OAKVILLE HYDRO ELECTRICITY DISTRIBUTION

September 30, 2015

Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge Street
Suite 2700, PO Box 2319
Toronto, Ontario
M4P 1 E4

Dear Ms. Walli:

Re: OEB File No. EB-2010-0215
Oakville Hydro Electricity Distribution Inc.
Conservation and Demand Management – 2014 Annual Report

Please find accompanying this letter, two copies of Oakville Hydro Electricity Distribution Inc.'s 2014 Conservation and Demand Management ("CDM") Report. This CDM Report has been prepared in accordance with Section 2.2 of the Conservation and Demand Management Code for Electricity Distributors.

Should there be any questions, please do not hesitate to contact me.

Respectfully Submitted,

Original signed by

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Oakville Hydro Inc.

Conservation and Demand Management

2014 Annual Report

Submitted to:

Ontario Energy Board

EB-2010-0215

Submitted on September 30, 2015

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EXECUTIVE SUMMARY

Oakville Hydro is submitting its Conservation and Demand Management ("CDM") Annual Report in accordance with the filing requirements set out in the CDM Code (File No. EB-2010-0215), specifically Appendix C: Annual Report Template, as a final report. Accordingly, this Report outlines Oakville Hydro's CDM activities for the period of January 1, 2014 to December 31, 2014. It includes the reported net peak demand and net energy savings achieved from 2011 to 2014, with a summary of CDM program activities, successes and challenges.

Oakville Hydro did not apply for any Board-Approved CDM Programs during 2014. However, as noted in the "Guidelines for Electricity Distributor Conservation and Demand Management", released April 26, 2012, the Ontario Energy Board ("OEB" or the "Board") has deemed Time-of-Use ("TOU") pricing a Province-Wide Board-Approved CDM Program. The Independent Electricity System Operator ("IESO") formerly the Ontario Power Authority ("OPA") has provided measurement and verification on TOU in the 2014 Final Report.

On February 25, 2011, Oakville Hydro entered into a contract with the OPA to deliver a portfolio of OPA-Contracted Province-Wide CDM Programs ("OPA Programs") to all customer segments; including residential, commercial, institutional, industrial and low income. As set out in Oakville Hydro's CDM Strategy, filed with the OEB on November 1, 2010, the OPA Programs were anticipated to deliver approximately 64% of Oakville Hydro's net peak demand reduction target and 92% of the cumulative net energy savings target.

In 2014, Oakville Hydro focused on the delivery of OPA Programs to build on its peak demand and energy savings and achieved strong results in many areas. Specific to participation levels, Oakville Hydro's results were at or above its 1.3% provincial share for the majority of Residential (Consumer) Program initiatives. Strong growth in Residential New Construction site completions represented 15% of the provincial total. The Residential and Small Commercial Demand Response Initiative ("***peaksaver* PLUS®**") was expanded in 2014 to include small commercial accounts and, combined, added 2,662 demand response participants. In addition, Oakville Hydro experienced a small increase (4.3%) in the number of completed applications from 2013 for the RETROFIT Initiative, yet the total contribution saw an increase of 23% of net kW demand and 128% net kWh energy savings versus 2013.

As of December 2014, Oakville Hydro achieved 10.9 MW of net peak demand savings and 69.1 GWh of cumulative net energy savings for the 2011-2014 framework based on information published by the IESO in its Final 2014 Verified Results Report. These results represent 52.8% of Oakville Hydro's four-year net peak demand reduction target and 93.3% of the cumulative net energy savings target. It is important to note the net peak demand savings results reflect Scenario 2, assuming a persistence of demand savings from both the ***peaksaver* PLUS** Program and the Demand Response 3 ("DR3") Program. Scenario 1 excludes CDM savings from demand response initiatives.

A summary of Oakville Hydro's achievements towards the CDM targets is shown in Table 1:

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

	2011 Verified*	2012 Verified	2013 Verified	2014 Verified	% of 2014 CDM Target	CDM Target
Net Peak Demand Savings (MW)	2.2	3.5	6.8	10.9	52.80%	20.7
Cumulative Net Energy Savings (GWh)	26.9	45.1	55.7	69.1	93.30%	74.06

The 2014 verified CDM results filed in this report shows that there is a shortfall of approximately 9.8 MW versus Oakville Hydro's 2014 peak demand reduction target and a shortfall of approximately 5 GWh of energy savings.

Reasons for the Shortfall

The challenges faced by Oakville Hydro in its efforts to achieve its CDM targets were common to many other Local Distribution Companies ("LDCs").

For Oakville Hydro, the following are key reasons related to these lower results:

Demand Energy Saving

- Customer mix: It had been well documented that Oakville Hydro has a limited commercial and industrial customer base with a lower than average number of large users. This unique customer mix meant fewer large customer projects and lower than expected demand saving opportunities;

- Program Implementation: In 2011, Oakville Hydro was delayed in engaging Commercial, Institutional and Industrial ("CI&I") customers while it established adequate resources and better understanding of the new processes associated with the 2011 - 2014 framework; and,

- Gains made in the acquisition of new customer participants for the ***peaksaver* PLUS** residential demand response initiative were negatively impacted by the attributed savings to Oakville Hydro allocated by the IESO being reduced to 0.35 kW/participant as compared to the provincial average of 0.49 kW/participant. Another 945 kW to the demand target would have been achieved using the provincial average (a 5% net gain).

Energy Saving

- Customer mix: As noted above, Oakville Hydro has a limited commercial and industrial customer base with a lower than average number of large users;

- Program Implementation: A slower start in 2011 resulted in lower four-year accumulation of savings; and,

- Strong initiative participation prior to the 2011 - 2014 framework. Specifically, Small Business Lighting and Appliance Retirement that left little opportunity for savings.

Despite these obstacles, Oakville Hydro focused on increasing customer participation in program initiatives including RETROFIT, ***peaksaver* PLUS** and DR-3 and is satisfied with the IESO 2011 - 2014 Final Report and does not intend to challenge the results or make claim for any additional demand or energy savings.

Oakville Hydro has a strong history of championing CDM initiatives and since 2005 has successfully encouraged and engaged their customers to participate. Early success (prior to the 2011-2014 framework) can be identified through their achievements from programs like Appliance Pick-Up and Small Business Lighting and, while this success may have translated to lost future opportunity as reflected in these final results, Oakville Hydro remains committed to conservation and the promotion of energy efficiency to its customers in the new Conservation First 2015 - 2020 framework.

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 licence of Oakville Hydro to require Oakville Hydro, as a condition of its licence, to achieve 20.70 MW of net peak demand savings and 74.06 GWh of cumulative net energy savings, over the period beginning January 1, 2011 through December 31, 2014.

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

On February 7, 2011 Oakville Hydro filed an addendum to its CDM Strategy listing the anticipated program administration budgets for the OPA Programs and potential Board-Approved CDM Programs.

The Code also required a distributor to file annual reports with the Board. This is Oakville Hydro's final Annual Report filed under the 2011 - 2014 framework. It has been prepared in accordance with the requirements of the Code and covers the period from January 1, 2014 to December 31, 2014.

Oakville Hydro submitted its 2011 Annual Report on September 28, 2012 which summarized the CDM activities, successes and challenges experienced by Oakville Hydro for the January 1, 2011 to December 31, 2011 period. The OEB's "Conservation and Demand Management Report - 2011 Results", published on December 20, 2012, identified that the delay in the full suite of CDM Programs being made available by the OPA, and the absence of some programs negatively impacted the final 2011 results for the LDCs. This issue was also highlighted in the Environmental Commissioner's Report: "Restoring Balance - A Review of the First Three Years of the Green Energy Act" Annual Energy Conservation Progress Report Volumes I & II.

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

The Ministerial Directive did not amend the timelines for LDCs to achieve their energy savings and demand targets. Therefore, Oakville Hydro remained focused on the achievement of CDM targets by December 31, 2014. Oakville Hydro filed an exemption to its Distributor System Code in late fall 2014, as it was apparent that CDM targets would not be met for December 31, 2014.

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

The OEB's "Conservation and Demand Management Report - 2012 Results", published on December 5, 2013 identified that the majority of LDCs had achieved close to 20% of their net peak demand (MW) target from their 2012 results. Based on the 2013 OPA Final Verified Results report, LDCs collectively achieved 48% of the demand target under Scenario 2 and only 27% under Scenario 1.

According to the OPA 2011 - 2013 Final Results report, LDCs collectively achieved approximately 85.7% of the provincial energy savings (kWh) target. It was estimated that each year LDCs needed to achieve a minimum of 10% of their target in order to meet their respective targets. To meet the provincial energy target of 6,000 GWh, another 14.3% of incremental energy savings would be required in 2014. The OPA Conservation and Demand Management Report - 2012 Results identified that although there were improvements to programs, some shortcomings to the design and delivery of initiatives still remained. These have resulted in less than anticipated customer participation rates in some programs. The report also identified that some initiatives are reaching the point of market saturation and that new initiatives need to be developed in order to replace existing initiatives. The OEB released a letter on December 17, 2014, stating no compliance actions will be carried out against distributors that do not meet their demand saving targets. This direction was given based on the 2013 Long Term Energy Plan which assigned responsibility to the IESO to evolve existing demand response programs in Ontario.

The IESO released the 2011 - 2014 Final Results Report on September 1, 2015. For the first time in the four year framework the allocated demand savings associated with TOU rates was released to LDCs. The methodology for allocating the TOU results was not provided in the 2011 - 2014 Final Results Report but Oakville Hydro was credited 1.6% of the provincial demand savings aligning to its proportion of the demand target.

1 Conservation Framework

1.1 2011-2014 Framework

Ontario's 2011-2014 CDM framework was a key step towards creating a culture of conservation in the Province. The Ontario Government ("Government") Directive to the OEB to establish CDM targets that would be met by electricity distributors recognized the importance of CDM for both electricity customers and the electricity system. CDM helps customers manage rising energy costs, supports the provincial integrated supply plan, and addresses local distribution and transmission supply constraints. The CDM framework was intended to enable customers to benefit from a suite of both Board-approved and OPA Province-Wide programs and provide a portfolio that would meet both broad and specific customer needs.

