CKAM's) contacted more of our business customers. Over 300 CDM applications have been processed by our CKAM's during 2013.
- Hydro One continued to employ a multifaceted marketing approach utilizing customer direct mailings, e-Blasts, trade shows, workshops, and our CKAM's provided multiple direct points of contact to our customers, directly impacting our results. Throughout the year, Hydro One also worked directly with many of its large customers. A focus on National Accounts with HONI as the Lead LDC has yielded large retrofit projects with Tim Hortons, LCBO, BELL Canada, Rogers, Wal-Mart and Home Depot to name a few.
- HONI continued to work with the OPA's Energy Efficiency Service Providers (EESPs) program to the Association
 of Municipalities of Ontario (AMO). The program was developed to assist municipalities in developing energy
 usage reports, energy efficiency plans and energy savings retrofits, as per Reg. 397/11 under the Green Energy
 Act. Before the EESPs entered the municipal market, a plan was developed between our conservation account
 managers and the EESPs to efficiently cover the greatest number of municipalities in HONI's territory.
- *Marketing Strategy:* In 2013, Hydro One continued to expand its key marketing strategy which resulted in record results. Key elements of this strategy are:
 - Top Down Bottom Up Marketing: The ERII Initiative continued to market 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, manufacturers and school boards. A targeted Direct Mail piece was sent to 500 manufacturing 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 available through the participation of Hydro One in 26 wholesale trade shows.
 - Increasing Awareness: Creating heightened awareness through advertising, customer workshops and shows. In 2013, we had 20 well attended customer event, that generated multiple leads for our business programs. Various marketing pieces were also developed through the year to inform and engage our customers; a free standing insert and teaser ad was placed in 88 community newspapers (700,000 inserts). Radio ads were run on 24 stations for a period of 4 weeks in October; 6 Case studies were produced and distributed via print and video; our CDM

Web pages were redesigned to promote sector-specific technologies; and an eNewsletter was developed, and sent to customers who had opted-in to receive it quarterly. Hydro One continued with its recognition program which provided customers with certificates of recognition for participation in the program.

- *Leverage and Bundle:* Cross promotion and initiative integration wherever possible to create increased awareness and cost efficiencies.
- Face to Face Customer 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. Union Gas was hired as Hydro One's Commercial Key Account Managers ("CKAM"s) with the responsibility for calling upon Hydro One customers in specific geographic regions. They provide personal visits to promote CDM projects within the customer's facilities and assist with the initiative application process.
- Resourcing: In order to execute our marketing strategy, several key resources needed to be put in place. For
 example, contracting marketing services, CKAMS, and outsourcing all aspects of ERII project evaluation to
 address the growing uptake of the Retrofit program in recent years. The increasing success of this initiative
 resulted in close to 1000 applications being received by Hydro One. CLEAResult (formerly Willis Energy
 Services) continued on as HONI's technical evaluator for all ERII project applications.

Additional Comments:

- A large portion of the marketplace was still not fully engaged in the program even though a large proportion
 of LDC savings are attributed to ERII. Due to this, HONI continues to spend a great deal of time training and
 educating the market on available incentive programs. Training events were held across the province and
 focused on specific technologies (compressors, LED lighting, etc.) while also educating customers on the saveon-energy program in general.
- Capability building programs from Industrial programs have had very positive contributions to ERII program.
- This Initiative is limited by the state of the economy and the ability of commercial/institutional facility to complete capital upgrades.
- Lighting is still the most prevalent measure. Market sectors providing other energy efficient technologies are slowly becoming engaged, particularly manufacturers and suppliers of HVAC equipment.
- Prescriptive and Engineered worksheets provide a much needed simplified application process for customers. However, the eligible measures need to be updated and expanded in both technology and incentive amounts to address changing product costs and evolution of the marketplace.
- Changes to the application process helped to remove significant barriers to program participation from HVAC (Unitary AC) and compressed air channel partners; because of this, the intake of applications has increased significantly. The working group worked directly with industry to develop an application process that effectively suited their business requirements.

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

Initiative Activities/Progress:

- Since program launch in 2008 through to 2011 year-end, Hydro One's program delivery partners were able to complete just over 22,100 installations. Due to such high penetration rates and increased market saturation from past years, Hydro One advocated for several program enhancements including expanding the Eligible Measures list to include LED lighting. The new LED Measures were included in the updated Eligible Measures Price List effective September 1, 2013. The continuing market transformation of many lighting applications to LED provides a great opportunity for the Small Business Lighting Program to adopt this highly efficient technology and provide it as a standard offering. In addition to this, Hydro One continues to execute a multitiered marketing strategy focusing on LED measures. It is anticipated that this will result in sustainable participation rates through December 2014.
- Hydro One's initiative to promote the expansion of the Eligible Measures to include LED has contributed to the increase in installations from 2012 to 2013.
- *Multiple Marketing Pieces:* Hydro One continued to inform its customers in 2013 through delivering 209,000 direct mail pieces, 49,000 inserts distributed in local newspapers and trade publications, and 7,600 collateral pieces distributed throughout 60 community events.
- Agricultural Customers through Targeted Marketing: Direct mail, magazine inserts and collateral material were developed and designed specifically for agricultural customers promoting the new lighting measures
 - o 190,000 direct mail pieces were sent in three separate waves to all Hydro One farm customers.
 - o 6,000 collateral pieces were distributed throughout some of Ontario's largest agricultural fairs
 - 38,000 inserts were distributed in an issue of *Better Farming* magazine Spring and Fall
 - 3,500 inserts in Canadian Poultry (Ontario only): 7,500 inserts in The Grower magazine (both September issues)
 - 2 Full page ads were placed in the Pork and Poultry Congress show guides: 1 ad was placed in the Canadian Poultry annual calendar..
- *Phone Calls:* There was a strong outreach program in place via Hydro One's contracted outbound call centre. In 2013, there were 34,526 calls placed to Hydro One's business customers resulting in contact with approximately 14,700 customers. There were 5,953 customer assessments booked via the call centre.
- Door to Door Campaign: Hydro One assessors visited nearly 1,460 customers to offer a no obligation assessment (audit) of their lighting system. A total of 1,138 assessments were carried out during the door to door campaign.
- 8,500 total customer assessments were carried out in 2013.
- Hydro One's turnkey vendor created formal alliances within local communities with 150 electrical contracting companies that completed 4,637 installations in 2013.

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- At the end of 2013, just over 30,200 of Hydro One's eligible small business customers (GS<50 kW) have participated in the program and received \$1,000 or \$1,500 in free energy-efficient lighting upgrades.
- With the program enhancements including the inclusion of LED measures which were added during the second half of 2013, Hydro One anticipates seeing continual growth in participation rates into and throughout 2014 as a result of these changes.

Additional Comments:

- Successful execution of the previous rendition of this Initiative has resulted in diminished potential for the 2011-2014 Initiative in some LDC's territories.
- The Eligible Measure Price List was also updated with new pricing. This helps with Electrical contractor's margins and vendor channel participation in some regions.
- Currently LDCs are unable to offer these standard incentives to prior participants. The ability to return to prior participants and offer a standard incentive on the remaining measures has potential to provide additional energy and demand savings.
- The 2013 Demand Realization Rate increased from 68% in 2012 to 81%. This is a large improvement from the 40% drop (108% to 68%) in Peak Demand Realization Rates that were reported by the OPA for 2012. The OPA stated that this decrease was the result of the participation mix of business which does not necessarily operate during peak times, such as schools, churches, and social organizations. At that time, the OPA committed to investigating the issue, and if warranted committed to an adjustment 2013 which they have done. Hydro One has requested an increase of the 2012 Demand Realization Rate as well.

