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Kirsten Walli Board Secretary Ontario Energy Board, 2300 Yonge St. Suite 2700, P.O. Box 2319 Toronto, Ontario M4P 1E4

Dear Ms. Walli:

#### Re: OEB File No. EB-2010-0215 Oakville Hydro Electricity Distribution Inc. Conservation and Demand Management – 2012 Annual Report

Please find accompanying this letter, two copies of Oakville Hydro Electricity Distribution Inc.'s 2012 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 contact Bob Myers, Director, Conservation and Demand Management at 905-825-6347.

Respectfully Submitted,

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# Oakville Hydro Electricity Distribution Inc.

**Conservation and Demand Management** 

# 2012 Annual Report

Submitted to:

**Ontario Energy Board** 

EB-2010-0215

Submitted on September 30, 2013

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# **Executive Summary**

This 2012 Annual Report is submitted by Oakville Hydro Electricity Distribution Inc. ("Oakville Hydro") in accordance with the filing requirements set out in the Conservation and Demand Management ("CDM") Code for Electricity Distributors (Board File No. EB-2010-0215), specifically Appendix C Annual Report Template, as a progress report and modification to Oakville Hydro's CDM Strategy. Accordingly, this Report provides an overall review of Oakville Hydro's CDM program activities for the January 1, 2012 to December 31, 2012 period. The Report includes the reported net peak demand and cumulative net energy savings (collectively, "Savings") achieved from 2011 and 2012, a discussion of the current / future CDM framework, and a summary of CDM program activities, successes and challenges. The Report also includes an updated forecast of the expected net peak demand and cumulative net energy savings to the end of 2014.

On November 12, 2010, the Ontario Energy Board (the "OEB" or the "Board") released the final allocation of CDM targets specific to all local distribution companies ("LDCs") (Board File No. EB-2010-0215/0216). Oakville Hydro's net peak demand reduction target was set at 20.70 MW (1.6% of the provincial target), and its cumulative net energy savings reduction target was set at 74.06 GWh (1.2% of the provincial target).

Oakville Hydro entered into a contract with the Ontario Power Authority (the "OPA") on February 25, 2011 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 2012 Oakville Hydro continued to focus on the delivery of the OPA Programs and saw improved results in many areas. This is evident in the results from the OPA's "Triple A In-Market Market Research Report" for Q4 2012, which highlighted consumer awareness levels of the Residential Program initiatives for a grouping of LDCs in Central Ontario, including Oakville Hydro, being at or above the Province-wide averages. Consistent with these findings, Oakville Hydro experienced participation levels at or above the Province-wide averages for most Residential Program initiatives. Other successes in 2012 include the launch of the Residential Demand Response Program (the "RDR Program") in December, and an increase in the number of new applications received for the Efficiency: Equipment Replacement Incentive Initiative of over 70% versus 2011.

As of December 2012, Oakville Hydro has achieved 3.50 MW of net peak demand savings and 45.08 GWh of cumulative net energy savings in 2012, based on information published by the OPA in its Final 2012 Results Report. These results represent 16.9% of Oakville Hydro's four-year net peak demand reduction target and 60.9% of the

cumulative net energy savings target. It is important to the note the net peak demand savings results reflect 'Scenario 2', assuming a persistence of demand savings from both the RDR Program and the Demand Response 3 Program, and includes 0.44 MW of demand response achievements that are subject to change during the final OPA evaluation, measurement and verification process at the end of 2014. A summary of Oakville Hydro's achievements towards the CDM targets is shown in Table 1:

<u>Table 1:</u>	Verified	and	Forecast	Net	Peak	Demand	and	Cumulative	Net	Energy
Reduction (Scenario 2)										

	2011 Verified <sup>1</sup>	2012 Verified	2013 Forecast	2014 Forecast	% of 2014 CDM Target	CDM Target
Net Peak Demand Savings (MW)	2.21	3.50	7.01	11.27	54.4	20.70
Cumulative Net Energy Savings (GWh)	26.94	45.08	54.77	61.64	83.2	74.06

As outlined in Oakville Hydro's CDM Strategy, it was originally planned that the CDM program portfolio would include one or more Board-Approved CDM Programs. Oakville Hydro has not applied for any Board-Approved CDM Programs, however, and is not planning to do so in 2013 or 2014.

As noted in the Guidelines for Electricity Distributor Conservation and Demand Management, released April 26, 2012, however, the OEB has deemed Time-of-Use ("TOU") pricing a Province-wide Board-Approved CDM Program. The OPA is to provide measurement and verification on Savings attributable to the introduction of TOU pricing. At the time of this Report the OPA has not released any verified results of Savings attributable to TOU pricing for Oakville Hydro.

As shown in Table 1, the updated forecast prepared for this Report is that Oakville Hydro will achieve approximately 54% of its net peak demand reduction target and 83% of its cumulative net energy savings reduction target, despite the delays in the introduction by the OPA of a number of initiatives and without any Board-Approved CDM Programs other than TOU pricing. Key factors for this variance include the limited market potential for the Industrial Program and some Commercial and Institutional Program initiatives within the service area of Oakville Hydro, as well as declining participation rates and revised expectations for net-to-gross ratios for Residential Program initiatives.

<sup>&</sup>lt;sup>1</sup> Excluding adjustments reported by the OPA for 2011 in the 2012 Final Results Report

The challenges faced by Oakville Hydro in its efforts to achieve its CDM targets are common to many other LDCs. While the OPA did not include specific LDC rankings in its Final 2012 Results Report, data was provided in graph form indicating that 47 LDCs have achieved less than 25% of their target for net peak demand reduction as of the end of 2012. With respect to cumulative net energy savings reduction, at 60.9% of its target, Oakville Hydro is close to the Province-wide average for all LDCs.

Although the current forecast suggests a variance in meeting its CDM targets, Oakville Hydro will continue to dedicate and explore new opportunities to capture its CDM market potential across all customer classes and increase participation in key OPA Programs and initiatives in an effort to meet its targets by 2014. Through its collaborative efforts with other LDCs, Oakville Hydro will also be reviewing its practices for implementation of the OPA Programs and providing feedback to the OPA on potential enhancements.

# Background

On March 31, 2010, the Minister of Energy and Infrastructure of Ontario, under the guidance of sections 27.1 and 27.2 of the *Ontario Energy Board Act, 1998*, directed the Ontario Energy Board (the "OEB" or the "Board") to establish Conservation and Demand Management ("CDM") targets to be met by electricity distributors (the "March 2010 Ministerial Directive"). 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-Contracted Province-Wide CDM Programs ("OPA Programs") and potential Board-Approved CDM Programs.

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

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 introduction of the full suite of OPA Programs and the absence of some programs negatively impacted the final 2011 results for the local distribution companies ("LDCs"). This issue was also highlighted in Volumes One and Two of the Environmental Commissioner of Ontario's recent publication "Annual Energy Conservation Progress Report – 2011". <sup>2</sup>

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<sup>&</sup>lt;sup>2</sup> Volume One was published on June 5, 2012, and Volume 2 was published on January 8, 2013

On December 21, 2012, the Minister of Energy directed the Ontario Power Authority (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 (the "December 2012 Ministerial Directive").

The December 2012 Ministerial Directive did not amend the timelines for LDCs to achieve their net peak demand savings and cumulative net energy savings reduction targets. Therefore, the main focus of Oakville Hydro's efforts remains the achievement of CDM targets by December 31, 2014.

# 1 Conservation Framework

#### 1.1 Current Framework

On November 12, 2010, the OEB issued its Decision and Order in respect of the March 2010 Ministerial Directive regarding a proceeding under Section 74 of the Ontario Energy Board Act, 1998 amending all LDC licences (Board File No. EB-2010-0215). In that Decision, the OEB ordered that, to meet its mandatory CDM targets, "*Each licensed electricity distributor must, as a condition of its licence, deliver Board-Approved CDM Programs, OPA-Contracted Province-Wide CDM Programs, or a combination of the two*".<sup>3</sup>

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

Ontario's current CDM framework is a key step towards creating a culture of conservation in the Province. The March 2010 Ministerial Directive recognizes the importance of CDM activities for both electricity customers and the electricity system. CDM programs and initiatives help customers manage rising energy costs and support the provincial integrated supply plan, as well as address any local distribution and transmission supply constraints. The current framework was intended to enable customers to benefit from a suite of both Board-Approved CDM Programs and OPA Programs and be a portfolio that would meet both broad and specific customer needs.

The state of Board-Approved CDM Programs and the current suite of OPA Programs have not resulted in a full range of CDM offerings to customers. Certain initiatives which were to be included in the OPA Programs have not been introduced by the OPA, and others have met with limited customer interest. This has resulted in lower-thananticipated net peak demand and cumulative net energy savings (collectively, "Savings") for Oakville Hydro, and has restricted the associated opportunity for Oakville Hydro and many other LDCs to meet their CDM targets. The process to introduce changes to current OPA Programs and initiatives has been challenging, taking considerable effort by the LDC community, and has resulted in limited benefits to customers and Savings.

The December 2012 Ministerial Directive provides continuity of the OPA Programs, generally, and associated incentives for participants in these programs and initiatives, to the end of 2015. In the absence of a new CDM framework for 2015, however, the subsequent Savings would not be attributed to any LDC's CDM targets and in effect would be 'lost'. In addition, the establishment of defined administrative funding for 2015 and an incentive mechanism for LDCs for achieving any new CDM targets are required to provide the necessary business framework for continued CDM program

<sup>3</sup> EB-2010-0216, p.5

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implementation activities. Oakville Hydro anticipates that the specific elements of the CDM framework for 2015 will be established in the fall of 2013.