The state of Board-approved programs and the suite of Province-Wide OPA Programs provided limited CDM offerings to customers. This produced limited savings and restricted the associated opportunity for LDCs to meet targets. The process to introduce changes to program initiatives or to pilot new initiatives was challenging, involved considerable cost and effort and resulted in limited benefits to customers and CDM savings.

Challenges faced by LDCs in the 2011-2014 framework, such as overbuilt governance and unnecessarily excessive legal requirements and misalignment of control and risks, have been addressed by the new directive.

1.2 Conservation First 2015-2020 Framework

Oakville Hydro is supportive of the Government's renewed commitment for CDM in Ontario and is committed to working with the Government, IESO, Natural Gas Utilities and other stakeholders to develop programs for the new framework for CDM in the Province.

Long-term commitment for CDM funding and confirmation of the role of LDCs have been provided in the Minister's directive dated March 31, 2014, allowing LDCs to maintain current program infrastructure, including LDC staff and third party contracts as required.

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

A unified transition of all LDCs into the Conservation First framework at the same time was not expected or accomplished within the Energy Conservation Agreement structure. As a result LDCs were allowed to make use of the OPA Amending Agreement funding to earn energy savings which accumulate towards 2015 results.

Oakville Hydro in collaboration with Toronto Hydro submitted a Joint CDM Plan on May 20, 2015. The IESO granted conditional approval of the Toronto Hydro and Oakville Hydro joint plan.. Oakville Hydro will transition into the Conservation First Framework on January 1, 2016.

2 Board-Approved CDM Program

2.1 Introduction

In its Decision and Order dated November 12, 2010 (Board File No. EB-2010-0215 / 0216), the OEB ordered that, (to meet its mandatory CDM targets), "*Each licensed electricity distributor must, as a condition of its license, deliver Board-Approved CDM Programs, OPA-Contracted Province-Wide CDM Programs, or a combination of the two*".

At that time, the implementation of Time-of-Use ("TOU") Pricing was deemed a Board-Approved CDM Program which was offered by Oakville Hydro in its service area.

2.2 Time Of Use Pricing

2.2.1 Background

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

The OEB stated in the April 26, 2012 CDM Guidelines that verified CDM savings from TOU pricing would be determined by the OPA's Evaluation, Measurement and Verification ("EM&V") Protocols. The Board was of the view that evaluations of savings from TOU pricing should be conducted by the OPA for the province, and then allocated to distributors.

The OPA retained the Brattle Group as the evaluation contractor and worked with an expert panel convened to provide ongoing advice on methodology, data collection, models, and savings allocation. Evaluations were conducted during the years 2012 - 2014 with five LDCs: Hydro One Networks, Toronto Hydro Energy Services Limited, Hydro Ottawa, Thunder Bay Hydro and Newmarket-Tay Power Distribution. Preliminary results were issued to the participating LDCs involved in the "Impact Evaluation of Ontario's Time of Use Rates - First Year Analysis" prepared by The Brattle Group on November 26, 2013.

Preliminary results demonstrated load shifting behaviours from the residential customer class. Three additional LDCs were added to the study in 2014 - Cambridge and North Dumfries Hydro Inc., Powerstream and Greater Sudbury Hydro Inc., with preliminary results from this study being issued to the participating LDCs in September 2014.

The IESO's 2011 - 2014 Final Results Report included 1.6% of allocated provincial demand savings from TOU rates for Oakville Hydro. The allocation methodology for TOU was not included in the 2011 - 2014 Final Results Report and the allocation of 1.6% is slightly higher than Oakville Hydro's provincial proportional weighting of 1.3%.

2.2.2 TOU Pricing 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 encourage the shifting of energy usage. Therefore peak demand reductions are expected, and energy conservation benefits may also be realized.

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

The RPP TOU price is adjusted twice annually by the OEB. A summary of the RPP TOU pricing is provided in Table 2:

Table 2: TOU Pricing for RPP Customers

Effective Date	Rates (cents/kWh)		
	On Peak	Mid Peak	Off Peak
November 1, 2010	9.9	8.1	5.1
May 1, 2011	10.7	8.9	5.9
November 1, 2011	10.8	9.2	6.2
May 1, 2012	11.7	10.0	6.5
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
November 1, 2014	14.0	11.4	7.7

Delivery: The OEB set the rates; Oakville Hydro installs and maintains the Smart Meters; Oakville Hydro converts customers to TOU billing. Customers receive education materials on Smart Meters at the time of installation and are advised of the new TOU rates in advance of implementation.

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Initiative Activities/Progress:

Oakville Hydro began transitioning 286 RPP customers to TOU billing in October of 2006 as part of an OEB-approved Smart Meter Pilot Project. As of December 31, 2014 there were 65,590 RPP customers being billed using the TOU billing structure. This includes 60,486 Residential and 5,104 General Service <50kW class customers.

Consumer education and awareness activities have included the following activities:

Billing inserts
Door hangers
TOU rate information OEB handbooks
Newspaper publications
Public meetings and public presentations
Community events

2.3 Oakville Hydro’s Application with the OEB

Oakville Hydro has not filed any applications for Board-Approved CDM Programs.

2.4 Oakville Hydro’s Application with the OPA's Conservation Fund

Oakville Hydro has not submitted any applications for CDM programs to the OPA's Conservation Fund.

3 OPA-Contracted Province-Wide CDM Programs

3.1 Introduction

Effective February 25, 2011, Oakville Hydro entered into the Master CDM Program Agreement (the "Master Agreement") with the OPA to deliver OPA Programs and initiatives extending from January 1, 2011 to December 31, 2014. Those programs for which Oakville Hydro had contracted with the OPA are shown in Table 3. Details concerning the Programs are included in Appendix A.

Table 3: OPA Programs Contracted by Oakville Hydro

Initiative	Master Agreement Schedule	Date Schedule Issued	Customer Class	In-Market Date for Oakville Hydro
Residential Program				
Appliance Retirement	Schedule B-1, Exhibit D	January 27, 2011	All residential rate classes	February 25, 2011
Appliance Exchange	Schedule B-1, Exhibit E	January 27, 2011	All residential rate classes	February 25, 2011
HVAC Incentives	Schedule B-1, Exhibit B	January 27, 2011	All residential rate classes	February 25, 2011
Conservation Instant Coupon Booklet	Schedule B-1, Exhibit A	January 27, 2011	All residential rate classes	Feb 25, 2011
Bi-Annual Retailer Event	Schedule B-1, Exhibit C	January 27, 2011	All residential rate classes	February 25, 2011
Retailer Co-op	Not Applicable	Not Applicable	All residential rate classes	Not Applicable
Residential Demand Response	Schedule B-3	August 22, 2011	All general service classes	December 15, 2012
Residential New Construction Program	Schedule B-2	January 27, 2011	All residential rate classes	July 1, 2013

Note: that the Conservation Instant Coupon Booklet initiative was modified by the OPA in June 2013 and is now known as the Coupon initiative.

Initiative	Master Agreement Schedule	Date Schedule Posted	Customer Class
Pre-2011 Programs			
Electricity Retrofit Incentive Program	Not Applicable	Not Applicable	All general service classes
High Performance New Construction	Not Applicable	Not Applicable	All general service classes

In addition, results were realized towards Oakville Hydro's CDM targets through the following pre-2011 Programs:

Initiative	Master Agreement Schedule	Date Schedule Posted	Customer Class
Pre-2011 Programs			
Electricity Retrofit Incentive Program	Not Applicable	Not Applicable	All general service classes
High Performance New Construction	Not Applicable	Not Applicable	All general service classes

As shown in Table 4, several OPA Program initiatives are no longer available to customers or have not been launched in 2012.

Table 4: OPA Program Initiatives Not in-Market

Initiative Not in Market in 2012	Objective	Status
Residential Program		
Midstream Electronics	The objective of this initiative is to encourage Retailers to promote and sell high efficiency televisions, and for distributors to distribute high efficiency set top boxes	Never launched and removed from Schedule B-1 in June 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 B-1 in June 2013.
Home Energy Audit Tool	This is a provincial on-line audit tool to engage customers in conservation and help drive customer participation to CDM programs	Never launched and removed from Schedule B-1 in June 2013.
Commercial and 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 ~~OPA~~ there no plans to launch this initiative in 2013.
Demand Response 1 ("DR1")	See below	See below
Industrial Program		
DR 1	This initiative allows distribution customers to voluntarily reduce electricity demand during certain periods of the year pursuant to the DR 1 contract. The initiative provides DR payment for service for the actual electricity reduction provided during a demand response event.	No customer uptake for this initiative. As a result this initiative was removed from the Industrial Program in December 2012.

The Master Agreement included a program change management provision in Article 3. Collaboration between the OPA and LDCs commenced in 2011 and has continued through 2014, as the change

management process was implemented to enhance saveONenergy program suite of initiatives. While the change management process allowed for modifications to the Master Agreement and initiative Schedules, the process continued to be extremely time-consuming and did not lend itself to appropriate responsiveness to market requirements. The ability to make enhancements to OPA Programs / initiatives in a more timely manner would have given LDCs additional tools and greater flexibility to deliver programs in a way that met the needs of customers and further drive participation in the initiatives.

3.2 Program Descriptions

Full descriptions of the OPA Programs are available on the saveONenergy website at https://saveonenergy.ca. The targeted customer types, objectives, and individual descriptions for each Program Initiative are detailed in Appendix A.

3.2.1 Residential (Consumer) Program

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

Targeted Customer Type(s): Residential

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

Discussion: The Residential Program portfolio is predominately a carryover of initiatives from previous CDM programs. Customer participation in many of the initiatives is often driven by product / service providers including Retailers and residential Heating, Ventilation and Air Conditioning ("HVAC") contractors, a number of which may not have fully delivered what was anticipated.