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

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's service 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.

Additional Comments:

- Initiative name does not properly describe the Initiative.
- There was minimal participation for this Initiative. It is suspected that the lack of participation in the program is a result of the Initiative being limited to space cooling and a limited window of opportunity (cooling season) for participation.

- Participation is mainly channel partner driven, however the particulars of the Initiative have presented a too significant of a barrier for many channel partners to participate.
- The customer expectation is that the program be expanded to include a broader range of measures for a more holistic approach to building recommissioning and chilled water systems used for other purposes should be made eligible and considered through Change Management.
- This initiative should be reviewed for incentive alignment with ERII, as currently a participant will not receive an incentive if the overall payback is less than 2 years.

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

Initiative Activities/Progress:

- Hydro One continues to process HPNC applications to ensure completion in 2015.
- Hydro One was a key sponsor of the Green Building Festival and placed a full page ad in the program
- Hydro One cross-promoted HPNC in ERII marketing materials
- Our delivery partner, Enbridge Gas Distribution (Enbridge), continued to work with the building design community, leveraging existing relationships. Enbridge is well positioned to provide a one stop shop for customers and builders as it simultaneously integrates and offers both Hydro One incentives as well as Enbridge incentives during the construction project design phase.
- Hydro One partnered with other LDCs and Union Gas to deliver workshops to the building design community.
- Hydro One distributed approximately 500 copies of its HPNC case study at various municipal conferences.
- In 2013, Hydro One completed 48 HPNC projects.

Additional Comments

- The Participant Agreements have been updated to allow these longer term projects to participate in the HPNC initiative. This will allow customers with 2015 completion dates to participate in the current program.
- Participants estimated completion dates tend to be inaccurate and are usually 6 months longer. This could result in diminished savings towards target when facilities are not substantially completed by December 31, 2015
- The effort required to participate through the custom stream exceeds the value of the incentive for many customers.
- This Initiative has a very low Net-to-Gross ratio, which results in half the proposed target savings being 'lost'.

• A review of customer incentive levels is overdue. Some technologies have incentive levels that are too low to attract customer uptake. At the time of writing this report, the Agribusiness incentives that are now in market match incentives levels that are available through the Retrofit Program.

3.2.2.5 Energy Audit Initiative

Initiative Activities/Progress:

- This initiative was promoted at all customer outreach and municipal events. It was also cross-promoted on ERII marketing materials.
- Hydro One witnessed an increase in audit applications, specifically from municipalities as part of their reporting requirements in regulation 397/11.
- An eBlast was sent to 400 municipal customers in June of 2013 to increase awareness of this Initiative and its usefulness in meeting some of the requirements of Ontario Regulation 397/11, the new Energy Act.

Additional Comments

- The energy audit Initiative is considered an 'enabling' Initiative and 'feeds into' other saveONenergy Initiatives. Audit reports from consultants vary considerably and in some cases, while they adhere to the Initiative requirements, do not provide value for the Participant. A standard template with specific energy saving calculation requirements should be considered.
- Customers look to the LDCs to recommend audit companies. A centralized prequalified list provided by the OPA may be beneficial.
- Participants are limited to one energy audit which restricts enabling and direction to the other Initiatives. This Initiative should be evaluated for additional customer participation when presented with a new scope of work.
- 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.

3.2.3 INDUSTRIAL PROGRAM

Description: Large facilities are discovering the benefits of energy efficiency through the Industrial Programs which are designed to help identify and promote energy saving opportunities. It includes financial incentives and technical expertise to help organizations modernize systems for enhanced productivity and product quality, as wells as provide a substantial boost to energy productivity. This allows facilities to take control of their energy so they can create long-term competitive energy advantages which reach across the organization.

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

Objective: To provide incentives to both existing and new industrial customers to motivate the installation of energy efficient measures and to promote participation in demand management.

Discussion:

The Industrial Program Portfolio has been able to provide valuable resources to large facilities such as Energy Managers and enabling Engineering Studies. The Engineering Studies in particular provide a unique opportunity for a customer to complete a comprehensive analysis of an energy intensive process that they would not otherwise be able to undertake. Energy Managers provide customers with a skilled individual whose only role is to assist them with conservation initiatives. To date these Energy Managers have played a key role in customer participation.

Due to the size, scope and long lead time of these Initiatives and associated projects, the Ministerial Directive provides some security for the continuation of the conservation programs and associated compensation for the customer; however the subsequent savings would not be attributed to any LDC target.

Extensive legal documents, complex program structure and lengthy change management have restricted the change and growth of this Portfolio. While the expedited change management has benefited the Commercial Portfolio, the Industrial Portfolio has not seen the same results due to the narrow scope of the process. For 2013, a change to the threshold for small capital projects and a new small capital project agreement are expected to improve the number of projects and savings achieved within PSUI. Likewise, a decision to proceed with natural gas load displacement generation projects will also increase uptake although results may not be counted towards LDC targets due to in-service dates beyond 2014. Looking ahead there is minimal opportunity to make additional valuable changes to the current program suite and have these changes reflected in LDC 2014 results.

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

Initiative Activities/Progress:

Hydro One undertook outreach initiatives in 2013 to improve participation in PSUI.

- Hydro One held 1 industrial workshop for customers with an average demand of 1MW or greater. This
 was held in southwestern Ontario to educate customers on what technical projects would qualify for PSUI
 and other saveONenergy incentive programs. We had 5 participants and generated 6 potential PSUI
 projects.
- Hydro One continued its telephone marketing initiative where we would attempt to contact key customer personnel about Hydro One's conservation programs. Only customers with an average demand of 1 MW or greater were targeted. The goal was to generate customer site meetings with financial and facility staff and educate them on the benefits and uses of our conservation programs as well as offer an energy assessment. By the end of 2013 we have visited 60% of our target customers and generated 32 potential PSUI projects.
- Our efforts towards direct marketing and customer outreach through workshops and energy assessments resulted in increased participation of large-scale projects. For example, Hydro One received applications

for: 6 Preliminary Engineering Studies, 13 Detailed Engineering Studies, 2 Project Incentives, and 6 Energy Managers. If all projects are implemented within the program year, Hydro One will realize significant savings in both energy and demand by 2014.