# **1.2 Future CDM Framework**

Oakville Hydro is supportive of the Provincial Government's renewed commitment for CDM activities in Ontario, as reflected in the discussion paper entitled "Conservation First – A Renewed Vision on Energy Conservation in Ontario" published by the Ministry of Energy in July 2013. Oakville Hydro is committed to working with the Provincial Government, other LDCs and entities in the electricity sector, and other stakeholders to develop the next framework for CDM programs in the Province.

The future CDM framework (i.e., post the transition year of 2015) should address the challenges of the current framework and build on its strengths. Currently overbuilt governance and excessive legal requirements results in a slow, bureaucratic process, with a burdensome administrative process. There is a misalignment of control and risk where LDCs have the accountability to achieve their respective CDM targets as a condition of distribution licence, but the authority for design and funding of CDM programs and activities are controlled substantially by the OPA.

A long-term commitment for CDM funding and an enhanced role of LDCs for the design and delivery of CDM programs is needed. This will allow LDCs to maintain current program infrastructure including LDC staff and third party contracts through 2015 and beyond. This also provides clarity and continuity for customers as they consider ways to better manage their electricity use within their homes and businesses.

# 2 Board-Approved CDM Programs

# 2.1 Introduction

As noted in Section 1.1, 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 licence, deliver Board-Approved CDM Programs, OPA-Contracted Province-Wide CDM Programs, or a combination of the two".* 

At this time, the implementation of TOU pricing has been deemed as a Board-Approved CDM Program that is being offered in Oakville Hydro's service area.

# 2.2 Time of Use Pricing

# 2.2.1 Background

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

In accordance with the March 2010 Ministerial Directive, the OEB is of the view that any evaluations of savings from TOU pricing should be conducted by the OPA for the Province, and then allocated to distributors.

At the time of preparation of this Report the OPA had retained the Brattle Group as the evaluation contractor for TOU pricing and will be working with an expert panel convened to provide advice on methodology, data collection, models, etc. Initial evaluations were conducted with five LDCs: Hydro One Networks Inc., Toronto Hydro-Electric System Limited, Hydro Ottawa Limited, Thunder Bay Hydro Electricity Distribution Inc. and Newmarket-Tay Power Distribution Ltd. Preliminary results from these five LDCs have not yet been released by the OPA.

Accordingly, the OPA has not released any verified results of Savings attributable to TOU pricing for Oakville Hydro. Therefore, Oakville Hydro is not able to provide any verified Savings related to TOU pricing at this time. However, the OPA has provided an

unofficial, preliminary estimate of 170 MW in net peak demand savings for the contribution of TOU pricing on a Province-wide basis. Given that Oakville Hydro's Residential customer base represents 1.3% of all Residential customers in Ontario, it is forecast that TOU pricing will contribute 1.3% of 170 MW, or 2.26 MW, to Oakville Hydro's target for net peak demand reduction.

### 2.2.2 Time of Use Program Description

#### Target Customer Type(s):

Residential and small business customers (up to 250,000 kWh per year)

#### Initiative Frequency:

Year-Round

#### **Objectives:**

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

#### Description:

In August of 2010, the OEB issued a final determination to mandate TOU pricing for Regulated Price Plan ("RPP") customers by June 2011, in order to support the Provincial Government's expectation for 3.6 million RPP customers 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

		Rates (cents/kWh)	
Effective Date	On Peak	Mid Peak	Off Peak
November 1, 2010	9.9	8.1	5.1
May 1, 2011	10.7	8.9	5.9
November 1, 2011	10.8	9.2	6.2
May 1, 2012	11.7	10.0	6.5
November 1, 2012	11.8	9.9	6.3
May 1, 2013	12.4	10.4	6.7

#### Delivery:

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

#### 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. By December 31, 2012 there were 59,484 RPP customers being billed using the TOU billing structure. This includes 58,256 Residential and 1,198 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

Results from Oakville Hydro's 2013 Customer Satisfaction Survey indicate that 73% of the survey respondents agree that TOU billing has changed their daily electricity usage patterns, only slightly lower than the average of 77% reported for all participating LDCs.

# 2.3 Oakville Hydro's Application with the Ontario Energy Board

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

# **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 has contracted with the OPA are shown in Table 3. Details concerning the OPA Programs are included in Appendix A.

Initiative	Master Agreement Schedule	Date Schedule Issued	Customer Class	In-Market Date for Oakville Hydro
Residential Program				
Appliance Retirement	Schedule B-1, Exhibit D	Jan 27, 2011	All residential rate classes	Feb 25, 2011
Appliance Exchange	Schedule B-1, Exhibit E	Jan 27, 2011	All residential rate classes	Feb 25, 2011
HVAC Incentives	Schedule B-1, Exhibit B	Jan 27, 2011	All residential rate classes	Feb 25, 2011
Conservation Instant Coupon Booklet	Schedule B-1, Exhibit A	Jan 27, 2011	All residential rate classes	Feb 25, 2011 <sup>4</sup>
Bi-Annual Retailer Event	Schedule B-1, Exhibit C	Jan 27, 2011	All residential rate classes	Feb 25, 2011 <sup>4</sup>
Retailer Co-op	Not Applicable	Not Applicable	All residential rate classes	Not Applicable
Residential Demand Response	Schedule B-3	Aug 22, 2011	All general service classes	Dec 15, 2012 <sup>4</sup>
Residential New Construction Program	Schedule B-2	Jan 27, 2011	All residential rate classes	July 1, 2013

Table 3: OPA Programs Contracted by Oakville Hydro with the OPA

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

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<sup>&</sup>lt;sup>4</sup> Correction of information provided in the 2011 Annual CDM Report for Oakville Hydro

Initiative	Master Agreement Schedule	Date Schedule Issued	Customer Class	In-Market Date for Oakville Hydro
Commercial and Institutional	Program			
Efficiency: Equipment Replacement Incentive ("ERII")	Schedule C-2	Jan 27, 2011	All general service classes	Feb 7, 2011 <sup>5</sup>
Direct Install Lighting	Schedule C-3	Jan 27, 2011	General Service < 50 kW	Feb 25, 2011
Existing Building Commissioning Incentive	Schedule C-6	Jan 27, 2011	All general service classes	Not Applicable
New Construction and Major Renovation Initiative	Schedule C-4	Jan 27, 2011	All general service classes	Feb 25, 2011
Energy Audit	Schedule C-1	Jan 27, 2011	All general service classes	Feb 25, 2011 <sup>4</sup>
Small Commercial Demand Response (part of the Residential Program)	Schedule B-3	Jan 27, 2011	All general service classes	Dec 15, 2012
Demand Response 3 (part of the Industrial Program)	Schedule D-6	Apr 4, 2011	General Service 50 kW & above	Feb 25, 2011 <sup>6</sup>
Industrial Program				
Process and System Upgrades	Schedule D-1	Apr 4, 2011	General Service 50 kW & above	Feb 25, 2011 <sup>6</sup>
Monitoring and Targeting	Schedule D-2	Apr 4, 2011	General Service 50 kW & above	Feb 25, 2011 <sup>6</sup>
Energy Manager	Schedule D-3	Apr 4, 2011	General Service 50 kW & above	Feb 25, 2011 <sup>6</sup>
Key Account Manager ("KAM")	Schedule D-4	Apr 4, 2011	General Service 50 kW & above	Not Applicable
Efficiency: Equipment Replacement Incentive (part of the C&I Program)	Schedule C-2	Jan 27, 2011	General Service 50 kW & above	Feb 25, 2011 <sup>5</sup>
Demand Response 3	Schedule D-6	Apr 4, 2011	General Service 50 kW & above	Feb 25, 2011 <sup>6</sup>

<sup>&</sup>lt;sup>5</sup> To ensure transition for Commercial and Institutional customers who no longer qualified for the previous Electricity Replacement Incentive Program, Oakville Hydro accepted applications for the ERII Program prior to signing the Master Agreement

<sup>&</sup>lt;sup>6</sup> Oakville Hydro provided information to customers interested in the Industrial Program prior to the finalization of the Program Schedules

Initiative	Master Agreement Schedule	Date Schedule Issued	Customer Class	In-Market Date for Oakville Hydro
Home Assistance Program				
Home Assistance Program	Schedule E-1	May 9, 2011	All residential rate classes	Jan 15, 2013

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:	<b>OPA</b> Program	Initiatives	Not in-Market
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Initiative Not in Market in 2012	Objective	Status
Residential Program		
Midstream Electronics	The objective of this initative is to encourage Retailers to promote and sell high efficency televisions, and for 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.
Aboriginal Conservation Program	First Nations programs are delivered by the OPA and results are attributed to LDCs for reporting	Launched in 2013 by the OPA.
Home Energy Audit Tool	This is a provincial online audit tool to engage customers in conservation and help drive customer participation to CDM programs	Never launched and removed from Schedule B-1 in June 2013.