As shown in Table 4, three new initiatives were never launched by the OPA and were subsequently removed from the Residential Program portfolio in 2013, with no other new initiatives added.

Province-wide advertising by the OPA was substantially curtailed for much of 2012 and the first half of 2013 but was increased in Q3, 2013. In 2014, province wide promotion levels were maintained and continued to support individual LDC efforts.

The most important of the Consumer Program initiatives with respect to the provision of Savings are the HVAC Incentives initiative, the Bi-Annual Retailer Event and the Residential Demand Response Program (the "RDR Program", also known as ***peaksaver* PLUS**). The RDR Program is a continuation of an earlier similar program with the additional inclusion of an In-Home Energy Display ("IHD") at no cost to the customer. It was initially believed that use of the IHD by customers would result in additional savings; however, the OPA has not yet found conclusive evidence to support this and no demand or energy savings have been reported for the installations of this equipment.

Both the HVAC Incentives and the Bi-Annual Retailer Event initiatives are also continuations of earlier similar programs for which no enhancements have been introduced since prior to 2011. In the case of HVAC incentives, participation rates have been relatively consistent (2011-2013) and saw a significant increase in participants in 2014. The addition of Light Emitting Diode (LED) lighting measures to the Bi-Annual Retailer Event and also the continuation of the Annual Coupon initiative has had a positive impact on customer participation and saw a four-fold increase in participation.

Based on the data published by the IESO in its Final 2014 Verified Results Report, Oakville Hydro experienced higher-than-average participation rates in several initiatives including: the HVAC Incentives initiative; the Bi-Annual Retailer Event; the RDR initiative and Residential New Construction.

Oakville Hydro's Residential customer base represents about 1.3% of the Province-wide total, but the activity level for the HVAC initiative in 2014 was 2% of the Province-wide results. For the Bi-Annual Retailer Event it was 1.5% and for the RDR initiative it was 3.4%. Finally, Residential New Construction completed projects in the Oakville territory represented 15.5% of all activity in the province.

In 2014, Oakville Hydro Oakville Hydro continued to promote its Oakville Saves! campaign to build awareness and deliver conservation programs to all of its customers in partnership with the OPA under the provincial umbrella of saveONenergy.

3.2.1.1 Appliance Retirement Initiative (Schedule B-1, Exhibit D)

Initiative Activities/Progress:

The following illustrates the progress achieved in 2014:

Participation / Activity

- Number of eligible appliances decommissioned was 298 units, or 1.32% of the Province-wide result of 22,563 units

Net Savings

- 19 kW peak incremental peak demand savings and 130,190 kWh incremental energy savings

Final Contribution to CDM Targets

- 123 kW program-to-date net peak demand savings in 2014
- 2,572,140 kWh program-to-date, 2011-2014 cumulative net energy savings

Marketing & Promotional Tactics Used:

- Promotion at public community events (see Appendix C):
  - Six events held on-site at local Retailers (Canadian Tire, The Home Depot) in the spring and fall interacting with approximately 175 people
  - Two home / life style shows over a period of 3 days in the spring and fall, interacting with over 360 people
  - Twenty five community-related event days interacting with over 3,285 people
  - Distributed collateral materials for all Residential Program initiatives at all events

- Promotion on Oakville Hydro's website throughout 2014, 32 page-views with an average of time on page of over 100 seconds

Additional Comments:

- This initiative has been offered by Oakville Hydro and other LDCs since 2007. For Oakville Hydro, this early start (and strong participation) removed a significant number of eligible refrigerator and freezer units. Since then the rate of participation had slowly declined as the number of eligible units had shrunk.

- The number of eligible appliances retired by customers of Oakville Hydro in 2014 declined by 20% versus 2013, while Province-wide results increased slightly by 7.7%.

- In an effort to capture additional savings from this initiative, the eligibility requirement for refrigerators was revised to 15 years old from 20 years old in Q2, 2014.

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

Initiative Activities/Progress:

The following illustrates the progress achieved in 2014:

Participation / Activity:

- Number of eligible appliances exchanged was 37 units, or 0.65% of the Province-wide result of 5,685 units

Net Savings:

- 8 kW peak incremental peak demand savings and 13,669 kWh incremental energy savings

Final Contribution to CDM Targets:

- 25 kW net peak demand savings.
- 95,214 kWh cumulative net energy savings.

Marketing & Promotional Tactics Used:

- Distributed collateral materials for all Residential Program initiatives at all events.

- Promotion on Oakville Hydro's website throughout 2014, more than 850 page-views on Oakville Hydro's Conservation 'landing page' for all OPA Programs.

Additional Comments:

- The number of eligible appliances exchanged within Oakville Hydro had plateaued in 2013.

- Eligible products and incentive amounts for this initiative was influenced by Retailers with no direct involvement from Oakville Hydro. The restrictive, limited and sometimes non-participation of local Retailers diminished the potential Savings for this initiative.

- There was only one Retailer participant (Canadian Tire) in this initiative in the spring of 2014.

3.2.1.3 HVAC Incentives Initiative (Schedule B-1, Exhibit B)

Initiative Activities/Progress:

The following illustrates the progress achieved in 2014:

Participation / Activity:

- Number of eligible furnaces and central air conditioners ("CACs") installed was 2,287 units, or 2.02% of the Province-wide result of 113,002 units.

Net Savings:

- 428 kW peak incremental peak demand savings and 781,609 kWh incremental energy savings.

Final Contribution to CDM Targets:

- 1,862 kW net peak demand savings.
- 8,416,719 kWh net energy savings.

Marketing & Promotional Tactics Used:

- Two Bill statement inserts were distributed to approximately 60,000 households (for each campaign).

- Promotion at public community events (see Appendix C):
  - Six events held on-site at local Retailers (Canadian Tire, The Home Depot) in the spring and fall interacting with approximately 175 people.
  - Two home / life style shows over a period of 3 days in the spring and fall, interacting with over 360 people.
  - Twenty five community-related event days interacting with over 3,285 people .
  - Distributed collateral materials for all Residential Program initiatives at all events.

- Local arena advertising generating over 200,000 impressions.

- Promotion on Oakville Hydro's website throughout 2014, more than 1,200 page-views on Oakville Hydro's Conservation 'landing page' for all OPA Programs.

Additional Comments:

- The number of HVAC incentives provided to customers of Oakville Hydro in 2014 increased by 2% versus 2013, whereas the overall Province-wide results increased by approximately 17.4%. Overall, participation in this initiative has been consistent with an average of 2,200 eligible furnaces and CACs per year.

- Most participation is a result of equipment failure causing a need for an immediate replacement of either the heating system or the cooling system. In some cases, both.

- This initiative was a contractor-driven and centrally-managed by the OPA and the Heating, Refrigeration and Air Conditioning Institute of Canada ("HRAI"). LDCs primarily were responsible for local marketing efforts.

- While there were some participating HVAC contractors that operated within the Oakville Hydro service territory, the majority of participating contractors tended to service the greater Toronto area and this made it challenging to enhance the channel relationship.

- There may be cases where non-participating HVAC contractors were 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 and the resulting demand and energy savings are not credited to LDCs.

3.2.1.4 - Conservation Instant Coupon Initiative (Schedule B-1, Exhibit A)

Initiative Activities/Progress:

The following illustrates the progress achieved in 2014:

Participation / Activity:

- Number of coupons redeemed was 16,052 coupons, or 1.33% of the Province-wide result of 1,208,108 coupons

Net Savings:

- 33 kW peak incremental peak demand savings and 436,742 kWh incremental energy savings

Final Contribution to CDM Targets:

- 61 kW net peak demand savings
- 1,845,371 kWh cumulative net energy savings

Marketing & Promotional Tactics Used:

- Promotion at public community events (see Appendix C):
  - Six events held on-site at local Retailers (Canadian Tire, The Home Depot) in the spring and fall interacting with approximately 175 people.
  - Two home / life style shows over a period of 3 days in the spring and fall, interacting with over 360 people.
  - Twenty five community-related event days interacting with over 3,285 people.
  - Distributed collateral materials for all Residential Program initiatives at all events.

- Promotion on Oakville Hydro's website throughout 2014, more than 900 page-views on Oakville Hydro's Conservation 'landing page' for all OPA Programs

Additional Comments:

- The number of eligible coupons used by customers of Oakville Hydro in 2014 increased by over 200% versus 2013, as was the case for the Province-wide results.

- In 2014, all coupons were custom-coded which allowed LDCs to promote the initiatives based on local preferences.

- Consumer experience varied amongst participating Retailers. For example, a particular high volume 'participating Retailer' does not accept point of sale coupons and had their own procedure to provide the incentive.

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

Initiative Activities/Progress:

The following illustrates the progress achieved in 2014:

Participation / Activity:

- Number of coupons redeemed was 70,594 coupons, or 1.46% of the Province-wide result of 4,824,751 coupons.

Net Savings:

- 118 kW peak incremental peak demand savings and 1,798,256 kWh incremental energy savings.

Final Contribution to CDM Targets:

- 183 kW net peak demand savings.
- 5,324,281 kWh cumulative net energy savings.

Marketing & Promotional Tactics Used:

- Promotion at retailers:
  - Six events held on-site at local Retailers (Canadian Tire, The Home Depot) in the spring and fall interacting with approximately 175 people.

- Distributed collateral materials for all Residential Program initiatives at all events.

Additional Comments:

- Participation rates for Oakville Hydro for this initiative in 2014 increased by 411% versus 2013, mirroring the trend in the overall Province-wide results.

- This initiative is strongly influenced by the support offered by participating Retailers which are contracted centrally by the OPA. The local outlets of these Retailers, however, exhibit a wide range of support with respect to the initiative. For example, Retailer staff are not always provided

with any information or training to support an event. This limits the potential participation rates and Savings for this initiative.