Additional Comments:

- Approximately 364 engineering study applications have been submitted province-wide. This is a strong indication that there is the potential for large projects with corresponding energy savings. Most of these studies have been initiated through the Energy Manager and KAM resources.
- This Initiative is limited by the state of the economy and the ability of a facility to complete large capital upgrades.
- There is typically a long sales cycle for these projects, and then a long project development cycle. As such, there were improved results in 2013. The majority of the results are expected in2014, with a much reduced benefit to cumulative energy savings targets.
- Delays with processing funding payments have caused delayed payments to Participants beyond contract requirements. In some cases, LDCs have developed a separate side agreement between the LDC and Participant acknowledging that the Participant cannot be paid until the funds are received.
- The contract required for PSUI is a lengthy and complicated document. A key to making PSUI successful is a new agreement for 'small' projects which is a simplified with less onerous conditions for the customer.
- The business case that amended the PSUI contract for "small" projects was approved by the OPA in July 2013 which changed the upper limit for a small project from 700 MWh to 1 million dollars in incentives. This allows more projects to be eligible for the new small capital project agreement and increase participant uptake, while still protecting the ratepayer.
- Hydro One expected to achieve significant savings from industrial co-generation projects. While the OPA issued guidelines for such projects at the beginning of 2012, the review and approval of all natural gas fired co-generation projects were put on-hold in October, 2012. In June 2013, the OPA sent a notice to all LDCs that they would begin to review these projects again, although with incentives reduced from 70% of the project costs to 40%. While there is still strong potential for these projects in Hydro One's service area, the yearlong hold on these projects makes it unlikely that they would be in service before the end of 2014.

3.2.3.2 Monitoring & Targeting Initiative (Schedule D-2)

Initiative Activities/Progress: Monitoring & Targeting ("M&T") was promoted along with all PSUI outreach activities. As such, M&T benefited from the activities referenced in Section 3.2.3.1.

Additional Comments:

- The M&T initiative is targeted at larger customers with the capacity to review the M&T data. This review requires the customer facility to employ an Energy Manager, or a person with equivalent qualifications, which has been a barrier for some customers. As such, a limited number of applications have been received to date.
- The savings target required for this Initiative can present a significant challenge for smaller customers.
- Changes were made to ERII to allow smaller facilities to employ M&T systems.

3.2.3.3 Energy Manager Initiative (Schedule D-3)

Initiative Activities/Progress:

Hydro One had 6 customers hire an Embedded Energy Manager (EEM) in 2013. Most EEMs were engaged in startup activities in 2013, results of approximately 2 GWh were achieved. However, increased results are expected in 2014 as they implement more and longer-term projects.

We expect to have greater participation in this program in 2014 due to the outreach efforts described in the PSUI section.

The Energy Manager Initiative was promoted along with all PSUI outreach activities. As such, this program benefited from the activities referenced in Section 3.2.3.1.

Additional Comments:

- The Energy Managers have proven to be a popular and useful resource for larger customers. There are approximately 50 Embedded Energy Managers (EEMs) and 22 Roving Energy Managers (REMs) being utilized by customers across the province.
- LDCs that are too small to qualify for their own REM are teaming up with other utilities to hire an REM to be shared by the group of utilities.
- At the beginning, it took longer than expected to set up the energy manager application process and unclear communication resulted in marketing and implementation challenges for many LDCs.
- Some LDCs and Customers are reporting difficulties in hiring capable Roving and Embedded Energy Managers (REM/EEM), in some instances taking up to 7 months to have a resource in place.
- New energy managers require training, time to familiarize with facilities and staff and require time to establish "credibility". Energy Managers started filling their pipeline with projects but few projects were implemented in 2013.
- Delays with processing EEM payments causing LDCs to delay payments to Participants beyond contract requirements.

- There have been a number of studies identified by Energy Managers and they have been able to build capacity and deliver energy saving projects within their respective large commercial/industrial facilities.
- Requirement that 30% of target must come from Non-incented projects is identified as an issue for most REMs, although final targets not due to 2013. Working group has proposed to remove this requirement for REM's only as they are not resident full time at a customer facility to find the non-incented savings.

3.2.3.4 Key Account Manager (Schedule D-4)

Initiative Activities/Progress:

In July 2012 Hydro One hired 2 Key Account Managers and in July 2013 we hired 2 more for a total of 4 Key Account Managers. They were instructed to target customers with an average demand of 1MW or more. Their task was to contact these customers, educate them on the conservation programs and provide them with a targeted energy assessment of the customer's facility. In 2013 30% of the 280 target customers had been contacted about participating in Conservation Programs. This has led to 38 conservation projects. We expect similar good results in 2014 as more customers receive the energy assessments.

Additional Comments

- Customers appreciate dealing with a single contact to interface with an LDC, a resource that has both the technical and business background who can communicate easily with the customer and the LDC.
- Finding this type of skill set has been difficult. In addition, the short-term contract and associated energy targets discourage some skilled applicants resulting in longer lead times to acquire the right resource.
- This resource has been found by some LDCs to be of limited value due to the part-time nature of the position and limited funding. In addition, the position role has been too narrow in scope to provide assistance to the wider variety of projects LDCs may be struggling with.
- A decision was made by the OPA to continue funding for KAM's till the end of 2014.

3.2.3.5 Demand Response 3 (D-6)

Initiative Activities/Progress:

• In 2013 Hydro One continued their marketing partnership with the Demand Response Aggregators. The purpose was to identify ideal customers for participation in Demand Response 3 and educate those customers on the benefits of the program to encourage participation. The number of customers participating in demand response increased from 35 in 2011 to 86 in 2013. We expect to see excellent participation numbers continue in 2014.

Additional Comments:

- The DR3 program is delivered by Aggregators to LDC's large industrial and commercial consumers to help them reduce their peak demand. Although varying contract terms of one-to-five years are offered, consumer participation is almost exclusively for a 5 year term, due to the higher financial incentives available for longer contracts.
- Until early 2013, the OPA did not provide customer data on an individual customer basis due to contractual requirements with the aggregators. This limited LDCs' ability to effectively market to prospective participants and verify savings.
- No program improvements were made in 2013 however, it was accepted that prior participants who renew their DR3 contract within the 2011-2014 term will contribute to LDC targets.
- As of 2013, Aggregators are able to enter into contracts beyond 2014. This has allowed them to offer a more competitive contract price (5 year) than if limited to 1 or 2 year contracts.
- Metering and settlement requirements are expensive and complicated and can reduce customer compensation amounts, and present a barrier to smaller customers.
- Compensation amounts for new contracts and renewals have been reduced from the initial launch of this program (premium zones and 200 hour option have been discontinued) and subsequently there has been a corresponding decrease in renewal revenue.
- The limit of 500MW procurement authority for DR has been exhausted, limiting the ability of LDCs to meet their conservation target in 2014. The OPA has advised that there is limited capacity left for new DR3 customers which will effectively end new customer enrollments by the end of 2013 and significantly impact the ability for LDC's to increase their demand savings to reach their targets.

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

Initiative Activities/Progress:

 4,071 homes were audited and completed in 2013. The program endured delays most notably pertaining to social housing guidelines. The easing of these guidelines led to significantly greater results in comparison to 2012. Activities initiated to bolster the awareness of the program include leveraging the LEAP recipient's pool, regional blitz campaigns, direct mail inserts through Ontario Works and other social benefit programs, and engaging various social housing providers.

Additional Comments:

- Awareness of the program amongst social agencies took time to develop. Benefits started to become evident in late 2012.
- Centralized payment processes were not developed in 2011. The payment process was established in 2012 and continued in 2013.