Initiative Not in Market in 2012	Objective	Status
Commercial and Institut		
Direct Service Space Cooling	The objective of this initiative is to offer free servicing of air conditioning systems and refrigeration units for the purpose of achieving energy savings and demand reduction.	Not launched to market in 2011/2012. As per the OPA there no plans to launch this initiative in 2013.
Demand Response 1 ("DR1")	See below	See below
Industrial Program		
Demand Response 1	This initiative allows distribution customers to voluntarily reduce electricity demand during certain periods of the year pursuant to the DR 1 contract. The initiative provides DR payment for service for the actual electricity reduction provided during a demand response event.	No customer uptake for this initiative. As a result this initiative was removed from the Industrial Program in December 2012.

The Master Agreement includes a provision for a change management process. Collaboration between the OPA and LDCs commenced in 2011, and continued in 2012, as the change management process was implemented to enhance the OPA Program suite. While the change management process allows for modifications to the Master Agreement and initiative Schedules, the process is extremely time-consuming and does not lend itself to appropriate responsiveness to market requirements. For example, a proposed change to the application process for the Residential New Construction initiative, to allow multiple new homes to be processed on one application, was initiated by the Residential Working Group in November 2011 but not approved through the change management process until December 2012; an elapsed time of over a year. The ability to make Program / initiative enhancements in a more timely manner would give LDCs additional tools and greater flexibility to deliver programs in a way that meets 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 OPA's website at <u>http://www.powerauthority.on.ca/ldc-province-wide-program-documents</u> and additional initiative information can be found on the saveONenergy website at <u>https://saveonenergy.ca</u>. The targeted customer types, objectives, and individual descriptions for each Program initiative are detailed in Appendix A.

#### 3.2.1 Residential Program

#### Description:

Provides residential customers with programs and tools to help them understand and manage the amount of energy they use throughout their entire home and protect the environment. The Residential Program portfolio includes initiatives offering customers incentives for the use of energy-efficient equipment.

#### 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.

Delays in communication with regards to initiative offerings and results reporting have hampered the ability of LDCs to engage customers and promote participation.

Province-wide advertising by the OPA was substantially curtailed in 2012 versus 2011, and was essentially limited to only the Residential Demand Response Program (the "RDR Program", also known as *peaksaver* PLUS<sup>®</sup>). Previous experience suggests that participation rates for most Residential Program initiatives are positively impacted by the presence of Province-wide advertising to supplement local advertising by LDCs.

The most important of the Residential Program initiatives with respect to the provision of Savings are the RDR Program, the HVAC Incentives initiative, and the Appliance

Retirement initiative (also known as the Fridge & Freezer Pick-up). 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. Early experience in delivering the RDR Program is that many consumers are eager to utilize the IHD to help manage their electricity consumption.

Both the HVAC Incentives and the Appliance Retirement initiatives are also continuations of earlier similar programs for which no enhancements have been introduced since prior to 2011. In these cases, continuing declines in Province-wide customer participation rates are signs that adjustments are likely necessary in order to stimulate new interest by customers.

Based on the data published by the OPA in its Final 2012 Results Report, Oakville Hydro has experienced higher-than-average participation rates in both the Appliance Retirement and HVAC Incentives initiatives in both 2011 and 2012, and early response to the RDR Program has also been strong.

Oakville Hydro's Residential customer base represents about 1.3% of the Province-wide total, but the activity level for the Appliance Retirement initiative in 2012 was 1.8% of the Province-wide results, and for the HVAC Incentives initiative was 2.3% of the Province-wide results. In addition, results from the OPA's "Triple A In-Market Market Research Report" for Q4 2012 indicate that consumer awareness levels of the Residential Program initiatives for a grouping of LDCs in Central Ontario, including Oakville Hydro, are at or above the Province-wide averages for most of the initiatives. This suggests that Oakville Hydro's marketing and promotional activities in support of these initiatives have been at least as effective as most other LDCs.

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

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

#### Initiative Activities/Progress:

The following illustrates the progress achieved in 2012:

#### **Participation / Activity**

• Number of eligible appliances decommissioned was 598 units, or 1.8% of the Province-wide result of 34,146 units

#### Net Savings

 33 kW peak incremental peak demand savings and 238,004 kWh incremental energy savings

#### Contribution to CDM Targets

- 80 kW program-to-date net peak demand savings in 2014
- 2,123,343 kWh program-to-date, 2011-2014 cumulative net energy savings

#### Marketing & Promotional Tactics Used:

- Bill statement inserts distributed to approximately 58,000 households:
  - One campaign in July and August which was cross-promoted with the HVAC Incentives initiative
  - A second campaign in November and December which was stand-alone
  - A third campaign also in November and December which was crosspromoted with TOU pricing
- On-bill messaging distributed to approximately 58,000 households, one campaign in September and October
- Promotion in local newspapers and other publications:
  - Oakville Beaver, newspaper published tri-weekly with circulation of approximately 55,000 households, ¼ page ads, two placements in November and December
  - Oakville Beaver's "Living Green" magazine published annually in May with circulation of approximately 55,000 households, full page ad (cross-promotion with the HVAC Incentives initiative)
  - North Oakville Today, newspaper published weekly with circulation of approximately 36,000 households, full page ads, seven placements from January to June
  - Town of Oakville "Parks, Recreation & Culture Program Guide", magazine published annually in May with circulation of approximately 30,000 households, full page ad
  - North Oakville Today spring magazine, published annually in May with circulation of approximately 36,000 households, full page ad (cross-promotion with the HVAC Incentives initiative)
- Promotion on CHCH television, fifteen-second advertisement, one campaign in May and June and a second campaign in September running a total of 156 times, generating over 6 million impressions, co-branded with six other LDCs
- Promotion at five community arenas, advertising placed on rink boards all year generating an estimated 2.5 million impressions
- Promotion at public / community events (see Appendix C for event list):
  - Eleven events held on-site at local Retailers in the spring and fall interacting with approximately 600 people

- Two home / life style shows in the spring and fall, interacting with over 2,500 people
- Twelve community-related events interacting with over 4,000 people
- Created life-size fridge display to be used at events, as well as fridge magnets for distribution
- Distributed collateral materials for all Residential Program initiatives at all events
- Online banner advertising on The Weather Network in November, generating 140,505 impressions (cross-promotion with the HVAC Incentives initiative)
- Just Junk Google search engine optimization accumulating 880 visits and 1,296 views (co-branded with Horizon Utilities Corporation)
- Promotion on Oakville Hydro's website throughout 2012, 714 page-views with an average of over four minutes on-page

#### Additional Comments:

- This initiative (previously known as The Great Refrigerator Round-Up) has been offered by Oakville Hydro and other LDCs since 2007. Oakville Hydro has had strong participation in this initiative through the years; however, the participation rate may be approaching market saturation as appliances have a natural life cycle. The number of eligible appliances retired by customers of Oakville Hydro in 2012 declined by 32% versus 2011, mirroring the overall Province-wide results, which declined by approximately 39%.
- Participation rates in this initiative have been responsive to Province-wide advertising by the OPA, supported by LDCs. In 2012, however, the OPA provided no advertising support for this initiative.
- With the change in the eligibility requirements for 2013, increasing the minimum age of the appliance to a minimum of 20 years, further declines in participation rates are anticipated. Oakville Hydro understands that consideration is being given to remove this initiative from the Residential Program portfolio for this reason.
- Rather than strictly remove this initiative from the Residential Program portfolio, the OPA and LDCs could review what opportunities there are to include other appliances such as stoves, dishwashers, washers and dryers. The delivery framework for this initiative may provide a suitable foundation for a more holistic residential appliance retirement program.
- The experience of other jurisdictions should also be considered, where similar appliance retirement programs have typically included participant incentives of \$25 to \$50. No participant incentives have been offered for this initiative in Ontario since its introduction in 2007.
- The OPA and individual LDCs can also continue working to establish partnerships with Retailers, service providers and municipalities to better promote this initiative.

Oakville Hydro's experience with Just Junk, offering a 'referral fee' to attract participants, is one example of such a partnership.

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

#### Initiative Activities/Progress:

The following illustrates the progress achieved in 2012:

#### **Participation / Activity**

• Number of eligible appliances exchanged was 35 units, or 0.9% of the Provincewide result of 3,836 units

#### Net Savings

 5 kW peak incremental peak demand savings and 8,911 kWh incremental energy savings

#### Contribution to CDM Targets

- 6 kW program-to-date net peak demand savings in 2014
- 41,645 kWh program-to-date, 2011-2014 cumulative net energy savings

#### Marketing & Promotional Tactics Used:

- Promotion at four events held at Canadian Tire locations in June, interacting with almost 200 customers (see Appendix C for event list):
  - Distributed collateral materials for all Residential Program initiatives at all events
- Promotion on Oakville Hydro's website throughout 2012, more than 2,000 pageviews on Oakville Hydro's Conservation 'landing page' for all OPA Programs

#### Additional Comments:

- The number of eligible appliances exchanged for Oakville Hydro and Province-wide is essentially unchanged versus 2011.
- Eligible products and incentive amounts for this initiative are influenced by Retailers with no direct involvement from Oakville Hydro. The restrictive, limited and sometimes non-participation of local Retailers can diminish the potential Savings for this initiative.
- There was only one Retailer participant (Canadian Tire) in this initiative in the spring of 2012 versus three in 2011. The fall events have not had Retailer participation, therefore expected Savings have not materialized. Oakville Hydro and other LDCs found that employees of participating Retailers were not fully trained with respect to this initiative.