- While LDCs have the opportunity to stage in-store events to drive the distribution of LDC-coded coupons and the promotion of other CDM Program initiatives, this required cooperation from the Retailer and staffing by the LDC.

- The product list changed very little over the past five years. Program evolution, including new products and review of incentive pricing for all initiatives involving coupons, should have been a regular activity to ensure continued consumer interest.

3.2.1.6 Retailer Co-op Initiative

Initiative Activities/Progress:

The following illustrates the progress achieved in 2014:

Participation / Activity:
None. This initiative was not available from the OPA.

Net Savings:
- None.

Final Contribution to CDM Targets:
- None.

Marketing & Promotional Tactics Used:
- None.

Additional Comments:
- None.

3.2.1.7 New Construction Program (Schedule B-2)

Initiative Activities/Progress:

The following illustrates the progress achieved in 2014:

Participation / Activity:

- Number of eligible energy efficient homes completed and registered was 366 homes, or 15.46% of the Province-wide result of 2,367 units.

Net Savings:

- 11 kW peak incremental peak demand savings and 157,347 kWh incremental energy savings.

Final Contribution to CDM Targets:

- 11 kW net peak demand savings.
- 157,347 kWh net energy savings.

Marketing & Promotional Tactics Used:

- In 2013, Oakville Hydro entered into an agreement with a third party agent with the task of reaching out to new home builders to explain the program and assist with the application submission process. This produced over 600 preliminary applications for homes under construction in 2013 and this generated a significant number of final applications in 2014.

Additional Comments:

- There was limited participation Province-wide for this initiative with less than 2,700 homes completed over the 2011 to 2014 framework. The application process, which initially one application for each new home, presented an administrative challenge for builders who were building multiple houses in a subdivision. This process changed in December 2012 allowing for multiple homes on one application and generated greater interest from builders developing in Oakville to participate.

- This Initiative provides incentives to home builders for incorporating energy efficiency into their buildings. To support this initiative and drive behavioural changes in new home buyers, LDCs needed to provide education to the consumers regarding the long term benefits of choosing the energy efficient builder upgrade options. There were insufficient funds available within the Residential Program portfolio to support these efforts.

3.2.1.8 Residential Demand Response Program (Schedule B-3)

Initiative Activities/Progress:

The following illustrates the progress achieved in 2014:

Participation / Activity:

- Number of load control devices installed saw a net increase of 2,384 from 2013, or 3.42% of the Province-wide result of 69,648 net new load control devices installed in 2014.

- Number of IHDs installed saw a net increase of 2,471, or 4.50% of the Province-wide 2014 result of 54,920 IHDs installed.

Net Savings:

- 750 kW peak incremental peak demand savings (calculated) and 0 kWh incremental energy savings resulting from the installation of load control devices.
- No incremental peak demand savings or energy savings are attributed to the installation of In-Home Energy Displays.

Final Contribution to CDM Targets:

- 2,408 kW net peak demand savings (applies to Scenario 2 only).
- 8,828 kWh cumulative net energy savings.

Marketing & Promotional Tactics Used:

- Bill statement inserts distributed to approximately 60,000 residential households.

- On-bill promotion to approximately 13,200 residential households.

- Three direct mail campaigns to approximately 60,000 residential customers (each campaign).

- Promotion at public community events (see Appendix C):
  - Six events held on-site at local Retailers (Canadian Tire, The Home Depot) in the spring and fall interacting with approximately 175 people.
  - Two home / life style shows over a period of 3 days in the spring and fall, interacting with over 360 people.
  - Twenty five community-related event days interacting with over 3,285 people.
  - Distributed collateral materials for all Residential Program initiatives at all events.

- Local arena advertising generating over 200,000 impressions.

- Promotion on Oakville Hydro's website throughout 2014, more than 700 OPA links and 3,150 page-views with an average 152 seconds time on page

Additional Comments:

- Oakville Hydro experienced significant customer participation in this initiative for a second straight year outperformed beyond the provincial average.

- Savings attributed to each control device installed had trended downward and is significantly less than the provincial average. As illustrated in Chart 1, the average net contribution per device for Oakville Hydro in 2014 is 0.35 kW compared to that of the Provincial average of 0.49 kW.

Oakville Hydro is currently working with the IESO on why such a variance exists and remains outstanding as of September 30, 2015.

Chart 1: Attributable kW savings per RDR control device

	2011	2012	2013	2014
Oakville Hydro attributable kW Savings / RDR control device	0.56	0.46	0.37	0.35
Provincial Average attributable kW Savings / RDR device	0.56	0.50	0.54	0.49
Difference (kW)	—	0.04	0.17	0.14

The impact of this reduced 0.14 kW contribution is significant and represents a loss of 1.1 MW toward Oakville Hydro's target or 5%. Oakville Hydro has notified the IESO of this discrepancy and has yet to be provided with additional clarification or adjustment.

Chart 2: Attributable kW savings per RDR control device:

	2013	2014	Total
Total Number of installed devices	4,458	2,384	6,842
Current OHEDI contribution based on 0.35 kW	1,649	834	2,483
OHEDI contribution based on Provincial Average of 0.49 kW	2,407	1,168	3,575
Possible kW Loss to Oakville Hydro (kW)	(758)	(334)	(1,092)

The 2012 evaluation indicated savings realized from the IHD were not statistically significant. This impacts the cost effectiveness of the initiative and the value of continuing to offer the IHD if no savings can be attributed.

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

Description: Provided non-residential customers with energy-efficiency programs to help reduce their electrical costs while helping Ontario defer the need to build new generation and reduce its environmental footprint. The Commercial and Industrial ("C&I") Program portfolio includes initiatives to help fund energy audits, to replace energy-wasting equipment or to pursue new construction that exceed 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 the growth of a culture of conservation among these communities as well as the supply chains which serve them.

Discussion: The C&I Program portfolio is comprised of three initiatives that are continuations of previous initiatives as well as two new initiatives. Similar to many of the initiatives in the Residential Program portfolio, customer interest in participating in the C&I Program is largely driven by supply channel partners such as commercial lighting contractors, commercial Heating, Ventilation, Air Conditioning and Refrigeration ("HVACR") contractors, and other parties.

The most important of the C&I Program initiatives with respect to the provision of Savings is the Retrofit initiative and the Direct Install Lighting ("DIL") initiative (also known as the Small Business Lighting Program). Both are continuations of earlier programs that have been refined over time, particularly to increase the incentives available.

While the Retrofit program is targeted at all sizes and types of business customers and for almost any energy efficient product or measure, as noted above most applications for this initiative involve lighting replacement projects. The impact of these lighting replacement projects in terms of contribution to Savings is effectively determined by the size of the customer's building (and the resulting number of lighting fixtures). Versus many other LDCs, Oakville Hydro has relatively few larger building types such as distribution centres, major shopping malls, office towers and major institutional facilities. As such, the market potential for the Retrofit Program is somewhat limited within the service area of Oakville Hydro. The CDM targets for Oakville Hydro did not necessarily take this into account. For 2014, Oakville Hydro's participation rate for the Retrofit Program remained consistent at 1.3% of the Province-wide average; however, the average energy demand Savings per project was 8% less while energy Savings per project was 24% higher.

DIL initiative participants (small business under 50 kW demand) can receive more energy-efficient lighting and other products at no cost to a maximum of $1,500. Oakville Hydro experienced strong participation in the previous version of this initiative (Power Savings Blitz), prior to 2011 and has experienced lower participation rates in 2011 through 2014 versus the Province-wide average. Oakville Hydro has experienced relatively little customer interest in the other initiatives in the C&I Program portfolio for the reasons noted above.

Throughout 2011 to 2014 the C&I Working Group, comprised of representatives of LDCs and the OPA, sought to enhance the existing C&I programs and rectify identified program and system deficiencies. This continued to be a challenging undertaking, normally taking months to complete even relatively minor changes due to the current CDM framework. In 2013, the introduction of an expedited change management process helped to fast track small intuitive changes into market and the removal of participant agreements and forms from the schedules helped some changes through.

Program management by LDCs continued to be delayed by varying interpretations of initiative eligibility requirements, and other administrative variables. The numerous initiative requirements and complex program structures restricted growth without providing the anticipated improvement in customer participation and verified Savings. In addition, EM&V did not appear to be transparent. LDCs were held accountable for these results yet are mostly completely removed from the process.

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

Initiative Activities/Progress:

The following illustrates the progress achieved in 2014:

Participation / Activity:

- Number of Retrofit projects completed was 144, or 1.32% of the Province-wide result of 10,925 units.

Net Savings:

- 856 kW peak incremental peak demand savings and 7,587,997 kWh incremental net energy savings.

Final Contribution to CDM Targets:

- 2,883 kW net peak demand savings.
- 37,016,620 kWh 2011-2014 cumulative net energy savings.

Marketing & Promotional Tactics Used:

- Promotion in local newspapers and other publications:
  - The Business Advocate, published six times per year by the Oakville Chamber of Commerce, circulation of approximately 1,500 businesses, full-page ads in five issues.
  - Advertised in Chamber of Commerce having a reach of 1,000 impressions.
  - Advertised in Business Link with a reach of 300 businesses.
  - Advertised in Oakville Beaver reaching over 52,000 households.

- Co-hosted Chamber Gala Event and presented the Energy Saving Leadership award

- Included in collateral material available for all C&I Program initiatives Promotion on Oakville Hydro's website throughout 2014, 329 page-views on Oakville Hydro's Conservation 'landing page' for all OPA Programs

Additional Comments:

- The on-line application process served the initiative's objectives of improving documentation in support of projects and verifying the resulting Savings, but was still considered difficult to navigate. Typically, customers or their agents required the assistance of highly trained LDC personnel to assist in processing their applications, which often times resulted in contractors electing not to participate in this initiative.

- The requirement to have a customer invoice the LDC for their incentive was considered to be burdensome for the customer and resulted in a negative customer experience and another barrier to participation.

- Despite the challenges described above, Oakville Hydro experienced a slight increase in the number of new Retrofit project applications submitted in 2014 versus 2013. Lighting replacements or improvements continued to represent the most common type of project.