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

3.2.5 PRE-2011 PROGRAMS

Savings were realized towards LDC's 2011-2014 target through pre-2011 programs. The targeted customer types, objectives, descriptions, and activities of these programs are detailed in Appendix B.
4 2013 LDC CDM Results

4.1 Participation and Savings

Initiative	Unit		Increment ram activity occ	tal Activity			gs by Year (Sce remental Peak I demand saving specified repo 2012	Demand Saving s from activity			Incremental Ener savings from a reporting 2012	ctivity within th		Program-to-Date Verif (exclud 2014 Net Annual Peak Demand Savings (kW) 2014	
		2011-	2012-	2015	2014	2011	2012	2015	2014	2011	2012	2015	2014	2014	2014
Consumer Program	1				-										
Appliance Retirement	Appliances	17,394	10,137	6,274		1,045	582	413		7,306,925	4,037,503	2,653,749		2,002	46,613,953
Appliance Exchange	Appliances	939	1,039	2,313		95	150	479		116,777	263,601	854,514		665	2,913,849
HVAC Incentives	Equipment	11,504	12,507	14,476		4,255	2,935	3,319		8,101,055	5,274,119	6,018,710		10,509	60,263,995
Conservation Instant Coupon Booklet	Items	192,631	9,261	103,995		497	69	155		7,415,670	419,164	2,310,637		721	35,541,446
Bi-Annual Retailer Event	Items	285,443	318,045	283,231		504	444	355		8,810,008	8,028,823	5,150,309		1,303	69,627,119
Retailer Co-op	Items	0	0	0		0	0	0		0	0	0		0	0
Residential Demand Response	Devices	1,956	13,200	23,055		1,095	6,159	11,374		2,836	44,183	35,856		0	82,875
Residential Demand Response (IHD)	Devices	0	0	69		0	0	0		0	0	0		0	0
Residential New Construction	Homes	,	4	12		0	1	1		0	10,212	13,843		2	58,321
Consumer Program Total						7,491	10,340	16,096		31,753,271	18,077,604	17,037,619		15,202	215,101,558
Business Program															
Retrofit	Projects	321	632	1,102		2,346	5,081	4,792		13,286,676	24,422,018	28,576,792		12,124	182,903,225
Direct Install Lighting	Projects	4,313	3,410	4,637		5,296	2,997	5,839		13,630,141	11,201,013	20,363,703		12,191	123,428,968
Building Commissioning	Buildings	0	0	0		0	0	0		0	0	0		0	0
New Construction	Buildings	14	28	48		87	354	356		252,008	1,054,580	1,688,931		796	7,549,632
Energy Audit	Audits	10	17	1		0	72	9		0	352,468	48,431		81	1,154,304
Small Commercial Demand Response	Devices	0	25	286		0	16	183		0	91	27		0	118
Small Commercial Demand Response (IHD)	Devices	0	0	0		0	0	0		0	0	0		0	0
Demand Response 3	Facilities	15	15	16		924	880	1,213		36,069	12,793	18,962		0	67,823
Business Program Total						8,653	9,400	12,391		27,204,894	37,042,963	50,696,865		25,193	315,104,071
Industrial Program															
Process & System Upgrades	Projects	0	0	1		0	0	188		0	0	1,650,877		188	3,301,754
Monitoring & Targeting	Projects	0	0	0		0	0	0		0	0	0		0	0
Energy Manager	Projects	0	3	15		0	0	190		0	254,894	2,030,080		139	3,921,033
Retrofit	Projects	55	0	0		453	0	0		3,097,420	0	0		453	12,389,680
Demand Response 3	Facilities	21	53	70		13,590	22,391	54,325		797,689	539,613	1,625,617		0	2,962,919
Industrial Program Total						14,042	22,391	54,703		3,895,109	794,507	5,306,574		779	22,575,386
Home Assistance Program															
Home Assistance Program	Homes	0	510	4,071		0	75	391		0	711,836	3,306,705		462	8,677,463
Home Assistance Program Total						0	75	391		0	711.836	3,306,705		462	8,677,463
Aboriginal Program							•	•							
Home Assistance Program	Homes	0	0	578		0	0	259		0	0	1,573,622		259	3,147,243
Direct Install Lighting	Projects	0	0	0		0	0	0		0	0	0		0	0
Aboriginal Program Total			-			0	0	259		0	0	1,573,622		259	3.147.243
Aboriginar rogram rota						-				-		2,010,022			3,247,245
Electricity Retrofit Incentive Program	Projects	385	0	0		2,732	0	0		12.086.358	0	0		2,732	48,345,431
			-	-			488	-			2,118,988	-		-	
High Performance New Construction	Projects	63	15	0		2,087		0		10,719,939		0		2,575	49,236,719
Toronto Comprehensive	Projects	•	0	•		•	0	0		0	0	0		0	0
Multifamily Energy Efficiency Rebates	Projects	•	0	•		0	0	0		•	0	0		0	0
LDC Custom Programs	Projects	0	0	0		0	0	0		0	0	0		0	0
Pre-2011 Programs completed in 2011 Tot	tal					4,819	488	0		22,806,297	2,118,988	0		5,307	97,582,151
Program Enabled Savings	Projects	0	0	•		0	0	0		0	0	0		0	0
Time-of-Use Savings	Homes	0	0	0		0	0	0		0	0	0		0	0
Other Total			-	-		0	0	0		0	0	0		0	0
Adjustments to 2011 Verified Results		i — — — — — — — — — — — — — — — — — — —					-215	3			1,211,854	5,598		-228	4,816,721
Adjustments to 2011 Verified Results Adjustments to 2012 Verified Results							-215	388			1,211,854	5,598 2,148,141		-228 388	4,816,721 6,444,424
Energy Efficiency Total						19,397	13,248	16,744		84,822,977	58,149,218	76,240,922		47,202	659,074,136
Demand Response Total (Scenario 1)						15,609	29,446	67,096		836,594	596,680	1,680,462		0	3,113,735
Adjustments to Previous Years' Verified R	esults Total	1				0	-215	390		0	1,211,854	2,153,740		160	11,261,145
OPA-Contracted LDC Portfolio Total (inc. /						35,005	42,479	84,230		85,659,571	59,957,751	80,075,123		47,362	673,449,016
Activity and savings for Demand Response resource		The IHD inc has	on the 2013 and	ual report has he	en left blank cend	ing a results updat			indated once				II OEB Target:	213,660	
represent the savings for demand response resource			ation is made ava		pend	a creating apoint		De c					-		1,130,210,000
January 1, 2011 (reported cumulatively).										% of Fu	III OEB Target A	chieved to Date	(Scenario 1):	22.2%	59.6%

Table 1: Hydro One Networks Inc. Initiative and Program Level Net Savings by Year (Scenario 1)

January 1, 2011 (reported cumulatively).