- Evaluation, measurement, and verification ("EM&V") results indicated that the Savings for retired room / window air conditioners has dropped, resulting in participating Retailers not accepting these units during the spring 2013 event.
- Notification regarding Retailer participation and eligible products continues to be delayed. Improved communications will aid in appropriate resource allocation and marketing of the initiative.
- This initiative may benefit from the disengagement of Retailers and allowing LDCs to conduct these events directly, possibly as part of a larger community engagement effort, with the backing of the service provider for the Appliance Retirement initiative, currently ARCA Canada, for appliance removal.
- The initiative appears to require more promotion from Retailers and LDCs.
- As the in-store events are limited to twice per year, it may be helpful to be able to provide consumers with an annual coupon incentive program, such as the Conservation Instant Coupon Booklet initiative, providing consumer product purchases throughout the year in addition to promoting these exchange events.

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

#### Initiative Activities/Progress:

The following illustrates the progress achieved in 2012:

#### Participation / Activity

• Number of eligible furnaces and central air conditioners ("CACs") installed was 1,990 units, or 2.3% of the Province-wide result of 85,221 units

#### Net Savings

 414 kW peak incremental peak demand savings and 678,390 kWh incremental energy savings

#### Contribution to CDM Targets

- 996 kW program-to-date net peak demand savings in 2014 including a reduction to the results reported for 2011 of 115 kW
- 6,187,680 kWh program-to-date, 2011-2014 cumulative net energy savings including a reduction to the results reported for 2011 of 812,392 kWh

#### Marketing & Promotional Tactics Used:

- Bill statement inserts distributed to approximately 58,000 households, one campaign in July and August which was cross-promoted with the Appliance Retirement initiative
- Promotion in local newspapers and other publications:

- Oakville Beaver, newspaper published tri-weekly with circulation of approximately 55,000 households, ¼ page ads, three placements in November and December
- Oakville Beaver's "Living Green" magazine published annually in May with circulation of approximately 55,000 households, full page ad (cross-promotion with the Appliance Retirement initiative)
- North Oakville Spring magazine, published annually in May with circulation of approximately 36,000 households, full page ad (cross-promotion with the HVAC Incentives initiative)
- North Oakville Today, newspaper published weekly with circulation of approximately 36,000 households, full page ad, twelve placements in January to November
- Promotion at public / community events (see Appendix C for event list):
  - Eleven events held on-site at local Retailers in the spring and fall interacting with approximately 600 people
  - Two home / life style shows in the spring and fall, interacting with over 2,500 people
  - o Twelve community-related events interacting with over 4,000 people
  - Distributed collateral materials for all Residential Program initiatives at all events
- Online banner advertising on The Weather Network in November, generating 140,505 impressions (cross-promotion with the Appliance Retirement initiative)
- Promotion on Oakville Hydro's website throughout 2012, more than 2,000 pageviews on Oakville Hydro's Conservation 'landing page' for all OPA Programs

# Additional Comments:

- The OPA has adjusted its previously-published figures for 2011 for this initiative. Province-wide the adjustment was a 17% reduction in terms of the number of eligible furnaces and CACs installed. For Oakville Hydro the adjustment was also a 17% reduction (the originally reported results were 2,627 eligible furnaces and CACs installed; this figure has been reduced by 448 to now 2,179 eligible furnaces and CACs); resulting in a reduction of 115 kW in net peak demand savings and 812,392 kWh in cumulative net energy savings.
- Allowing for the adjustment to the 2011 figures, participation rates for Oakville Hydro for this initiative in 2012 declined by 8.7% versus 2011, slightly higher than the decrease in the overall Province-wide results which declined by 8.1%. This decrease in participation rates may be related to the expiration of the 'ecoENERGY Retrofit – Homes' program, funded through Natural Resources Canada and also the Provincial Ministry of Energy, in March 2012; as this program offered additional incentives for the installation of energy efficient HVAC equipment.
- Supply channel partners require timeliness of the rebate process to maintain a positive relationship between consumers, contractors, the OPA, and the participating

LDC. Due to a contracting delay no applications were processed from, approximately, the end of October 2012 to February 2013.

 There may be cases where non-participating HVAC contractors are offering their own incentives, by discounting their installations to match value of the OPA incentive, to make the sale. Although this occurs outside of the initiative, these installations should be attributed to the appropriate LDC. This opportunity should be further explored by the OPA and LDCs.

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

#### Initiative Activities/Progress:

The following illustrates the progress achieved in 2012:

#### Participation / Activity

• Number of coupons redeemed was 452 coupons, or 1.5% of the Province-wide result of 30,891 coupons

#### Net Savings

• 3 kW peak incremental peak demand savings and 20,458 kWh incremental energy savings

#### Contribution to CDM Targets

- 20 kW program-to-date net peak demand savings in 2014
- 1,182,392 kWh program-to-date, 2011-2014 cumulative net energy savings including an increase to the results reported for 2011 of 16,133 kWh

#### Marketing & Promotional Tactics Used:

- Promotion at public / community events (see Appendix C for event list):
  - Eleven events held on-site at local Retailers in the spring and fall interacting with approximately 600 people
  - Two home / life style shows in the spring and fall, interacting with over 2,500 people
  - o Twelve community-related events interacting with over 4,000 people
  - Distributed collateral materials for all Residential Program initiatives at all events
- Issued Press Release in October
- Promotion on Oakville Hydro's website throughout 2012, more than 2,000 pageviews on Oakville Hydro's Conservation 'landing page' for all OPA Programs

#### Additional Comments:

• The OPA has adjusted its previously-published figures for 2011 for this initiative. Province-wide the adjustment was a 1.5% increase in the number of coupons redeemed. For Oakville Hydro the adjustment was a 1.6% increase (the originally reported results were 7,394 coupons redeemed; this figure has been increased by 120 to now 7,514 coupons redeemed), resulting in an increase 16,133 kWh in cumulative net energy savings (but no increase in peak demand savings).

- This initiative was ineffective for most of 2012 as the instant coupons (annual) were not available to consumers until September 2012. In addition, whereas coupon books were printed and mailed to residential households in 2011, in 2012 coupons were available only on-line. These changes in the delivery of the initiative likely resulted in far lower consumer awareness and, as such, Savings budgeted by LDCs did not materialize. Oakville Hydro's results were only 6% of 2011, mirroring the Province-wide results.
- The timeframe for Retailer submission of redeemed coupons vary from Retailer to Retailer and in some cases has been lengthy. The delay in reporting accurate participation results to LDCs limits the ability to react and respond to initiative performance or changes in consumer behaviour. This also resulted in the delayed deployment of the initiative in 2012.
- LDCs should be able to custom code all coupons to provide 100% allocation and push specific coupons based on localized needs.
- The product list could be distinctive from the Bi-Annual Retailer Event initiative in order to gain more consumer interest and uptake.
- Program evolution, including new products and review of incentive pricing for all initiatives involving coupons, should be a regular activity to ensure continued consumer interest.
- This initiative may benefit from an enabler such as a 'conservation loyalty card' to increase customer participation.

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

#### Initiative Activities/Progress:

The following illustrates the progress achieved in 2012:

#### **Participation / Activity**

• Number of coupons redeemed was 15,523 coupons, or 1.5% of the Provincewide result of 1,060,901 coupons

#### Net Savings

• 22 kW peak incremental peak demand savings and 391,857 kWh incremental energy savings

#### Contribution to CDM Targets

- 48 kW program-to-date net peak demand savings in 2014 including an increase to the results reported for 2011 of 2 kW
- 3,023,290 kWh program-to-date, 2011-2014 cumulative net energy savings including an increase to the results reported for 2011 of 127,785 kWh

#### Marketing & Promotional Tactics Used:

- Promotion at nine events held at Canadian Tire and Home Depot locations in the spring and fall, interacting with almost 300 customers (see Appendix C for event list):
  - Distributed collateral materials for all Residential Program initiatives at all events
- Promotion on Oakville Hydro's website throughout 2012, more than 2,000 pageviews on Oakville Hydro's Conservation 'landing page' for all OPA Programs

#### Additional Comments:

- The OPA has adjusted its previously-published figures for 2011 for this initiative. Province-wide the adjustment was a 9.4% increase in the number of coupons redeemed. For Oakville Hydro the adjustment was also a 9.4% increase (the originally reported results were 12,734 coupons redeemed; this figure has been increased by 1,197 to now 13,931 coupons redeemed), resulting in an increase of 2 kW in net peak demand savings and 127,785 kWh in cumulative net energy savings.
- Participation rates for Oakville Hydro for this initiative in 2012 increased by over 11% versus 2011, mirroring the trend in the overall Province-wide results. No explanation has been offered by the OPA for the increase in the number of coupons redeemed.
- This success of 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.
- The product list has changed very little over the past four years.
- Program evolution, including new products and review of incentive pricing for all initiatives involving coupons, must be a regular activity to ensure continued consumer interest.
- The product list should be distinctive from that of Conservation Instant Coupon Booklet initiative in order to gain more consumer interest and uptake.
- A review conducted by the Residential Working Group in Q4 2011 supported the experience of Oakville Hydro (and other LDCs) with this initiative and identified three areas for improvement:

- 1. introduction of product-focused marketing,
- 2. enhanced product selection, and
- 3. improved training for Retailers as retail staff tend not to be knowledgeable regarding the products or promotion.
- LDCs should be able to custom code all coupons to provide 100% allocation and push specific coupons based on localized needs.
- Communications by the OPA to LDCs regarding Retailer participation continues to be delayed. Improved communications will aid in appropriate resource allocation and marketing of the initiative.