- It is important to point out that in 2014 the average size of a completed Retrofit project for customers of Oakville Hydro was 5.7 kW in incremental net peak demand savings and 39.9 MWh in incremental net energy savings. This compares to the Province-wide averages of 6.4 kW and 41.4 MWh, respectively. While energy savings per project exceeded the provincial average, the demand savings was 7% less in 2014 and 14% lower for the 2011 - 2014 framework. These lower values support Oakville Hydro's position that their commercial customer base differed from most LDCs and that the OEB did not take this into consideration when setting their target or take corrective action.

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

Initiative Activities/Progress:

The following illustrates the progress achieved in 2014:

Participation / Activity:

- Number of DIL projects completed was 66, or 0.28% of the Province-wide result of 23,784 units.

Net Savings:

- 69 kW peak incremental peak demand savings and 267,200 kWh incremental energy savings.

Final Contribution to CDM Targets:

- 401 kW net peak demand savings.
- 3,961,629 kWh cumulative net energy savings.

Marketing & Promotional Tactics Used:

- Door-to-door contact by Oakville Hydro's delivery partner throughout the year.
- Promotion on Oakville Hydro's website throughout 2014, over 300 page-views on Oakville Hydro's Conservation 'landing page' for all OPA Programs

Additional Comments:

- As noted earlier, successful execution of the previous version of this initiative, the 'Power Savings Blitz' had resulted in diminished potential for the initiative in Oakville Hydro's service area.

- LED lighting (for standard light bulbs) was introduced in 2013 as a new measure and was well received by customers who may not have previously qualified for DIL eligible upgrades.

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

Initiative Activities/Progress:

Participation / Activity:

- None.

Net Savings:

- None.

Final Contribution to CDM Targets:

- None.

Marketing & Promotional Tactics Used:

- Included in collateral material available for all C&I Program initiatives
- Promotion on Oakville Hydro's website throughout 2014, however no data concerning the number of page-views is available, but page-views are expected to be very low

Additional Comments:

- Experience has shown that there is minimal potential for participation in this initiative within the service area of Oakville Hydro as currently offered.

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

Initiative Activities/Progress:

The following illustrates the progress achieved in 2014:

Participation / Activity:
- None.

Net Savings:
- None.

Final Contribution to CDM Targets:
- None.

Marketing & Promotional Tactics Used:

- Included in collateral material available for all C&I Program initiatives.
- Promotion on Oakville Hydro's website throughout 2014.

Additional Comments:

- There is typically a long project planning and development cycle for new construction projects. As a result Oakville Hydro had no participants in this initiative with completed projects.

- The application process for 'custom' projects required considerable customer support and skilled LDC staff, and potential participants often expressed that the effort involved exceeded the value of the incentives available.

- Estimated completion dates for new construction projects tended to be inaccurate and were typically delayed by at least six months or more.

- This Initiative had a very low net-to-gross ratio, which resulted in almost half of the proposed target savings being 'lost'.

3.2.2.5 Energy Audit Initiative

Initiative Activities/Progress:

The following illustrates the progress achieved in 2014:

Participation / Activity:

- The number of Energy Audits undertaken in Oakville in 2014 was 12, or 2.54% of the provincial total of 473.

Net Savings:

- 160 kW peak incremental peak demand savings and 783,283 kWh incremental energy savings.

Final Contribution to CDM Targets:

- 187 kW net peak demand savings.
- 1,074,180 kWh cumulative net energy savings.

Marketing & Promotional Tactics Used:

- Included in collateral material available for all C&I Program initiatives
- Promotion on Oakville Hydro's website throughout 2014, over 300 page-views on Oakville Hydro's Conservation 'landing page' for all OPA Programs.

Additional Comments:

- This initiative was an 'enabling' initiative, designed to support subsequent participation in the Retrofit Program or other initiatives within the C&I Program portfolio. While no savings were expected to be attributed to Energy Audits, evaluators recognized savings towards LDCs targets as a result of customers implementing low cost no cost recommendations from their energy audits.

- Participation was limited to one energy audit per customer which restricted enabling and direction to the other Initiatives. This was revised in 2014 and LDCs were able to consider additional customer participation when presented with a new scope of work.

3.2.2.6 Small Commercial Demand Response Program (Schedule B-3)

Initiative Activities/Progress:

The following illustrates the progress achieved in 2014:

Participation / Activity:

- Number of load control devices installed in 2014 was 278, or 11.39% of the Province-wide result.
- Number of IHDs installed was 179, or 40.50% of the Province-wide incremental 2014 result of 442 IHDs installed.

Net Savings:

- 155 kW peak incremental peak demand savings (calculated) and 0 kWh incremental energy savings resulting from the installation of load control devices.
- No incremental peak demand savings or energy savings are attributed to the installation of In-Home Energy Displays.

Final Contribution to CDM Targets:

- 165 kW net peak demand savings (applies to Scenario 2 only).
- 4 kWh cumulative net energy savings.

Marketing & Promotional Tactics Used:

- A door to door marketing campaign was employed in 2014 and resulted in significant uptake by small commercial customers.

Additional Comments:

- Changes to the initiative made in March 2013 to increase the participant-based funding specifically for small commercial customers and to address the expectations of delivery partners for adequate compensation to service this customer segment, did contribute positively to the results achieved.

3.2.2.7 Demand Response 3 Program (Schedule D-6)

Initiative Activities/Progress:

The following illustrates the progress achieved in 2014:

Participation / Activity:

- 1 participant (2011 - 2014)

Net Savings:

- 57 kW Net incremental peak demand savings and 0 kWh incremental energy savings.

Final Contribution to CDM Targets:

- 57 kW program-to-date net peak demand savings (from participant in 2011) (applies to scenario 2 only).
- 5,505 kWh cumulative net energy savings (from participant in 2011).

Marketing & Promotional Tactics Used:

- See discussion in Section 3.2.3.4

Additional Comments:

See discussion in Section 3.2.3.4

3.2.3 INDUSTRIAL PROGRAM

Description: Designed to help identify and promote energy saving opportunities for large building and manufacturing based customers. The Industrial Program portfolio included financial incentives and technical expertise to help organizations modernize systems for enhanced productivity and product quality, as well as provide a substantial boost to energy productivity. This allowed facilities to take control of their energy so they could create long-term competitive energy advantages which reached 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 provided valuable resources to large facilities including funding for enabling Engineering Studies and for process or system changes. The Engineering Studies in particular provided a unique opportunity for customers to complete a comprehensive analysis of an energy intensive process that they would not otherwise be able to undertake. This Program also provided funding for Energy Managers to provide customers with a skilled individual whose only role would be to assist them with conservation initiatives.

This Program was geared to support larger facilities that were prepared to pursue longer term energy efficiency projects that were typically capital-intensive. However, there were relatively few such facilities that were customers of Oakville Hydro. Oakville Hydro has no customers in the 'Large User' category of at least 5 MW in annual peak demand, and has seen declines in its industrial customer base in recent years. Consequently, Oakville Hydro was not able to apply for funding for a Key Account Manager to support the delivery of this Program; and opportunities for significant results arising from the Demand Response 3 initiative (the "DR3 Program") were also limited. Similar to the situation noted for the C&I Program, Oakville Hydro's CDM targets did not necessarily take into account these characteristics of the industrial sector within its service area.

Extensive legal documents, complex program structure and lengthy change management restricted the change and growth of this portfolio. While the expedited change management benefited the C&I Program portfolio, the Industrial Program portfolio did not see the same results due to the narrow scope of the process.

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

Initiative Activities/Progress:
The following illustrates the progress achieved in 2014:

Participation / Activity:

- Number of PSUI projects completed was 1, or 10% of the Province-wide result of 10 projects.

Net Savings:

- 27 kW peak incremental peak demand savings and 131,238 kWh incremental net energy savings.

Final Contribution to CDM Targets:

- 27 kW net peak demand savings.
- 131,238 kWh 2011-2014 cumulative net energy savings.

Marketing and Promotional Tactics Used:

- Included in collateral material available for all C&I Program initiatives.
- Promotion on Oakville Hydro's website throughout 2014, over 300 (OPA link) page-views on Oakville Hydro's Conservation 'landing page' for all OPA Programs.

Additional Comments:

- Customer interest in this initiative was limited by economic factors as well as the lengthy project planning and development cycle. As a result Oakville Hydro had no participants in this initiative in 2011, 2012 or 2013.

- The OPA's standard form of contract for this initiative was a lengthy and complicated document, and contains particular clauses, such as the contract term, that many customers were not prepared to accept. As a result, in some instances Oakville Hydro encouraged customers to consider applying for the Retrofit initiative instead. As noted above, a key to making PSUI successful was a simplified contract for small projects with less onerous conditions for the customer. To partially address this, changes were made in August 2013 to allow smaller projects for industrial process upgrades to be eligible as 'small capital projects'.

3.2.3.2 Monitoring & Targeting Initiative (Schedule D-2)

Initiative Activities/Progress:
The following illustrates the progress achieved in 2014:

Participation / Activity:
- None.

Net Savings:
- None.

Final Contribution to CDM Targets:
- None.

Marketing & Promotional Tactics Used:

- Included in collateral material available for all C&I Program initiatives
- Promotion on Oakville Hydro's website throughout 2014, over 300 (OPA link) page-views on Oakville Hydro's Conservation 'landing page' for all OPA Programs

Additional Comments:

- This initiative was originally targeted at larger customers with the internal capacity to review electricity usage data. This review required the customer to employ an Energy Manager, or a person with equivalent qualifications, which was a barrier for some potential participants in this initiative. The minimum Savings required for this initiative also presented a significant challenge for smaller customers. As such, Oakville Hydro received no applications for this initiative to date.

3.2.3.3 Energy Manager Initiative (Schedule D-3)

Initiative Activities/Progress:

The following illustrates the progress achieved in 2014:

Participation / Activity:
- None.