*Includes adjustments after Final Reports were issued Energy

Energy Manager, Aboriginal Program and Program Enabled Savings were not independently evaluated

Table 2: Summarized Program Results

	Gross Sa	avings ²	Net Sa	ivings	Contribution to Targets	
Program	Incremental Peak Demand Savings (MW)	Incremental Energy Savings (GWh)	Incremental Peak Demand Savings (MW)	Incremental Energy Savings (GWh)	Program-to-Date: Net Annual Peak Demand Savings (MW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (GWh)
Consumer Program Total			16.096	17.038	15.202	215.102
Business Program Total			12.391	50.697	25.193	315.104
Industrial Program Total			54.703	5.307	0.779	22.575
Home Assistance Program Total			0.391	3.307	0.462	8.678
Aboriginal Program			0.259	1.574	0.259	3.147
Pre-2011 Programs completed in 2011 Total			0.000	0.000	5.307	97.582
Adjustments to 2011 Verified Results					(0.228)	4.817
Adjustments to 2012 Verified Results			0.388	2.148	0.388	6.444
Total OPA Contracted Province-Wide CDM Programs			84.230	80.075	47.362	673.449

² Gross savings results not reported in the Final 2013 OPA Program Results.

4.2 Evaluation

The following section is copied from the OPA's summary of the 2013 EM&V findings for all of the evaluated saveONenergy initiatives.

CONSUMER PROGRAM

Appliance Retirement Initiative

- Per unit savings increased for both energy (+15.4%) and demand (+4.0%) between 2012 and 2013 due to a greater proportion of refrigerators/freezers with large volumes and a manufacturer date before National Appliance Energy Conservation Act (NAECA) was implemented. Dehumidifiers also show a higher per unit savings related to the change in ENERGY STAR definitions.
- Overall participation continues to decline with 20,952 appliances recycled in 2013, compared with 34,146 in 2012 and 56,110 in 2011. The program has experienced close to a 40% reduction (39.1% 2011 to 2012, 41.1% 2012 to 2013) in recycled appliances in each subsequent year of operation.
- Net to gross ratio stayed constant at around 43% between 2012 and 2013

Appliance Exchange Initiative

- Increased per unit energy and demand savings due to an adjustment to the assumed consumption of "conventional" and Energy Star dehumidifiers. The calculated weighted average annual energy savings of a exchanged dehumidifier increased 36.6%
- Of the participants surveyed who reported they had replaced the dehumidifiers they exchanged, 100% reported purchasing ENERGY STAR[®] models.
- 21% increase in the number of eligible dehumidifiers collected in the program. In 2013, 5,337 dehumidifier units were collected compared to 3,617 dehumidifier units and 219 window air conditioners.
- Net to Gross ratio (NTG) was 52.6% which is a slight increase of the 2012 NTG of 51.5%

Bi-Annual Coupon Events

- 19% increase in the number of coupons redeemed during the Spring and Fall Events in 2013 compared to 2012 because of substantial increase in LED purchases with event coupons.
- 36% lower net annual savings in 2013 compared to 2012 primarily because of significant reductions in per unit savings estimates for standard and specialty CFLs. In 2013, findings showed a decrease in replacement rate of incandescent bulbs. Only 30% of 2013 participants are estimated to have replaced incandescent bulbs compared to 60% of participants replacing incandescent bulbs in 2012. This leads to a change in the baseline assumption for the savings calculations.
- 87% of coupons redeemed were for general purpose and specialty CFLs and LEDs, producing 80% of net annual energy savings and 73% of net demand savings
- Measure NTG ratio was approximately 8% higher in 2013 than in 2012 due to the inclusion of participant like spillover, i.e., purchase of additional coupon initiative measures without using coupons because of program influence.

Heating and Cooling Initiative

- Total participation (equipment) increased 7.5% from 2012 to 91,581.
- Per unit furnace savings decreased from 1139 kWh/year in 2012 to 1090 kWh/year due to a slight shift in the number of participants who use their furnace fan non-continuously both before and after the retrofit as opposed to changing from continuous to non-continuous operation
- Per unit energy and demand savings assumptions for central air conditioners did not change from 2012.

Annual Coupons

- Customers redeemed more than ten times as many annual coupons in 2013 as in 2012 because of new LED coupons and full year availability of all coupons. Customers redeemed 13% more annual coupons in 2013 than in 2011, the first full year of annual coupons due to the high volume of new LED coupons.
- There was a significant reduction in savings specialty CFL related measures. In 2013, the findings showed around 30% of participants are replacing incandescent bulbs compared to 60% of participants replacing incandescent bulbs in 2012.
- Despite the significant per unit savings reductions, the Net Annual Savings from Annual Coupons in 2013 was more than 5.5 times that in 2012. This is primarily because of higher participation due to the inclusion of LED coupons and full year availability of all coupons.
- 93% of coupons redeemed in 2013 were for general purpose LEDS and specialty CFLs and LEDs, producing 89% of net annual energy savings and 84% of net demand savings.
- Measure NTG ratio was approximately 8% higher in 2013 than in 2012 due to the inclusion of participant like spillover, i.e., purchase of additional coupon initiative measures without using coupons because of program influence.

*peaksaver*PLUS

- The cycling strategy for CAC load control was changed from 50% simple cycling to 60% simple cycling.
- Under 1-in-10 year weather conditions, the 2013 estimated impacts for load control devices are higher than the 2012 estimates in all months and are between 10 and 15% higher during the core summer months of June through August.
- Load impact estimates for the average small and medium business and for electric water heaters among residential customers are also unchanged from the prior year's analysis
- This year's IHD analysis has yielded an estimate of no statistically significant energy savings.

Residential New Construction

- Energy and demand savings for the Initiative increased by 300% compared to the combined 2011 and 2012 results ; number of projects also increased from 45 in 2011 and 2012 to 86 in 2013.
- All projects are opting for the prescriptive or performance path. No custom project applications were received in 2013, similar to 2011-2012.
- Net-to-gross ratio for the initiative was higher by 14% from 49% in 2012 to 63% in 2013.

HOME ASSISTANCE PROGRAM

Home Assistance Program

- Participation increased significantly to 26,756 participants in 2013 from 5,033 in 2012
- Realization rates were slightly lower in 2013 (0.88 for kWh and 0.26 for kW) than in 2012 (0.98 for kWh and 0.32 for kW) primarily due to updated verified per unit assumptions.
- Realization rate for demand savings remained low as FAST Tool calculated kW savings for certain insulation measures remained very high and recommended revisions to kW savings factors were not yet in use in 2013 (changes to the FAST Tool to address these issues were made in early 2014)

BUSINESS PROGRAM

Retrofit

- A total of 8,785 projects completed in 2013. Reported energy savings for individual projects ranged from 1 kWh to over 5,000,000 kWh
- Net to Gross ratio (NTG) for energy was 72.8%, consistent with prior years
- NTG for demand was 72.0%, consistent with prior years
- NTG ratios are comparable to similar programs across North America

Small Business Lighting

- In 2013 the initiative introduced: a) an increase in the incentive to \$1500 from \$1000, b) new LED measures c) Agribusiness eligibility, resulting in the stabilization of participation and an increase in savings.
- 17,782 projects completed in 2013 (3.8% decrease from 2012)
- However, 12.2% increase in Net Verified Energy Savings relative to 2012.
- The average incentive per project and savings per project both increased between 2012 to 2013
- Net to Gross ratio (NTG) for 2013 remained unchanged at 94%

Audit Funding

- 319 audits were completed in 2013
- 2013 sample saw more recommended measures implemented without incentives (33% in 2013 vs. 13% in 2012)
- The average per audit summer peak demands savings is estimated to be 13 kW.