#### 3.2.1.6 Retailer Co-op Initiative

#### Initiative Activities/Progress:

The following illustrates the progress achieved in 2012:

#### **Participation / Activity**

• None; initiative was not available from the OPA

#### **Net Savings**

None

#### **Contribution to CDM Targets**

None

#### Marketing & Promotional Tactics Used:

None

#### Additional Comments:

The availability of Retailers to actively promote energy efficient products and to train
retail staff with knowledge of such products would support the Residential Program
portfolio. There could be a valuable role for LDCs to work closely with local Retailers,
however many LDCs are limited by available staff resources and funding and may be
unable to undertake such activities.

#### 3.2.1.7 Residential New Construction Initiative (Schedule B-2)

#### Initiative Activities/Progress:

The following illustrates the progress achieved in 2012:

#### **Participation / Activity**

• None; initiative was not launched by Oakville Hydro

#### **Net Savings**

None

#### **Contribution to CDM Targets**

None

#### Marketing & Promotional Tactics Used:

• Attended home builder meetings to discuss the program with individual builders and developers.

#### Additional Comments:

- To date there has been limited participation Province-wide in this initiative; only 45 homes in total for both 2011 and 2012. The application process, which initially required one application for each new home, presented an administrative challenge for builders who are building multiple houses in a subdivision. As noted previously, this process was changed in December 2012 allowing for multiple homes on one application. In addition, typical feedback from new home builders is that the incentives available are too low. As such, Oakville Hydro did not introduce the initiative until July 2013.
- This initiative provides incentives directly to new home builders for incorporating energy efficiency into their buildings. To support this initiative and drive behavioural changes in new home buyers, LDCs need to provide education to consumers regarding the long-term benefits of choosing the energy efficient builder upgrade options without an immediate benefit to the consumer. Current funding for the Residential Program portfolio would not provide sufficient funds for such activities.

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

#### Initiative Activities/Progress:

The following illustrates the progress achieved in 2012:

#### Participation / Activity

- Number of load control devices installed was a net increase of 76 from 2011, or 0.1% of the Province-wide result of 78,838 net new load control devices installed versus 2011
- Number of IHDs installed was 67, or 0.1% of the Province-wide result of 49,689 IHDs installed

#### Net Savings

- 35 kW peak incremental peak demand savings (calculated) and 2,674 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

#### Contribution to CDM Targets

- 355 kW program-to-date net peak demand savings in 2014 (applies to Scenario 2 only)
- 3,684 kWh program-to-date, 2011-2014 cumulative net energy savings

#### Marketing & Promotional Tactics Used:

- Addressed direct mail to approximately 5,000 residential customers in December
- A total of 19,334 email blasts and 6,918 direct mail using AIR MILES<sup>®</sup> as a promotion tool in September in advance of the launch of the program
- Promotion at public / community events (see Appendix C for event list):
  - Eleven events held on-site at local Retailers in the spring and fall interacting with approximately 600 people
  - Two home / life style shows in the spring and fall, interacting with over 2,500 people
  - Twelve community-related events interacting with over 4,000 people
  - Distributed collateral materials for all Residential Program initiatives at all events
- Promotion on Oakville Hydro's website throughout the year, tracking a total of almost 2,700 page-views on pages related to *peaksaver* PLUS with the majority spending over two minutes on the page

#### Additional Comments:

- Oakville Hydro originally intended to launch this initiative to previous participants in the original *peaksaver*<sup>®</sup> program, offering a ZigBee<sup>®</sup>-enabled IHD with the capability of direct communication with the customer's smart meter. Due to continuing delays in the availability of this technology, Oakville Hydro proceeded to launch this initiative in December 2012 using an in-market IHD that receives consumption data via an optical sensor on the smart meter.
- The OPA has reduced the attributed peak demand savings per load control device in 2012 versus 2011. This impacted the peak demand savings for all devices installed since 2011. The net impact of this change on Oakville Hydro's results was a decrease of 35 kW in net peak demand savings in 2012 despite the increase in the number of installed load control devices.
- Versus the original *peaksaver* program, the key change to this initiative is the introduction of the IHD as a customer incentive, as opposed to the cash incentive of \$25 previously offered. Preliminary figures reported by the OPA suggested that IHDs would contribute energy savings of more than 200 kWh per unit. In the Final 2012 Results Report, however, no energy savings are attributed to IHDs; although the OPA suggests that energy savings may be attributed to IHDs at a later date. This raises concerns about the substantially higher-cost incentive, over \$200, and whether the initiative is truly cost-effective.

- Customers have complained about performance limitations of the IHD with the optical sensor, including inaccurate readings, the inability of the device to communicate over a long distance from the smart meter and its inability to adapt to statutory holidays for off peak energy pricing. This equipment can be prone to misalignment of the optical sensor during and following installation. This suggests that continuation of this initiative may require technology that communicates directly with the smart meter, which will necessitate early replacement of the Sensus meters installed by Oakville Hydro and higher-cost IHDs.
- There currently is no avenue for participants without the ability to provide demand response capabilities to obtain an IHD and gain energy saving benefits. Should Savings be attributed to IHDs in the future, this should be re-considered.

#### 3.2.2 Commercial and Institutional Program

#### **Description:**

Provides 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 the construction of new buildings that exceed 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:

To assist building owners and operators as well as tenants and occupants in achieving peak demand and energy savings, and 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. While lighting contractors have actively supported the C&I Program, other supply channel partners have been less supportive. This has been due to concerns including the complexity of the application process, the need to apply for projects in advance of their commencement, and insufficient incentives available.

As shown in Table 4, the Direct Service Space Cooling initiative has not been launched by the OPA; and as well there was no customer uptake for the Demand Response 1 initiative (the "DR1 Program") which was withdrawn by the OPA in December 2012. No other new initiatives have been added to replace these initiatives.

The most important of the C&I Program initiatives with respect to the provision of Savings are the Efficiency: Equipment Replacement Incentive Initiative ("ERII Program", also known as the Retrofit program) 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 ERII 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 ERII Program is somewhat limited within the service area of Oakville Hydro. The CDM targets for Oakville Hydro did not necessarily take this into account.

The DIL initiative, in which participants can receive more energy-efficient lighting and other products at no cost to a maximum of \$1,500 (previously \$1,000), restricts the customer to participating only once for each eligible facility. Oakville Hydro experienced strong participation in the previous version of this initiative, the 'Power Savings Blitz', prior to 2011 and as such has experienced lower participation rates in 2011 and 2012 versus the Province-wide average. Oakville Hydro's participation rates for the ERII Program, however, are slightly higher than the Province-wide average although the average Savings per project are lower than 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 and 2012 the C&I Working Group, comprised of representatives of LDCs and the OPA, has strived to enhance the existing C&I Program portfolio and rectify identified deficiencies. This has proven to be a challenging undertaking, normally taking months to complete even relatively minor changes due to the current CDM framework. Program management by LDCs has been hampered by varying interpretations of initiative eligibility requirements, a somewhat inflexible online system of checks and balances, and staffing shortfalls at the OPA to address questions and issues in a timely manner. Overbuilt governance, numerous initiative requirements, complex program structure and lengthy change management have restricted growth without providing an improvement in customer participation and verified Savings. In addition, EM&V studies

and results published by the OPA have not yet achieved transparency. LDCs are held accountable for these results yet are, mostly, completely removed from the process.

Despite these challenges the C&I Working Group, working in cooperation with the OPA, have managed to address a number of issues in 2012 with respect to the C&I Program portfolio. One accomplishment in particular was the introduction of an expedited change management process as a means to accelerate certain initiative changes.

Looking ahead, there is minimal opportunity to make valuable changes to the current C&I Program portfolio and have these changes reflected in the 2014 results for LDCs. The project life cycle for many C&I customers can involve months, if not years, of preproject activities such as scoping, justification and budgeting. As such, LDCs and the OPA should look beyond the shortcomings of current initiatives and work to launch new programs, built on the strengths of the current C&I Program portfolio, to better meet the needs of the industry and consumers.