Net Savings:
- None.

Final Contribution to CDM Targets:
- None.

Marketing & Promotional Tactics Used:

- Not applicable

Additional Comments:

- Oakville Hydro was not able to apply for funding for a Roving Energy Manager (REM) to support the delivery of this Program; yet committed CDM staff to undertake the role and responsibilities of a REM in order to deliver and manage the initiatives for both the C&I Program portfolios. Funding, like that provided to larger LDCs, would have benefited Oakville Hydro toward achieving its targets.

- Oakville Hydro also had no customers that were interested in applying for an Embedded Energy Manager under this initiative in 2011 and 2012. In 2013 one customer applied and was approved for an EEM but did not complete the application process as they were unwilling to agree to certain terms specified in the contract required by the OPA.

3.2.3.4 Demand Response 3 (Schedule D-6)

Initiative Activities/Progress:

The following illustrates the progress achieved in 2014:

Participation / Activity:

- In 2014, 3 Oakville customers entered into Demand Response contracts. This represents 5.45% of the provincial total of 55 projects for 2014.

Net Savings:

- 481 kW peak incremental peak demand savings and 0 kWh incremental energy savings.

Final Contribution to CDM Targets:

- 1,195 kW net peak demand savings in 2014 (applies to Scenario 2 only).
- 17,506 cumulative net energy savings.

Marketing & Promotional Tactics Used:

- Promoted DR3 along with the C&I initiative portfolio.

Additional Comments:

- Oakville Hydro has few large and medium-size customers with load profiles suitable for this initiative. Aggregators preferentially pursue opportunities with larger customers, putting Oakville Hydro at a competitive disadvantage versus other LDCs.

- Participant incentives for this initiative were reduced by the OPA effective January 2013. Partially off-setting this change, however, Aggregators were then able to enter into contracts beyond 2014, allowing them to offer a more competitive contract price over a five year term as opposed to being limited to up to the end of 2014.

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

Initiative Activities/Progress:

The following illustrates the progress achieved in 2014:

Participation / Activity:

- In 2014, 173 Oakville homes participated in this initiative representing 0.68% of the provincial total of 25,424.

Net Savings:

- 8 kW incremental peak demand savings.
- 121,102 kWh incremental energy savings.

Final Contribution to CDM Targets:

- 24 kW net peak demand savings.
- 559,467 kWh 2011-2014 cumulative net energy savings.

Marketing & Promotional Tactics Used:

- Held four program awareness events with Social Agencies

Additional Comments:

- Oakville Hydro completed negotiations with a third party delivery agent for the delivery of this Program in late 2012. The 2014 results reflect the success of this effort.

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 2014 Oakville CDM Results

4.1 Participation and Savings

Oakville Hydro's participation levels and resulting Savings from the OPA Programs, as reported in Final 2014 Verified Results Report published by the IESO, are summarized in Tables 5a and 5b.

Table 5a: Summary of Oakville Hydro's Participation Levels and Savings Achieved as of December 31, 2014

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)				Program-to-Date Verified Progress to Target (excludes DR)	
														2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
		2011*	2012*	2,013	2,014	2,011	2,012	2,013	2,014	2,011	2,012	2,013	2,014	2,014	2,014
Consumer Program															
Appliance Retirement	Appliances	879	598	372	298	47	33	24	19	352,333	238,004	159,304	130,190	123	2,572,140
Appliance Exchange	Appliances	32	35	54	37	3	5	11	8	4,163	8,911	19,950	13,669	25	95,214
HVAC Incentives	Equipment	2,179	2,033	2,180	2,287	582	422	429	428	1,038,128	693,722	700,716	781,609	1,862	8,416,719
Conservation Instant Coupon Booklet	Items	7,515	452	5,091	16,052	17	3	8	33	280,255	20,458	113,119	436,742	61	1,845,371
Bi-Annual Retailer Event	Items	13,931	15,523	13,823	70,594	26	22	17	118	461,930	391,857	251,367	1,798,256	183	5,324,281
Retailer Co-op	Items	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Residential Demand Response	Devices	696	772	4,458	6,842	390	355	1,658	2,408	1,009	2,674	5,145	—	2,408	8,828
Residential Demand Response (IHD)	Devices	—	67	3,472	5,943	—	—	—	—	—	—	—	—	—	—
Residential New Construction	Homes	—	—	—	366	—	—	—	11	—	—	—	157,347	11	157,347
Consumer Program Total					—	**1,066**	**841**	**2,147**	**3,023**	**2,137,818**	**1,355,626**	**1,249,600**	**3,317,813**	**4,672**	**18,419,900**
Business Program															
Retrofit	Projects	44	108	138	144	461	792	796	856	2,371,787	4,069,070	3,907,284	7,587,997	2,883	37,016,620
Direct Install Lighting	Projects	208	112	16	66	259	89	21	69	662,516	336,964	72,801	267,200	401	3,961,629
Building Commissioning	Buildings	—	—	—	—	—	—	—	—	—	—	—	—	—	—
New Construction	Buildings	—	2	2	—	—	5	64	—	—	17,355	(69,958)	—	69	(87,851)
Energy Audit	Audits	—	—	3	12	—	—	26	160	—	—	145,449	783,283	187	1,074,180
Small Commercial Demand Response	Devices	—	—	15	293	—	—	10	165	—	—	4	—	165	4
Small Commercial Demand Response (IHD)	Devices	—	—	2	181	—	—	—	—	—	—	—	—	—	—
Demand Response 3	Facilities	1	1	1	1	82	82	83	57	3,198	1,194	1,113	—	57	5,505
Business Program Total					—	**802**	**969**	**1,000**	**1,307**	**3,037,502**	**4,424,584**	**4,056,693**	**8,638,480**	**3,762**	**41,970,087**
Industrial Program															
Process & System Upgrades	Projects	—	—	—	1	—	—	—	27	—	—	—	131,238	27	131,238
Monitoring & Targeting	Projects	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy Manager	Projects	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Retrofit	Projects	5	—	—	—	60	—	—	—	336,825	—	—	—	60	1,347,300
Demand Response 3	Facilities	1	—	2	5	21	—	714	1,195	1,237	—	16,269	—	1,195	17,506
Industrial Program Total					—	**81**	**—**	**714**	**1,222**	**338,062**	**—**	**16,269**	**131,238**	**1,282**	**1,496,044**
Home Assistance Program															
Home Assistance Program	Homes	—	—	285	173	—	—	15	8	—	—	222,914	121,102	24	559,467
Home Assistance Program Total					—	**—**	**—**	**15**	**8**	**—**	**—**	**222,914**	**121,102**	**24**	**559,467**
Aboriginal Program															
Home Assistance Program	Homes	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Direct Install Lighting	Projects	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Aboriginal Program Total					—	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**
Pre-2011 Programs completed in 2011															
Electricity Retrofit Incentive Program	Projects	26	—	—	—	240	—	—	—	1,343,088	—	—	—	240	5,372,354
High Performance New Construction	Projects	2	1	—	—	48	52	—	—	202,269	164,845	—	—	100	1,303,614
Toronto Comprehensive	Projects	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Multifamily Energy Efficiency Rebates	Projects	—	—	—	—	—	—	—	—	—	—	—	—	—	—
LDC Custom Programs	Projects	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pre-2011 Programs completed in 2011 Total					—	**288**	**52**	**—**	**—**	**1,545,358**	**164,845**	**—**	**—**	**340**	**6,675,968**
Other															
Program Enabled Savings	Projects	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Time-of-Use Savings	Homes	—	—	—	n/a	—	—	—	853	—	—	—	—	853	—
LDC Pilots	Projects	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Total		—	—	—	—	**—**	**—**	**—**	**853**	**—**	**—**	**—**	**—**	**853**	**—**
Adjustments to 2011 Verified Results							(3)	—	—		296,333	—	—	(12)	1,160,199
Adjustments to 2012 Verified Results								44	7			240,096	23,869	51	791,893
Adjustments to 2013 Verified Results									187				553,261	187	1,109,119
Energy Efficiency Total						**1,746**	**1,373**	**1,224**	**2,590**	**6,756,963**	**5,677,222**	**4,967,087**	**12,208,632**	**6,881**	**66,028,412**
Demand Response Total (Scenario 1)						**493**	**438**	**2,465**	**3,824**	**5,444**	**3,869**	**22,530**	**—**	**3,824**	**31,843**
Adjustments to Previous Years' Verified Results Total						**—**	**(3)**	**44**	**195**	**—**	**296,333**	**240,096**	**577,129**	**227**	**3,061,211**
OPA-Contracted LDC Portfolio Total (inc. Adjustments)						**2,239**	**1,808**	**3,733**	**6,608**	**6,762,407**	**5,977,423**	**5,229,713**	**12,785,762**	**10,932**	**69,121,466**
													Full OEB Target:	**20,700**	**74,060,000**
													% of Full OEB Target Achieved to Date (Scenario 1):	**52.8%**	**93.3%**

Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (reported cumulatively).