Existing Building Commissioning

- 29 unique participants in the 2013 population
- No Commissioning projects completed the hand-off/completion phase in 2013
- Improvements to the chilled water system controls were the most commonly targeted measure.
- Large variation in estimated savings results between preliminary investigation phase and actual implementation phase

High Performance New Construction

- Number of projects increased by 25% from 69 in 2012 to 86 in 2013.
- Custom projects, representing only about 8% of the total number of projects, account for 67% of verified demand savings and 54% of verified energy savings.
- A realization rate of 72% for energy savings is low due to the low realization rate of the Agribusiness high ventilation, low speed fans which comprised of 15 % of the HPNC prescriptive project energy savings.
- Net-to-gross ratio for the initiative was higher by 5% from 49% in 2012 to 54% in 2013.

INDUSTRIAL PROGRAM

Process and Systems Upgrade Initiative

- In 2013, three PSUI projects were put into service. Projects were very well documented and technical reviews were thorough. Most projects are delivering the level of energy savings expected or more (realization rates of 87% for energy savings and 86% for summer demand savings)
- Good level of quality on M&V conducted in each project. The level of free-ridership was found to be very low, at only 7% for energy savings and 6% for demand savings, and no spillover was identified.
- Energy Managers are seen as important drivers of program enabled savings projects. Almost a 300% increase vs. 2012 in the amount of energy savings from program enabled savings projects.

DR-3

- The largest 20 contributors account for 60% of the contractual demand reduction in other words, less than 5% of contributors account for the majority of the load reductions.
- In 2013, DR-3 was successfully dispatched locally for the first time in order to provide assistance in restoring power after a prolonged power outage due to substation flooding.

Note:

The Key Evaluation findings are derived from the 2013 evaluations of the saveONenergy programs. These findings were developed by 3rd party evaluation contractors. Complete findings are detailed in the contractors' full evaluation reports, which will be available publicly in Q4 2014.

4.3 Spending

Table 3: 2013 Spending

Initiative	Program Administration Budget (PAB)	inistration Based Funding		TOTAL
Consumer Program				
Appliance Retirement	\$675,433	0	0	\$675,433
Appliance Exchange	\$343,051	0	0	\$343,051
HVAC Incentives	\$779,193	0	0	\$779,193
Conservation Instant Coupons	\$150,908	0	0	\$150,908
Bi-Annual Retailer Event	\$1,185,567	0	0	\$1,185,567
Retailer Co-op	0	0	0	\$0
Residential Demand Response	\$2,996,204	\$3,553,533	0	\$6,549,737
New Construction Program	\$176,246	0	0	\$176,246
Social Benchmarking	0	\$110,813	0	\$110,813
Business Program				
Efficiency: Equipment Replacement	\$3,362,163	0	\$4,333,424	\$7,695,586
Direct Installed Lighting	\$669,686	\$1,236,413	\$6,041,757	\$7,947,856
Existing Building Commissioning Incentive	\$2,887	0	0	\$2,887
New Construction and Major Renovation Initiative	\$764,531	0	\$409,852	\$1,174,383
Energy Audit	\$97,056	0	\$51,577	\$148,633
Small Commercial Demand Response (part of the Residential program schedule)	\$72,396	\$84,103	0	\$156,499
Demand Response 3 (part of the Industrial program schedule)	\$9,213	0	0	\$9,213
2011-2014 ERIP 2010 Carry Over	0	\$0	(\$136,487)	(\$136,487)
Industrial Program				
Process & System Upgrades	\$316,859	\$0	\$103,965	\$420,824
a) preliminary engineering study	0	0	0	\$0
b) detailed engineering study	0	0	0	\$0
c) program incentive	0	0	0	\$0
Monitoring & Targeting	0	0	0	\$0
Capacity Funding	0	\$843,116	0	\$843,116
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	\$34,702	0	0	\$34,702
Demand Response 3	\$105,277	0	0	\$105,277
Home Assistance Program	+ 200,277			+ 200,277
Home Assistance Program	\$802,169	\$825,031	\$806,407	\$2,433,606

Initiatives Not In Market								
Midstream Electronics	\$6,967	0	0	\$6,967				
Midstream Pool Equipment	\$5,113	0	0	\$5,113				
Demand Service Space Cooling	0	0	0	\$0				
Demand Response 1 (Commercial)	0	0	0	\$0				
Demand Response 1 (Industrial)	\$19,024	0	0	\$19,024				
Home Energy Audit Tool	0	0	0	\$0				
TOTAL Province-wide CDM PROGRAMS	\$12,574,646	\$6,653,009	\$11,610,495	\$30,838,150				

Table 4: Cumulative Spending (2011-2014)

Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	TOTAL
Consumer Program				
Appliance Retirement	\$1,586,797	0	0	\$1,586,797
Appliance Exchange	\$719,717	0	0	\$719,717
HVAC Incentives	\$1,589,207	0	0	\$1,589,207
Conservation Instant Coupons	\$659,273	0	0	\$659,273
Bi-Annual Retailer Event	\$2,406,152	0	0	\$2,406,152
Retailer Co-op	0	0	0	\$0
Residential Demand Response ³	\$5,674,715	\$6,748,451	\$48,946	\$12,472,111
New Construction Program	\$443,541	0	0	\$443,541
Social Benchmarking	0	\$110,813	0	\$110,813
Business Program				
Efficiency: Equipment Replacement	\$6,103,204	0	\$9,394,820	\$15,498,024
Direct Installed Lighting	\$1,812,825	\$3,207,225	\$13,404,241	\$18,424,291
Existing Building Commissioning Incentive	\$3,820	0	0	\$3,820
New Construction and Major Renovation Initiative	\$1,266,935	0	\$733,645	\$2,000,581
Energy Audit	\$168,126	0	\$148,153	\$316,279
Small Commercial Demand Response (part of the Residential program schedule)	\$75,346	\$84,103	0	\$159,449
Demand Response 3 (part of the Industrial program schedule)	\$43,938	0	0	\$43,938
2011-2014 ERIP 2010 Carry Over	0	0	\$3,448,645	\$3,448,645
Industrial Program				
Process & System Upgrades	\$840,387	\$2 <i>,</i> 934	\$350,210	\$1,193,531
a) preliminary engineering study	0	0	0	\$0
b) detailed engineering study	0	0	0	\$0
c) program incentive	0	0	0	\$0
Monitoring & Targeting	0	0	0	\$0
Capacity Funding	0	\$1,211,431	0	\$1,211,431
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	\$146,915	0	0	\$146,915
Demand Response 3	\$216,421	0	0	\$216,421

³ Total cost is inclusive of peaksaver extension spending of \$654,673.70 on PAB, \$640,985.82 on PBF and \$48,946 on PI.