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

#### Initiative Activities/Progress:

The following illustrates the progress achieved in 2012:

#### **Participation / Activity**

• Number of ERII Program projects completed was 99, or 1.8% of the Provincewide result of 5,605 units

#### Net Savings

 755 kW peak incremental peak demand savings and 3,837,793 kWh incremental energy savings

#### Contribution to CDM Targets

- 1,200 kW program-to-date net peak demand savings in 2014 including an increase to the results reported for 2011 of 46 kW
- 20,941,598 kWh program-to-date, 2011-2014 cumulative net energy savings including an increase to the results reported for 2011 of 1,112,458 kWh

#### 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, fullpage ads in four issues and two-page ads in two issues
- Conducted four 'Lunch & Learn' workshops throughout the year for business customers, approximately 15 people attended each workshop
  - Topics included Air Compressors, Air Conditioning systems, Demand Management Strategies, Demand Response

- Collateral material available for all C&I Program initiatives provided
- Initiated the development of two business case studies
- Issued Press Release in October
- Promotion on Oakville Hydro's website throughout 2012, tracking 73 page-views

#### **Additional Comments:**

- Oakville Hydro experienced an increase to the number of completed projects for 2011 for this initiative, adjusted for projects completed by customers in 2011 but for which the post-project application process had not been finished until after the OPA published its Final 2011 Results Report. Province-wide the adjustment was an additional 303 projects completed. For Oakville Hydro the adjustment was an additional five projects completed, to 44 from 39 as reported previously. This resulted in an increase of 46 kW in net peak demand savings and 1,112,458 kWh in cumulative net energy savings. That over 300 projects Province-wide were not included originally for 2011 reflects one of the inherent challenges associated with this initiative; many customers find the application process to be quite complicated and are often not aware of the requirements to provide documentation following the completion of their project.
- The online application process serves the initiative's objectives for improving documentation in support of projects and verifying the resulting Savings, but does not work effectively as a 'self-serve' process for the customer to navigate. Customers and/or their contractors and other supply channel partners supporting their projects typically require the assistance of highly trained LDC personnel, such as CDM Program Agents and sales and technical staff, to properly process their applications. For this reason many contractors have elected not to participate in this initiative. This is particularly true for commercial HVACR contractors and other supply channel partners offering measures other than lighting.
- To address these concerns with the application process, Oakville Hydro and other LDCs continue to offer training workshops as well as one-on-one sessions with contractors and other supply channel partners. Although this has been an effective method of overcoming process issues and encouraging submissions, it also highlights the complexity and time-consuming nature of the application process. As such, contractors and other supply channel partners continue to directly process applications on behalf of their customers in the majority of instances. Continued focus to further streamline the application process is essential to the future success of this initiative.
- The requirement for pre-approval of ERII Program projects prior to their commencement is a barrier, particularly for participants that need to replace equipment that has failed and must be replaced immediately. In addition, for some classes of equipment, customers and contractors continue to convey that the incentives available are insufficient to warrant the additional expenditure required for more energy efficient equipment. In the second half of 2013, changes to the

'prescriptive' application process for the emergency replacement of HVAC equipment have been implemented to allow for project applications to be completed after-thefact, and the incentives available have been increased. This change for these types of projects will be informative to determine whether the willingness of customers, contractors and supply channel partners to participate in this initiative will improve.

- Administratively, the processes used by the OPA for application review and approval must also continue to improve. Great strides were made in 2012 with respect to the payment of participant incentives by the OPA, so that these funds can be provided to customers. Other processes, however, such as the handling of requests to waive project eligibility requirements, which can take months, remain an impediment to the success of this initiative.
- Despite the challenges described above, Oakville Hydro experienced an increase in the number of new ERII Program project applications submitted of over 70% in 2012 versus 2011. This increase was undoubtedly influenced by a general improvement in economic conditions and outlook, allowing more customers to proceed with capital projects. Lighting replacements or improvements continue to represent the most common type of project.
- In 2012 the average size of a completed ERII Program project for customers of Oakville Hydro was 7.6 kW in incremental net peak demand savings and 38.8 MWh in incremental net energy savings. This compares to the Province-wide averages of 10.9 kW and 56.2 MWh, respectively; in each case about 30% higher than for Oakville Hydro. This suggests that the potential savings for eligible customers for this initiative within the service area of Oakville Hydro is less than that of the provincial average. One reason for this difference may be that the proportion of non-lighting projects, which tend to result in higher Savings than for lighting projects, may be much lower for Oakville Hydro than for other LDCs. Further, the average size of completed projects for customers of Oakville Hydro declined by almost 30% versus 2011.
- Oakville Hydro implemented certain activities in support of this initiative in 2012. Onbill financing for eligible ERII Program projects was introduced in the fall of 2012, however no customers have taken advantage of this offer to date. In October 2012 an outbound calling campaign was initiated offering a free energy assessment to approximately 100 customers in 2012 and approximately 60 customers in 2013. No ERII Program projects resulted from this activity in 2012, although projects have resulted in 2013 that will be reflected in next year's Annual Report.
- Estimated completion dates for ERII Program projects tend to be inaccurate and are typically delayed by at least three months. As an outcome of the December 2012 Ministerial Directive, customers with approved ERII Program projects with an expected completion date near the end of 2014 currently have some security that they will be compensated for completing these projects. While the customer will still receive their incentives, however, LDCs will not receive any contributions to their

CDM targets for previously-approved projects that are not completed by December 31, 2014.

# 3.2.2.2 Direct Install Lighting Initiative (Schedule C-3)

## Initiative Activities/Progress:

The following illustrates the progress achieved in 2012:

## **Participation / Activity**

 Number of DIL projects completed was 112, or 0.6% of the Province-wide result of 18,494 units

## Net Savings

• 89 kW peak incremental peak demand savings and 336,964 kWh incremental energy savings

## Contribution to CDM Targets

- 311 kW program-to-date net peak demand savings in 2014 including an increase to the results reported for 2011 of 29 kW
- 3,548,827 kWh program-to-date, 2011-2014 cumulative net energy savings including an increase to the results reported for 2011 of 356,551 kWh

## Marketing & Promotional Tactics Used:

- Door-to-door contact by Oakville Hydro's delivery partner throughout the year
- Included in collateral material available for all C&I Program initiatives
- Promotion on Oakville Hydro's website throughout 2012 recording 19 page-views

# Additional Comments:

- The OPA has adjusted its previously-published figures for 2011 for this initiative. Province-wide the adjustment was a 2.2% increase in terms of the number of projects completed. For Oakville Hydro the adjustment was a 13.7% increase (the originally reported results were 183; this figure has been increased by 25 to now 208 projects completed), resulting in an increase of 29 kW in net peak demand savings and 365,551 kWh in cumulative net energy savings.
- As noted earlier, successful execution of the previous version of this initiative, the 'Power Savings Blitz' has resulted in diminished potential for the initiative in Oakville Hydro's service area. This is the primary reason that the number of completed projects was reduced by 46.2% in 2012 versus 2011.
- Due to the saturation of this initiative within the service area of Oakville Hydro, the increase to the maximum participant incentive of \$1,500, excluding standard incentives, effective December 2012 may have little impact either on customer participation rates.

- Significant increases to the cost of materials used in this initiative continue to be a barrier for delivery partners. Many appropriate measures are not being installed as the delivery partner's purchase price is higher than the pricing offered by the OPA, leaving no margin. An example would be medium bay fixtures, where the current pricing allowance is less than the cost of the fixture alone. (Increases were made to the allowance for certain eligible measures effective September 2013.)
- A significant number of customers have not participated due to a lack of appropriate measures for their business. Adding measures such as directional LED lighting or outdoor lighting measures would make the initiative attractive for many retail and food service customers.

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

## Initiative Activities/Progress:

## Participation / Activity

None

## **Net Savings**

None

## 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 2012, however no data concerning the number of page-views is available, but page-views are expected to be very low

#### Additional Comments:

Despite early interest from some potential participants approached by Oakville Hydro, experience has shown that there is minimal potential for participation in this initiative within the service area of Oakville Hydro as currently offered. The prescribed implementation of this initiative requires that all measurements of electricity usage, both pre- and post-project, be conducted within the months of June through September. Given that the pre-project phase involves data collection for 60 consecutive days, all pre-project measurements must commence in early June or the implementation of the improvements will not be credited until the following calendar year. Further, technology exists to collect the pre-project data in as little as two weeks. The requirement to collect data for 60 days should be revised to allow for the collection of data for a sufficient period appropriate to the technology used for this purpose.

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

#### Initiative Activities/Progress:

The following illustrates the progress achieved in 2012:

## Participation / Activity

None

## Net Savings

None

## **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 2012, however no data concerning the number of page-views is available, but page-views are expected to be very low

## 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 in 2011 or 2012, although results are expected in 2013-2014.
- The application process for 'custom' projects requires considerable customer support and skilled LDC staff, and potential participants often express that the effort involved exceeds the value of the incentives available.
- Estimated completion dates for new construction projects tend to be inaccurate and are typically delayed by at least six months. As an outcome of the December 2012 Ministerial Directive, new facilities with a completion date near the end of 2014 currently have some security that they will be compensated for choosing energy efficient measures. While the customer will still receive their incentives, however, LDCs will not receive any contributions to their CDM targets for previously-approved projects that are not completed by December 31, 2014.

# 3.2.2.5 Energy Audit Initiative (Schedule C-1)

#### Initiative Activities/Progress:

The following illustrates the progress achieved in 2012:

#### **Participation / Activity**

None

## **Net Savings**

None

# **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 2012, however no data concerning the number of page-views is available, but page-views are expected to be very low

## Additional Comments

- Oakville Hydro had only one participant in this initiative in 2012, however the Energy Audit was not completed by year-end; so no results are attributed to 2012, although results are expected in 2013-2014.
- This initiative is an 'enabling' initiative, designed to support subsequent participation in the ERII Program or other initiatives within the C&I Program portfolio. There are no Savings attributed to Energy Audits.
- Energy Audit reports from consultants vary considerably and in some cases, while they adhere to the initiative requirements, do not provide value for the Participant. A standard template with specific energy saving calculation requirements should be considered.
- Customers look to the LDCs to recommend Energy Audit companies. A centralized prequalified list provided by the OPA may be beneficial.