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

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

Table 5b: Summarized Program Results

Program	2014 Gross Savings		2014 Net Savings		Contribution to Targets	
	Incremental Peak Demand Savings (MW)	Incremental Energy Savings (GWh)	Incremental Peak Demand Savings (MW)	Incremental Energy Savings (GWh)	Program-to-Date: Net Annual Peak Demand Savings (MW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (GWh)
Consumer Program Total	1,055	3,476,675	3,023	3,317,813	4,672	18,419,900
Business Program Total	1,338	8,837,421	1,307	8,638,480	3,762	41,970,087
Industrial Program Total	27	131,238	1,222	131,238	1,282	1,496,044
Home Assistance Program Total	8	121,102	8	121,102	24	559,467
Pre-2011 Programs completed in 2011 Total	—	—	0	0	340	6,675,968
Other Adjustments	—	—	853	0	853	—
Total OPA Contracted Province-Wide CDM Programs	**2,741**	**13,380,893**	**6,608**	**12,785,762**	**10,932**	**69,121,466**

4.2 Evaluation

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

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

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

Energy Audit	Projects are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year of the audit date.	Peak demand and energy savings are determined by the total savings resulting from an audit as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).
Commercial Demand Response (part of the Residential program schedule)	Results are directly attributed to LDC based on data provided to IESO through project completion reports and continuing participant lists	Savings are considered to begin in the year the device was installed and/or when a customer signed a peaksaver PLUS™ participant agreement.	Peak demand savings are based on an ex ante estimate assuming a 1 in 10 weather year and represents the "insurance value" of the initiative. Energy savings are based on an ex post estimate which reflects the savings that occurred as a result of activations in the year. Savings are assumed to persist for only 1 year, reflecting that savings will only occur if the resource is activated.
Demand Response 3 (part of the Industrial program schedule)	Results are attributed to LDCs based on the total contracted megawatts at the contributor level as of December 31st, applying the provincial ex ante to contracted ratio (ex ante estimate/contracted megawatts); Ex post energy savings are attributed to the LDC based on their proportion of the total contracted megawatts at the contributor level.	Savings are considered to begin in the year in which the contributor signed up to participate in demand response.	Peak demand savings are ex ante estimates based on the load reduction capability that can be expected for the purposes of planning. The ex ante estimates factor in both scheduled non-performances (i.e. maintenance) and historical performance. Energy savings are based on an ex post estimate which reflects the savings that actually occurred as a results of activations in the year. Savings are assumed to persist for 1 year, reflecting that savings will not occur if the resource is not activated and additional costs are incurred to activate the resource.

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

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

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

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

4.3 Spending

Table 6 and 7 summarize the total spending by initiative that Oakville Hydro has incurred in 2014 and cumulatively since 2011. It is detailed by the Program Administration Budget (PAB), Participant Based Funding (PBF), Participant Incentives (PI) and Capability Building Funding (CBF).

Table 6: 2014 Spending

Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
Consumer Program					
Appliance Retirement	$ 25,267				$25,267
Appliance Exchange	$ 5,564				$5,564
HVAC Incentives	$ 15,299				$15,299
Annual Coupons					$0
Bi-Annual Retailer Event	$ 10,280				$10,280
Retailer Co-op					$0
Residential Demand Response	$ 684,727	$1,235,211			$1,919,938
New Construction Program	$ 44,637		$ 40,569		$85,206
Business Program					
Equipment Replacement	$ 426,026		$ 482,246		$908,272
Direct Installed Lighting	$ 56,327	$ 18,150	$ 97,953		$172,430
Existing Building Commissioning Incentive	$ 23,150				$23,150
New Construction and Major Renovation Initiative	$ 44,240				$44,240
Energy Audit	$ 65,288				$65,288
Small Commercial Demand Response					
Demand Response 3					
Industrial Program					
Process & System Upgrades					
a) preliminary engineering study	$ 11,218				$11,218
b) detailed engineering study	$ 11,387				$11,387
c) program incentive	$ 10,357				$10,357
Monitoring & Targeting	$ 10,131				$10,131
Energy Manager					
Key Account Manager (“KAM”)					
Equipment Replacement					
Demand Response 3	$ 18,060				$18,060
Home Assistance Program					
Home Assistance Program	$18,969	$177,136			$196,105
TOTAL SPENDING	$1,480,927	$1,430,497	$580,199		$3,532,192

Table 7: Cumulative Spending (2011-2014)

Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
Consumer Program					
Appliance Retirement	$ 136,771				$136,771
Appliance Exchange	$ 43,924				$43,924
HVAC Incentives	$ 110,298				$110,298
Annual Coupons	$ 32,999				$32,999
Bi-Annual Retailer Event	$ 73,660				$73,660
Retailer Co-op					$0
Residential Demand Response	$ 1,334,903	$ 2,708,016	$ 16,900		$4,059,819
New Construction Program	$ 79,637		$ 40,569		$120,206
Business Program					
Equipment Replacement	$ 995,005		$ 2,244,569		$3,239,574
Direct Installed Lighting	$ 189,137	$ 111,650	$ 477,415		$778,202
Existing Building Commissioning Incentive	$ 87,443				$87,443
New Construction and Major Renovation Initiative	$ 127,391				$127,391
Energy Audit	$ 201,056				$201,056
Small Commercial Demand Response					
Demand Response					
Industrial Program					
Process & System Upgrades					
a) preliminary engineering study	$ 47,817				$47,817
b) detailed engineering study	$ 47,239				$47,239
c) program incentive	$ 36,570				$36,570
Monitoring & Targeting	$ 34,886				$34,886
Energy Manager					
Key Account Manager (“KAM”)					
Equipment Replacement Incentive					
Demand Response 3	$ 59,972				$59,972
Home Assistance Program					
Home Assistance Program	$113,966	$ 197,934			$311,900
Pre 2011 Programs					
Electricity Retrofit Incentive Program	$18,236		$47,210		$65,446
High Performance New Construction					
TOTAL SPENDING	$3,770,910	$3,017,600	$2,786,094		$9,615,173

As of December 31, 2014, the Program Administration Budget (“PAB”) funding spending of $2.29 million was approximately 64% of the total PAB funding allocation of $3.58M for Oakville Hydro. The initial 2011-2014 PAB budget for Oakville Hydro was $3,700,137 plus an additional $70,773 for the Peaksaver initiative in 2011 for a total of $3,770,910. In April 2014 the OPA agreed to provide OH an additional $0.7M in PAB funding raising the total allocation to $4.28M.

4.4 Additional Comments

As indicated for specific OPA Program initiatives in Section 3.2.2, Oakville Hydro was deemed to be at a disadvantage with respect to the achievement of its CDM targets versus other LDCs for a number of reasons.

These included:

- Oakville Hydro does not have customers in the Large User class, meaning that there was limited potential for key Industrial Program initiatives.

- The average demand energy demand Savings from RETROFIT projects for customers of Oakville Hydro is lower than the Province-wide average.

- Oakville Hydro had very strong participation in the Power Savings Blitz Program prior to 2011, and this resulted in lower participation rates in the Small Business Lighting Program relative to other LDCs.

Other challenges faced by Oakville Hydro with respect to its CDM targets were common to all LDCs. Examples included:

- A reduction of Province-wide advertising campaigns from the OPA for the Residential Program portfolio.

- The impact of downward revisions to the net-to-gross ratios, realization rates and attributed Savings per measure, particularly for RDR.

- Processes, complexities and operational concerns.

- The time required to assess, approve and implement even minor changes to improve the existing OPA Programs.

5 Combined CDM Reporting Elements

5.1 Progress Towards CDM Targets

Table 8: Net Peak Demand Savings at the End User Level (MW)

Implementation Period	Annual (MW)			
	2011	2012	2013	2014
2011 - Verified by OPA	2.2	1.7	1.7	1.7
2012 - Verified by OPA	—	1.8	1.4	1.3
2013 - Verified by OPA	—	—	3.7	1.3
2014 - Verified by OPA	0.0	0.0	0.2	6.6
Verified Net Annual Peak Demand Savings in 2014:				**10.9**
Oakville Hydro Electricity Distribution Inc. 2014 Annual CDM Capacity Target:				**20.7**
Verified Portion of Peak Demand Savings Target Achieved (%):				**52.8%**

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

Implementation Period	Annual (GWh)				Cumulative (GWh)
	2011	2012	2013	2014	2011-2014
2011 - Verified by OPA	6.8	6.8	6.8	6.7	26.9
2012 - Verified by OPA	0.3	6.0	6.0	5.9	18.1
2013 - Verified by OPA	—	0.2	5.2	5.2	10.7
2014 - Verified by OPA	—	—	0.58	12.8	13.4
Verified Net Cumulative Energy Savings 2011-2014:					**69.1**
Oakville Hydro Electricity Distribution Inc. 2011-2014 Cumulative CDM Energy Target:					**74.1**
Verified Portion of Cumulative Energy Target Achieved (%):					**93.3%**

5.2 Variance from Strategy

As anticipated in the forecasted 2014 CDM results, Oakville Hydro was on pace to achieve 50% of the demand and 82% of its energy target. The IESO 2011 - 2014 Final Results Report indicated CDM results bettered this forecast slightly with verified achievements 52.3% of demand target and 92.3% of the energy target. Improvements to this forecast were based on the following:

- Inclusion of the allocated demand savings resulting from TOU rates contributed another 853 kW.
- EM&V activities conducted on the ***peaksaver* PLUS** program.
- Better than expected uptake of the RETROFIT program.

5.3 Outlook to 2015 and Strategy Modifications

In 2015, Oakville Hydro continues to progress on its energy savings programs and continues the momentum of the 2011 - 2014 framework.

In May 2015, Oakville Hydro and Toronto Hydro's CDM Plan was approved by the IESO. The combined plan includes a commitment to achieve the six year energy savings targets for both LDC's in a cost effective manner.

6 Conclusion

Over the course of the 2011-2014 CDM Framework, Oakville Hydro achieved 10.9 MW in net peak demand savings and 69.1 GWh in cumulative net energy savings, which represented 53% and 93% of Oakville Hydro's CDM targets, respectively. These results illustrated a considerable effort expended by Oakville Hydro, in cooperation with other LDCs, customers, supply channel partners and stakeholders, to overcome many operational and structural issues that had limited the effectiveness of some of the OPA's Program initiatives across all market sectors. However, final results for the RDR Initiative raised concerns as attributable savings were significantly reduced (72% of the Provincial average results) and represented a loss of 5% toward the demand energy target for Oakville Hydro.

Oakville Hydro is committed to energy conservation and to ensuring that existing and future CDM programs are a cost-effective resource in addressing the long-term energy requirements for customers, households, and businesses throughout Ontario. Oakville Hydro's achievements within the 2011 to 2014 Framework underline this commitment and we look forward to working with the IESO, the Ministry of Energy, the OEB and other agencies supporting the energy sector in Ontario to develop and implement the new Conservation First framework for CDM activities.