Home Assistance Program				
Home Assistance Program	\$1,280,133	\$871,091	\$847,101	\$2,998,325
Initiatives Not In Market				
Midstream Electronics	\$55,820	0	0	\$55,820
Midstream Pool Equipment	\$60,744	0	0	\$60,744
Demand Service Space Cooling	0	0	0	\$0
Demand Response 1 (Commercial)	0	0	0	\$0
Demand Response 1 (Industrial)	\$86,900	0	0	\$86,900
Home Energy Audit Tool	\$2,492	0	0	\$2,492
TOTAL Province-wide CDM PROGRAMS	\$25,243,408	\$12,236,049	\$28,375,760	\$65,855,217

5 Combined CDM Reporting Elements

5.1 Progress Towards CDM Targets

In Hydro One's CDM Strategy, submitted November 1, 2010, it was projected that by the end of 2013, Hydro One would have contributed 150 MW and 960 GWh towards its peak and energy targets. The results show that Hydro One has achieved 114.4 MW (17.4+12.9+84.2=114.4) and 673.5 GWh. These amount to 53.6% (114.4/213.7) and 59.6% (673.5/1130.2) of the peak demand and energy targets, respectively. This is 16.6% below the 2010 projection for peak demand and 25.4% below the 2010 projection for cumulative energy savings.

Implementation Period	Annual (MW)						
Implementation Period	2011	2012	2013	2014			
2011 – Verified by OPA	35.0	19.4	19.4	17.4			
2012 – Verified by OPA	(0.2)	42.5	13.0	12.9			
2013 – Verified by OPA	0.0	0.4	84.2	17.1			
2014							
Verified Net A	47.4 ⁴						
Hydro One'	213.7						
Verified Portion of I	22.2%						
Hydro One's expected	114.4 ⁵						

⁴ 47.4 MW does not include any results from Demand Response programs.

⁵ 114.4 MW represents Hydro One's expected 2014 persistence from all CDM activities ending in 2013. This figure includes expected persistence from Demand Response activities, including those that occurred in 2012 and 2013, but were not recorded in the Final Results Report. These are expected to be reflected in the 2014 report.

Implementation Period		Cumulative (GWh)			
	2011	2012	2013	2014	2011-2014
2011 – Verified by OPA	85.7	84.8	84.8	79.4	334.6
2012 – Verified by OPA	1.2	60.0	59.1	58.9	179.2
2013 – Verified by OPA	0.0	2.2	80.1	77.4	159.7
2014					
Verif	673.5				
Hydro On	1,130.2				
Verified Port	59.6%				

Table 6: Net Energy Savings at the End-User Level (GWh)

5.2 Variance from Strategy

In Hydro One's 2011 Annual CDM report, several strategy modifications were suggested (for more information, please refer to section 3.2 of the 2011 Hydro One CDM Annual Report). The progress on these items in 2013 is discussed below:

- Introduce new and enhanced OPA-Contracted Province-Wide Program Initiatives or measures for immediate implementation by LDCs – While there have been some enhancements to some existing program initiatives in 2013, the OPA did not introduced any new programs or initiatives. This has impacted the ability to leverage new cumulative energy savings;
- Introduce potential new Board-Approved Programs Hydro One did not submit an application for Board-Approved Program(s) in 2013. As discussed in section 2.3 of this report, Hydro One designed and proposed six Board-approved CDM programs in 2010. Most of these (four out of six) programs have been transferred to the OPA and are now (in 2013) at different stages of provincial roll-out. With the introduction of new provincial regulations and other changes, Hydro One had decided not to reintroduce the remaining two programs (and other potential Board-Approval programs) in 2013;
- Assist the OPA to assess and allocate TOU results to LDCs As discussed in section 2.2.1 of this document, Hydro One is one of the LDCs that are currently working with the OPA and the Brattle Group on developing an appropriate TOU evaluation methodology;
- Continuous feedback and cooperation on the Change Management recommendations for OPA Contracted programs – Hydro One continued to offer its assistance and recommendations for Change Management throughout 2013; In 2013 the Expedited Change Management process was introduced by the OPA, which allowed for timelier approvals of program changes in some instances.

- Consider enhancing the Head Office Model whereby the Lead LDC is rewarded for helping other satellite LDCs reach their targets No changes were made to the allocation of results when utilizing the Head Office Model. There were no other changes to the Head Office Model in 2012. However, changes have taken place in 2013, whereby the Lead LDC has full control to approve and inspect applications from a Satellite LDC;
- Assist the OPA in the launch of their First Nations Program This program was launched in 2013 and is expected to deliver savings for Hydro One customers; and
- Extend the time frame beyond 2014 to meet customers' needs and business cycles for larger projects The December 21, 2012 Ministry directive to extend CDM funding to the end of 2015 has helped maintain continuity in program delivery, especially for High Performance New Construction, Process and Systems Upgrades Initiative, and Retrofit. However, these results cannot be counted toward 2014 target.

With the implementation of these changes, Hydro One is on pace to achieve 95-100% of its 2014 demand target. However, despite its continuing efforts on these strategy modifications, Hydro One expects to only achieve about 80% of its energy target. We are at the closing stage of the 2011-2014 CDM framework and there is limited opportunity to materially improve Hydro One's 2014 results. While Hydro One will continue to work towards its 2014 targets, the focus of its CDM strategy development is now on the next CDM framework.

5.3 Outlook to 2014 and Strategy Modifications

Hydro One continues its efforts to achieve its conservation targets of 1,130 GWh and 214 MW by the end of 2014. Based on its results to date, Hydro One is on pace to achieve 95-100% of its demand target in 2014. However, achieving our peak demand target will depend upon the expected TOU savings determined by the OPA to be delivered and the OPA First Nations program delivering the anticipated results. Hydro One will likely achieve about 80% of its energy target. Hydro One is taking the following actions to help meet our energy target:

- Work with the OPA to enhance results from OPA CDM programs through improved program measures (e.g. fine-tune unit savings to appropriately reflect Hydro One customer profiles) and expanding customer eligibility for programs;
- Continue to work with the OPA and other LDCs to improve the effectiveness of current OPA CDM programs;
- Work with the OPA to extend the Social Benchmarking Pilot Program to more customers; and
- Apply customer segmentation (i.e. ability to target customers more effectively) to generate more customer participation and results.

Hydro One will continue to update and revise its CDM savings forecast as the CDM landscape evolves.

6.0 Conclusion

Over the course of 2013, Hydro One has incrementally achieved 84.2 MW in peak demand savings and 80.1 GWh in energy savings. This brings Hydro One's total cumulative results to 114.4 MW and 673.5 GWh or 53.6% and 59.6% of the 2014 peak demand and energy targets respectively, assuming full persistence of DR program results.

These results are representative of a considerable effort expended by Hydro One, in cooperation with other LDCs, customers, channel partners and stakeholders to overcome many challenges that limited program effectiveness across all market sectors. This achievement is a success and the relationships built within the 2011-2014 CDM program term will aid results in a subsequent CDM term.

With the current slate of available OPA Programs, and the current forecast of implementation and projected savings, Hydro One expects to meet 95% - 100% of its 214 MW peak demand target. However, despite continuing improvements to existing programs Hydro One faces challenges in the remaining year of the current CDM framework and is likely to only achieve 80% of its 1,130 GWh energy savings target.

Looking ahead there is limited opportunity to make valuable changes to the current program portfolios and have these changes reflected in LDCs' 2014 results. However, LDCs and the OPA can build on the strengths and key successes of the 2011-2014 programs to launch new programs which will meet the needs of the industry and consumers.

Appendix A: Initiative Descriptions

Residential Program

APPLIANCE RETIREMENT INITIATIVE (Exhibit D)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

Targeted End Uses: Refrigerators and freezers (except compact sizes), window air conditioners and portable dehumidifiers.