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

#### Initiative Activities/Progress:

The following illustrates the progress achieved in 2012:

#### **Participation / Activity**

None

#### Net Savings

None

#### **Contribution to CDM Targets**

None

#### Marketing & Promotional Tactics Used:

None

# Additional Comments:

 The launch of the commercial version of this initiative is now underway and is expected to deliver results in 2013 and 2014. Changes to the initiative made in March 2013 to increase the participant-based funding specifically for small commercial customers, to address the expectations of delivery partners for adequate compensation to service this customer segment, are expected to 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 2012:

## **Participation / Activity**

None

## Net Savings

None

## Contribution to CDM Targets

- 82 kW program-to-date net peak demand savings in 2014 (from participants in 2011)
- 4,392 kWh program-to-date, 2011-2014 cumulative net energy savings (from participants in 2011)

# Marketing & Promotional Tactics Used:

- 'Lunch & Learn' sessions for eligible customers:
  - One session in June, attended by twelve participants representing eight companies
  - A second session in November, attended by fifteen participants representing nine companies

#### Additional Comments:

• See discussion in Section 3.2.3.5 below.

# 3.2.3 Industrial Program

#### Description:

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

This Program is geared to support larger facilities that are prepared to pursue longer term energy efficiency projects that are typically capital-intensive. However, there are relatively few such facilities that are 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") are 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.

Due to the size, scope and long lead time associated with projects that may be eligible for Industrial Program initiatives, the December 2012 Ministerial Directive provides some security for the continuation of the conservation programs and associated compensation for the participant into 2015, although any subsequent Savings would not be attributed to an LDC's CDM targets.

Extensive legal documents, complex program structure and lengthy change management have restricted the change and growth of this portfolio. While the expedited change management has benefited the C&I Program portfolio, the Industrial Program portfolio has not seen the same results due to the narrow scope of the process. For 2013, a change to the threshold for 'small capital projects' and a new agreement for such projects are expected to improve the number of projects and Savings achieved for the Process and Systems Upgrades Initiatives ("PSUI"). Likewise, a decision to proceed

with natural gas load displacement generation projects will also increase uptake; although results may not be counted towards Oakville Hydro's CDM targets due to inservice dates beyond 2014.

Looking ahead, there is minimal opportunity to make additional valuable changes to the current Industrial Program portfolio and have these changes reflected in Oakville Hydro's results in either 2013 or 2014; for reasons similar to those described for the C&I Program.

# 3.2.3.1 Process and Systems Upgrades Initiative (Schedule D-1)

# Initiative Activities/Progress:

The following illustrates the progress achieved in 2012:

## **Participation / Activity**

None

## Net Savings

None

## **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 2012, however no data concerning the number of page-views is available, but results are expected to be very low

# Additional Comments:

- Customer interest in this initiative is 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 or 2012, although results are expected in 2013-2014.
- The OPA's standard form of contract for this initiative is a lengthy and complicated document, and contains particular clauses, such as the contract term, that many customers are not prepared to accept. As a result, in some instances Oakville Hydro has encouraged customers to consider applying for the ERII Program instead. As noted above, a key to making PSUI successful is 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 and Targeting Initiative (Schedule D-2)

#### Initiative Activities/Progress:

The following illustrates the progress achieved in 2012:

#### **Participation / Activity**

None

#### Net Savings

None

#### **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, however no data concerning the number of page-views is available, but results are expected to be very low

#### Additional Comments:

- This initiative was originally targeted at larger customers with the internal capacity to review electricity usage data. This review requires the customer to employ an Energy Manager, or a person with equivalent qualifications, which has been a barrier for some potential participants in this initiative. The minimum Savings required for this initiative can also present a significant challenge for smaller customers. As such, Oakville Hydro has received no applications for this initiative to date.
- Through the change management process, changes were made in August 2012 to this initiative and to the ERII Program to allow smaller facilities to employ monitoring and targeting systems as ERII Program projects.

#### 3.2.3.3 Energy Manager Initiative (Schedule D-3)

#### Initiative Activities/Progress:

The following illustrates the progress achieved in 2012:

#### **Participation / Activity**

None

#### Net Savings

None

#### **Contribution to CDM Targets**

None

# Marketing & Promotional Tactics Used:

• Not applicable

## Additional Comments:

- Oakville Hydro has not applied for a Roving Energy Manager under this initiative due to concerns that there is insufficient market potential to meet the minimum requirement for peak demand savings. Oakville Hydro will explore opportunities that would support an application for a Roving Energy Manager as they may arise.
- Oakville Hydro also had no customers that were interested in applying for an Embedded Energy Manager under this initiative in 2011 or 2012, although one such application may be made in 2013 or 2014.

## 3.2.3.4 Key Account Manager Initiative (Schedule D-4)

#### Initiative Activities/Progress:

The following illustrates the progress achieved in 2012:

#### **Participation / Activity**

None

#### **Net Savings**

None

#### **Contribution to CDM Targets**

None

#### Marketing & Promotional Tactics Used:

None

#### Additional Comments:

• As noted previously, Oakville Hydro does not qualify for this initiative as it has no customers with the required minimum of 5 MW in annual peak demand,

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

#### Initiative Activities/Progress:

The following illustrates the progress achieved in 2012:

#### **Participation / Activity**

None

#### Net Savings

None

# Contribution to CDM Targets

- 60 kW program-to-date net peak demand savings in 2014 (from participants in 2011)
- 1,347,300 kWh program-to-date, 2011-2014 cumulative net energy savings (from participants in 2011)

# Marketing & Promotional Tactics Used:

• See discussion in Section 3.2.2.1

## Additional Comments:

• See discussion in Section 3.2.2.1

# 3.2.3.6 Demand Response 3 Program (Schedule D-6)

#### Initiative Activities/Progress:

The following illustrates the progress achieved in 2012:

#### **Participation / Activity**

None

#### **Net Savings**

None

# **Contribution to CDM Targets**

None

# Marketing & Promotional Tactics Used:

- 'Lunch & Learn' sessions for eligible customers:
  - $\circ\,$  One session in June, attended by twelve participants representing eight companies
  - A second session in November, attended by fifteen participants representing nine companies

#### 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.
- In a comparison of Oakville Hydro's results for this initiative in 2011 versus other LDCs similar in size (i.e., total customer accounts), it was observed that these LDCs typically had 10 or more participants (both C&I and Industrial customers) contributing an average of 70 to 800 kW per facility; Oakville Hydro had only one participant in 2012 contributing 80 kW.

- Participant incentives for this initiative were reduced by the OPA effective January 2013. Partially off-setting this change, however, Aggregators are now 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.
- The OPA will not identify those customers of Oakville Hydro that participate in the DR3 Program due to contractual requirements with the Aggregators. Oakville Hydro could be more effective in targeting potential participants for this initiative if participant information was fully disclosed.
- Oakville Hydro's experience with the both the DR1 and DR3 Programs, and the limited results achieved, highlights the need for other demand response offerings that are designed and delivered by LDCs so as to better suit the needs of our customers.

# 3.2.4 Low Income Program (HOME ASSISTANCE Program) (Schedule E-1)

Further details concerning this Program are provided in Appendix A.

## Initiative Activities/Progress:

The following illustrates the progress achieved in 2012:

## **Participation / Activity**

• None; Program was not launched by Oakville Hydro in 2012

# Net Savings

None

# **Contribution to CDM Targets**

None

# Marketing & Promotional Tactics Used:

None

# Additional Comments:

• Oakville Hydro completed negotiations with its third party delivery agent for the delivery of this Program in late 2012. Results are expected in 2013 and 2014.

# 3.2.5 Pre-2011 Programs

#### Description:

Similar to the C&I Program, provides 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.

# Targeted Customer Type(s):

Commercial, Institutional, Agricultural, Multi-family buildings, Industrial

#### Objective:

To assist building owners and operators as well as tenants and occupants in achieving peak demand and energy savings, and facilitate the growth of a 'culture of conservation' among these communities as well as the supply chains which serve them.

#### Discussion:

While the pre-2011 Programs were not in-market in 2012, Oakville Hydro was credited for activities in the High Performance New Construction Program (the "HPNC Program").

It is note-worthy that Oakville Hydro's contribution to its CDM targets from the pre-2011 Programs is lower than that of many other LDCs. For the Electricity Rebate Incentive Program ("ERIP"), for example, the 26 ERIP projects completed by customers of Oakville Hydro in 2011 represent about 3% of its eligible customer base. Other LDCs have experienced participation rates of 5 to 10% of their eligible customer bases. One reason that Oakville Hydro did experience lower participation rates in the pre-2011 Programs than other LDCs was likely related to the prevailing local economic conditions.<sup>7</sup>

Further, as was noted earlier for the ERII Program, the average size of an ERIP project for Oakville Hydro was 9.2 kW and 51.7 MWh; lower than the Province-wide average of 10.7 kW and 60.0 MWh. This provides further support that the potential Savings for energy efficiency projects for non-Residential customers within the service area of Oakville Hydro is less than that of the provincial average.

Further details concerning ERIP and the HPNC Program are provided in Appendix B.

# 3.2.5.1 Electricity Retrofit Incentive Program

#### Initiative Activities/Progress:

The following illustrates the progress achieved in 2012:

# **Participation / Activity**

None

<sup>&</sup>lt;sup>7</sup> In its publication "Best Planning Estimates of Population, Occupied Dwelling Units and Employment, 2011-2031" published in June 2011, the Region of Halton reports that growth in the Region has been slower than forecasted.