Appendix A: Initiative Descriptions

RESIDENTIAL PROGRAM

Appliance Retirement Initiative (Schedule B-1, Exhibit D)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

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

Delivery: The OPA centrally contracts for the Province-wide marketing, call centre, appliance pick-up and decommissioning process. LDCs provide local marketing and coordination with municipal pick-up where available.

Additional detail is available:

- Schedule B-1, Exhibit D: http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf
- save**ON**energy website: https://saveonenergy.ca/Consumer/Programs/Appliance-Retirement.aspx

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

Target Customer Type(s): Residential Customers
Initiative Frequency: Spring and fall

Objective: Remove and permanently decommission older, inefficient window air conditioners and portable dehumidifiers that are in Ontario.

Description: This initiative involves appliance exchange events held at local retail locations, where customers are encouraged to bring in their old room air conditioners 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: The OPA contracts with participating Retailers for collection of eligible units. LDCs provide local marketing.

Additional detail is available:

- Schedule B-1, Exhibit C
  http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf
- save**ON**energy website: https://saveonenergy.ca/Consumer/Programs/EXCHANGE-EVENT.aspx

HVAC Incentives Initiative (Schedule B-1, Exhibit B)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

Objective: Encourage the replacement of existing heating systems with high efficiency furnaces equipped with ECMs, and to replace existing central air conditioners with ENERGY STAR® qualified systems and products**.**

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

Targeted End Uses: Central air conditioners and furnaces

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

Additional detail is available:

- Schedule B-1, Exhibit B
  http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf
- save**ON**energy website: https://saveonenergy.ca/Consumer.aspx

Conservation Instant Coupon Booklet Initiative (Schedule B-1, Exhibit A)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

Objective: 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 products and can be redeemed at participating Retailers. Booklets were directly mailed to customers and were also available at point-of-purchase. Downloadable coupons were also available at www.saveoneenergy.ca.

Targeted End Uses: ENERGY STAR qualified standard CFLs, ENERGY STAR- qualified light fixtures, lighting control products, weather-stripping, hot water pipe wrap, electric water heater blanket, heavy duty plug-in timers, advanced power bars, clothesline, baseboard programmable thermostats.

Delivery: The OPA develops the electronic version of the coupons and posts them online for download. Three LDC-specific 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: http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf
- save**ON**energy website: https://saveonenergy.ca/Consumer.aspx

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

Target Customer Type(s): Residential Customers

Initiative Frequency: Bi-annual events

Objective: 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 products.

Targeted End Uses: As per the Conservation Instant Coupon Booklet Initiative

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

Additional detail is available:

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

Retailer Co-op Initiative

Target Customer Type(s): Residential Customers

Initiative Frequency: Year Round

Objective: Encourage customers to purchase energy efficient products (and go above-and-beyond the traditional Bi-Annual Retailer Events).

Description: This 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 efficient products.

Targeted End Uses: As per the Conservation Instant Coupon Booklet 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.

Residential New Construction Initiative (Schedule B-2)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

Objective: Provide incentives to participants for the purpose of promoting the construction of energy efficient residential homes.

Description: This initiative 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 energy efficient products or 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 CACs, lighting control products, lighting fixtures, EnerGuide 83 and 85 whole homes

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

Additional detail is available:

- Schedule B-1, Exhibit C: http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-2%20New%20Construction%20Program.pdf
- save**ON**energy website: https://saveonenergy.ca/Consumer.aspx

Residential Demand Response Program (Schedule B-3)

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

Initiative Frequency: Year round

Objective: 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: Participants are eligible to receive a free programmable thermostat or switch, including installation. Participants also receive access to price and real-time consumption information through an IHD.

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

Delivery: LDCs recruit customers, procure technology and arrange for installation
Additional detail is available:

- Schedule B-1, Exhibit C: http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/SCHED_2011_ResDR_B_3_110727%28MJB%29v15_redacted.pdf
- save**ON**energy website: https://saveonenergy.ca/Consumer.aspx

COMMERCIAL AND INSTITUTIONAL PROGRAM

Efficiency: Equipment Replacement Incentive Initiative (Schedule C-2)

Target Customer Type(s): Commercial, Institutional, Agricultural and Industrial Customers
Initiative Frequency: Year round

Objective: Offer incentives to non-residential distribution customers to achieve reductions in electricity demand and consumption by upgrading to more energy efficient equipment for lighting, space cooling, ventilation and other measures.

Description: This initiative 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
- save**ON**energy website: https://saveonenergy.ca/Business/Program-Overviews/Retrofit-for-Commercial.aspx

Direct Install Lighting and Water Heating Initiative (Small Business Lighting) (Schedule C-3)

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

Initiative Frequency: Year round

Objective: Offer a free installation of eligible lighting and water heating measures of up to $1,000 (increased to $1,500 as of December 2012) 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: This 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 delivery agent.
Additional detail is available:

- Schedule C-3: http://www.powerauthority.on.ca/sites/default/files/page/Schedule%20C-3%20Direct%20Install%20Initiative%20-%20redacted.pdf
- save**ON**energy website: https://saveonenergy.ca/Business.aspx

Existing Building Commissioning Incentive Initiative (Schedule C-6)

Target Customer Type(s): Commercial and Institutional Customers

Initiative Frequency: Year round

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

Description: This initiative offers participants incentives for the following:

- Scoping Study phase
- Investigation phase
- Implementation phase
- Hand-Off/Completion phase

Targeted End Uses: Chilled water systems for space cooling

Delivery: LDC delivered

Additional detail is available:

- Schedule C-6: http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20C-6%20Commissioning%20Initiative.pdf
- save**ON**energy website: https://saveonenergy.ca/Business/Program-Overviews/Existing-Building-Commissioning.aspx

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

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

Initiative Frequency: Year round

Objective: 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: This 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: http://www.powerauthority.on.ca/sites/default/files/page/ScheduleC-4NewContructionInitiativeV2.pdf
- save**ON**energy website: https://saveonenergy.ca/Business/Program-Overviews/New-Construction.aspx

Energy Audit Initiative (Schedule C-1)

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

Initiative Frequency: Year round

Objective: 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: http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20C-1%20Energy%20Audit%20Initiative.pdf
- save**ON**energy website: https://saveonenergy.ca/Business/Program-Overviews/Audit-Funding.aspx

INDUSTRIAL PROGRAM

Process and Systems Upgrades Initiatives (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 components: (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 Manager support in some cases.

Additional detail is available:

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

Monitoring and Targeting Initiative (Schedule D-2)

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

Initiative Frequency: Year round

Objective: 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 participant 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
- save**ON**energy website: https://saveonenergy.ca/Business.aspx

Energy Manager Initiative (Schedule D-3)

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

Initiative Frequency: Year round

Objective: 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 annual 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: 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
- save**ON**energy website: https://saveonenergy.ca/Business.aspx

Key Account Manager Initiative (Schedule D-4)

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

Initiative Frequency: Year round

Objective: Offers LDCs the opportunity to access funding for the employment of a Key Account Manager ("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. KAMs are 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:

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

Demand Response 3 Program (Schedule D-6)

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

Initiative Frequency: Year round

Objective: 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: This initiative 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 initiative is a contractual resource that is an economic alternative to procurement of new generation capacity. The DR3 Program 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: The initiative 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). DRPs provide 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: http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20D-6%20Demand%20Response%203%202011-2014.pdf
- save**ON**energy website: https://saveonenergy.ca/Business.aspx

LOW INCOME PROGRAM (Schedule E-1)

Target Customer Type(s): Income Qualified Residential Customers

Initiative Frequency: Year Round

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

Targeted End Uses: End use products or measures based on results of the audit (e.g., CFLs, etc.)

Delivery: LDC delivered.

Additional detail is available:

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

Appendix B: Pre-2011 Programs

Electricity Retrofit Incentive Program (ERIP)

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

Initiative Frequency: Year Round

Objective: Provided 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: 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 Savings associated with these projects are attributed to 2011.

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

Delivery: LDC Delivered

High Performance New Construction (HPNC) Program

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

Initiative Frequency: Year round

Objective: Provided incentives for new buildings to exceed existing codes and standards for energy efficiency. The HPNC Program 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 HPNC Program offered financial incentives to 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. The Savings associated with these projects are attributed to the year in which they were completed.

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

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

Appendix C: 2014 EVENTS SCHEDULE

Residential Customer Event Interactions 2014	
Date 2014	**Event**
April 5, 2014	Halton ECO Fest
April 5, 2014	Canadian Tire saveONenergy Coupon Event
April 6, 2014	Home Depot saveONenergy Coupon Event
April 11, 2014	Oakville Lifestyle Home Show
April 12, 2014	Oakville Lifestyle Home Show
April 13, 2014	Oakville Lifestyle Home Show
April 19, 2014	Home Depot saveONenergy Coupon Event
May 24, 2014	Oakville Conserves Energy Fair Oakville Town Hall
May 24, 2014	Rain Barrel Sale Halton Regional Centre
June 14, 2014	Ice Cream with Alan and Ralph
June 20, 2014	Oakville Ribfest Sheridan Campus
June 21, 2014	Oakville Ribfest Sheridan Campus
June 22, 2014	Oakville Ribfest Sheridan Campus
July 1, 2013	Canada Day Heritage Park
July 05, 2014	Environmental Awareness Day Cross Avenue Tim Hortons
July 18, 2014	Midnight Madness
July 27, 2014	Oakville Children's Festival Coronation Park
September 5, 2014	Fall Home Show
September 6, 2014	Oak Park Fall Fair
September 6, 2015	Kerr Street Festival
September 6, 2014	Fall Home Show
September 7, 2014	Fall Home Show
October 4, 2014	Home Depot saveONenergy Coupon Event
October 11, 2014	Canadian Tire saveONenergy Coupon Event
October 18, 2014	Home Depot saveONenergy Coupon Event

Appendix D: Glossary of Defined Terms

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