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

Additional detail is available:

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

In Market Date: January 26, 2011

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 (although focus has moved towards de-humidifiers only).

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

Targeted End Uses: Window air conditioners and portable dehumidifiers

Delivery: OPA contracts with participating retailers for collection of eligible units. LDCs provide local marketing.

Additional detail is available:

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

In Market Date: April 2011

HVAC INCENTIVES INITIATIVE (Exhibit B)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

Description: This is an energy efficiency Initiative that provides rebates for the replacement of old heating or cooling systems with high efficiency furnaces (equipped with ECM) and Energy Star qualified central air conditioners by participating contractors.

Targeted End Uses: Central air conditioners and furnaces

Delivery: OPA contracts centrally for delivery of the program. LDCs provide local marketing and encourage local contractors to participate in the Initiative.

Additional detail is available:

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

In Market Date: January 26, 2011

CONSERVATION INSTANT COUPON 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 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. Coupon booklets were distributed at community and retail events, and downloadable on the HONI website.

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

Delivery: The OPA develops the electronic version of the coupons and posts them online for download. LDC barcoded coupons were made available for local marketing and utilization by LDCs. The OPA enters into agreements with retailers to honour the coupons.

Additional detail is available:

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

In Market Date: January 26, 2011

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: As per the Conservation Instant Coupon Initiative

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

Additional detail is available:

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

In Market Date: March 2011

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).

Targeted End Uses: As per the Conservation Instant Coupon Initiative

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.

In Market Date: Not in market

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 whole home, energuide 85 whole homes

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 <u>http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity</u> <u>contracts/pdfs/Schedule%20B-2%20New%20Construction%20Program.pdf</u> and
- SaveONenergy website https://saveonenergy.ca/Consumer.aspx

In Market Date: January 26, 2011

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).

Targeted End Uses: central air conditioning, electric hot water heaters and pool pumps

Delivery: LDC's recruit customers and procure technology

Additional detail is available:

- Schedule B-1, Exhibit C <u>http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity</u> <u>contracts/pdfs/SCHED_2011_ResDR_B_3_110727%28MJB%29v15_redacted.pdf</u> and
- SaveONenergy website <u>https://saveonenergy.ca/Consumer.aspx</u>

In Market Date: January 26, 2011

HOME ASSISTANCE PROGRAM

Target Customer Type(s): Residential

Initiative Frequency: Year round

Objective: The objective of this Initiative is to offer incentives to Low-Income home owners, renters, and social housing providers in single and multi-family buildings. The purpose of undertaking home assessments to is to identify all possible opportunities to reduce electricity demand and consumption within their buildings or premises.

Description: This Initiative provides participants with an in-home energy audit after which they may receive equipment and appliances to help make their homes more energy efficient. Qualifying homes may also receive deeper energy saving measures such as draft proofing and attic insulation.

Targeted End Uses: Home Energy Efficiencies

Delivery: LDC delivered.

In Market Date: July 2012

C&I Program

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

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

Initiative Frequency: Year round

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

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

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

Delivery: LDC delivered.

Additional detail is available:

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

In Market Date: January 26, 2011

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 \$1,500 to eligible owners and tenants of small commercial, institutional and agricultural facilities and multi-family buildings, for the purpose of achieving electricity 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 \$1,500 at no cost to qualifying small businesses. In addition, standard prescriptive incentives are available for eligible equipment beyond the initial \$1,500 limit.

Target End Uses: Lighting and electric water heating measures

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
 <u>http://www.powerauthority.on.ca/sites/default/files/page/Schedule%20C-</u> <u>3%20Direct%20Install%20Initiative%20-%20redacted.pdf</u> and
- SaveONenergy website <u>https://saveonenergy.ca/Business.aspx</u>

In Market Date: January 26, 2011

EXISTING BUILDING COMMISSIONING INCENTIVE INITIATIVE (Schedule C-6)

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

Initiative Frequency: Year round

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

Description: This Initiative offers Participants incentives for the following:

- scoping study phase
- investigation phase
- implementation phase
- hand off/completion phase

Targeted End Uses: Chilled water systems for space cooling

Delivery: LDC delivered.

Additional detail is available:

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

In Market Date: February 2011

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/major renovators 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: New building construction, 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
 <u>http://www.powerauthority.on.ca/sites/default/files/page/ScheduleC-4NewContructionInitiativeV2.pdf</u>
 and
- SaveONenergy website https://saveonenergy.ca/Business/Program-Overviews/New-Construction.aspx

In Market Date: February 2011

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

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

In Market Date: January 26, 2011

Industrial Program

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

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

Initiative Frequency: Year round

Objectives: The objectives of this Initiative are to:

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

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

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

Targeted End Uses: Process and systems

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

Additional detail is available:

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

In Market Date: May 31, 2011

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 sustained for the term of the M&T Agreement.

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

Targeted End Uses: Process and systems

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

In Market Date: May 31, 2011

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: Process and systems

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

Additional detail is available:

- Schedule D-3
 <u>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</u> and
- SaveONenergy website https://saveonenergy.ca/Business.aspx

In Market Date: May 31, 2011

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.

Description: This Initiative provides LDCs the opportunity to utilize a KAM to assist their customers. 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.

Targeted End Uses: Process and systems

Delivery: LDC delivered

Additional detail is available:

ScheduleD-4

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

In Market Date: May 31, 2011

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") payments to contracted participants to compensate them for reducing their electricity consumption by a pre-defined amount during a DR 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 payments for the actual electricity reduction provided during a demand response event. Participants are scheduled to be on standby approximately 1,600 hours per calendar year for possible dispatch of up to 100 hours or 200 hours within that year depending on the contract.

Targeted End Uses: Commercial and Industrial Operations

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

Additional detail is available:

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

In Market Date: January 2011

It is noted that while the Schedule for this Initiative was not posted until May 2011, the Aggregators reported that they were able to enroll customers as of January 2011.

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 use measures based on results of audit (i.e. compact fluorescent light bulbs)

Delivery: LDC delivered.

Additional detail is available:

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

In Market Date: May 31, 2011

Appendix B: Pre-2011 Programs

ELECTRICITY RETROFIT INCENTIVE PROGRAM

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

Initiative Frequency: Year Round

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

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

Targeted End Uses: Electricity savings measures

Delivery: LDC Delivered

HIGH PERFORMANCE NEW CONSTRUCTION

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

Initiative Frequency: Year round

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

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

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

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

TORONTO COMPREHENSIVE INITIATIVE

Target Customer Type(s): Commercial and Institutional Customers

Initiative Frequency: Year round

MULTIFAMILY ENERGY EFFICIENCY REBATES

Target Customer Type(s): Residential Multi-unit buildings

Initiative Frequency: Year round

Objective: Improve energy efficiency of Multi-unit building

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).

Targeted End Uses: Electricity saving measures

Delivery: OPA contracted with Greensaver

DATA CENTRE INCENTIVE PROGRAM

Initiative Frequency: Year round

Description: This Initiative is specific to Powerstream's Service Area.

ENWIN GREEN SUITES

Initiative Frequency: Year round

Description: This Initiative is specific to EnWin's Service Area.