# **Net Savings**

None

# Contribution to CDM Targets

- 240 kW program-to-date net peak demand savings in 2014 (from participants in 2011)
- 5,372,354 kWh program-to-date, 2011-2014 cumulative net energy savings (from participants in 2011)

# Marketing & Promotional Tactics Used:

None

# Additional Comments:

None

# 3.2.5.2 High Performance New Construction Program

## Initiative Activities/Progress:

The following illustrates the progress achieved in 2012:

## Participation / Activity

 Number of projects completed was one, or 1.4% of the Province-wide result of 69 units

# Net Savings

• 52 kW peak incremental peak demand savings and 164,845 kWh incremental energy savings

# Contribution to CDM Targets

- 100 kW program-to-date net peak demand savings in 2014 including an increase to the results reported for 2011 of 26 kW
- 1,303,614 kWh program to date, 2011-2014 cumulative net energy savings including an increase to the results reported for 2011 of 350,665 kWh

# Marketing & Promotional Tactics Used:

None

# Additional Comments:

 The OPA has adjusted its previously-published figures for 2011 for this initiative. Province-wide the adjustment was an increase of 34 projects completed. For Oakville Hydro the adjustment was an increase of one project, for an adjusted total of two projects completed. This resulted in an increase of 26 kW in net peak demand savings and 350,665 kWh in cumulative net energy savings.

# 4 2012 LDC CDM Results

# 4.1 Participation and Savings

Oakville Hydro's participation levels and resulting Savings from the OPA Programs, as reported in Final 2012 Results Report published by the OPA, are summarized in Tables 5a and 5b.

		Table 1: Oa	akville Hydi	o Electrici	ty Distribu	Ition Inc. Init	iative and P	rogram Level	Savings by Y	(ear (Scenario 1)				Program-to-Date Veri	ied Progress to Target
			Increment					Demand Savir			cremental Energy Sa			(exclud	les DR)
Initiative	Unit		ogram activity specified repo					gs from activity orting period)	within the	(new energy s	avings from activity v reporting period		ecmea	2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
		2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014	2014
Consumer Program															
Appliance Retirement	Appliances	879	598			47	33			352,333	238,004			80	2,123,343
Appliance Exchange	Appliances	32	35			3	5			4,163	8,911			6	41,645
HVAC Incentives	Equipment	2,627	1,990			697	414			1,241,226	678,390			1,111	7,000,072
Conservation Instant Coupon Booklet	Items	7,394	452			17	3			276,221	20,458			20	1,166,259
Bi-Annual Retailer Event	Items	12,734	15,523			25	22			429,984	391,857			46	2,895,505
Retailer Co-op	Items	0	0			0	0			0	0			0	0
Residential Demand Response (switch/pstat)	Devices	696	772			390	355			1,009	2,674			0	3,684
Residential Demand Response (IHD)	Devices	0	67			0				0					
Residential New Construction	Homes	0	0			0	0			0	0	_		0	0
Consumer Program Total						1,179	833			2,304,937	1,340,294			1,264	13,230,508
Business Program	Brojett				1		755			2,002,022	3 023 703			1.074	10.020 110
Retrofit Direct Install Lighting	Projects	39 183	99			415	755			2,093,673 564,846	3,837,793 336,964			1,154	19,829,140
	Projects Buildings	185	112 0			220	89			564,846	336,964			282	3,183,276
Building Commissioning New Construction	Buildings	0	0			-	0			0				0	-
Energy Audit	Audits	0	0			0	0			0	0			0	0
Small Commercial Demand Response	Devices	0	0			0	0			0	0			0	0
Small Commercial Demand Response (IHD)	Devices	0	0			0	0			0	0			0	0
Demand Response 3	Facilities	1	1			82	82			3,198	1,194			0	4,392
	raciitites	1				717	926			2,661,717	4,175,952			1,436	23,016,809
Business Program Total						/1/	920			2,001,/1/	4,175,952			1,450	23,016,809
Industrial Program Process & System Upgrades	Projects	0	0	1	1	0	0	<u>г г</u>		0	0	-		0	0
Monitoring & Targeting	Projects	0	0			0	0			0	0			0	0
Energy Manager	Projects	0	0		-	0	0			0	0			0	0
Retrofit	Projects	5				60				336.825				60	1.347.300
Demand Response 3	Facilities	1	0			21	0			1.237	0			0	1,237
Industrial Program Total	rucincies	-				81	0			338,062	0			60	1,348,537
Home Assistance Program							Ů	I		550,002				~	2,540,557
Home Assistance Program	Homes	0	0		1	0	0	1 1		0	0			0	0
Home Assistance Program Total				1	1	0	0			0	0			0	0
Pre-2011 Programs completed in 2011											-	-			-
Electricity Retrofit Incentive Program	Projects	26	0	1	1	240	0	<u>г г</u>		1,343,088	0	1		240	5,372,354
High Performance New Construction	Projects	1	1			22	52			114,603	164,845			74	952,949
Toronto Comprehensive	Projects	0	0			0	0			0	0			0	0
Multifamily Energy Efficiency Rebates	Projects	0	0		-	0	0			0	0	-		0	0
LDC Custom Programs	Projects	0	0			0	0			0	0			0	0
Pre-2011 Programs completed in 2011 To						262	52			1,457,692	164,845			314	6,325,303
Pre-2011 Programs completed in 2011 To	Lai					202	32			1,437,092	104,045			314	0,323,303
Other .	Projecto			1	1							1			
Program Enabled Savings	Projects	0	0			0	0			0	0			0	0
Time-of-Use Savings Other Total	Homes		L		I		0				0			0	0
	oculto						-3				296,333			-12	1,160,199
Adjustments to Previous Year's Verified R	esults										,	-			
Energy Efficiency Total						1,746	1,373			6,756,963	5,677,222	-		3,074	43,911,844
Demand Response Total (Scenario 1)						493	438			5,444	3,869			0	9,313
OPA-Contracted LDC Portfolio Total (inc.						2,239	1,808			6,762,407	5,977,423			3,062	45,081,356
Activity & savings for Demand Response resources f	or each year and	Due to the lim	nited timeframe	e of data, whic	ch didn't inclu	ide the summer r		HD results have I	een deemed			Full O	EB Target:	20,700	74,060,000
quarter represent the savings from all active facilitie	and the Annual Second					ort will be left bla									

## Table 5a: Summary of Oakville Hydro's Participation Levels and Savings Achieved as of December 31, 2012

Oakville Hydro Electricity Distribution Inc.

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#### Oakville Hydro Electricity Distribution Inc. 2012 CDM Annual Report

Initiative	Unit	l (new prog the sp	(new program activity occurring within the specified reporting period) within the spec		mental Pea (kV k demand s he specified	Mental Peak Demand Savings (kW)         Net Incremental Energy Savings (kWh)           demand savings from activity specified reporting period)         (new energy savings from activity within the specified reporting period)				Vh) in the	Target (e 2014 Net Annual Peak Demand Savings (kW)	Verified Progress to xcludes DR) 2011-2014 Net Cumulative Energy Savings (kWh)			
	_	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014	2014
Consumer Program	1				_						1	-			
Appliance Retirement	Appliances	0				0				0				0	0
Appliance Exchange	Appliances	0				0				0				0	0
HVAC Incentives	Equipment	-448				-115				-203,098				-115	-812,392
Conservation Instant Coupon Booklet	items	120				0				4,033				0	16,133
Bi-Annual Retailer Event	Items	1,197				2				31,946				2	127,785
Retailer Co-op	Items	0				0				0				0	0
Residential Demand Response (switch/pstat)*	Devices	0				0				0				0	0
Residential Demand Response (IHD)	Devices	0				0				0				0	0
Residential New Construction	Homes	0				0				0				0	0
Consumer Program Total						-113				-167,118				-113	-668,474
Business Program															
Retrofit	Projects	5				46				278,114				46	1,112,458
Direct Install Lighting	Projects	25				38				97,670				29	365,551
Building Commissioning	Buildings	0				0				0				0	0
New Construction	Buildings	0				0				0				0	0
Energy Audit	Audits	0				0				0				0	0
Small Commercial Demand Response (switch/pstat)*	Devices	0				0				0				0	0
Small Commercial Demand Response (IHD)	Devices	0				0				0				0	0
Demand Response 3*	Facilities	0				0				0				0	0
Business Program Total						85				375,785				76	1,478,008
Industrial Program															
Process & System Upgrades	Projects	0				0				0				0	0
Monitoring & Targeting	Projects	0				0				0				0	0
Energy Manager	Projects	0				0				0				0	0
Retrofit	Projects	0				0				0				0	0
Demand Response 3*	Facilities	0				0				0				0	0
Industrial Program Total						0				0				0	0
Home Assistance Program											•	•			•
Home Assistance Program	Homes	0				0				0				0	0
Home Assistance Program Total						0				0				0	0
Pre-2011 Programs completed in 2011															
Electricity Retrofit Incentive Program	Projects	0				0				0				0	0
High Performance New Construction	Projects	1				26				87,666				26	350,665
Toronto Comprehensive	Projects	0				0				0				0	0
Multifamily Energy Efficiency Rebates	Projects	0				0				0				0	0
LDC Custom Programs	Projects	0				0				0				0	0
Pre-2011 Programs completed in 2011 Total		-			-	26				87,666				26	350,665
										67,000		<u> </u>			350,005
Deserver Perchart Project	Designets	-				-				-	-	1			
Program Enabled Savings	Projects Homes	0				0				0		-		0	0
Time-of-Use Savings	Homes					-						-			
Other Total						0				0				0	0
Adjustments to Previous Year's Verified Results						-3				296,333				-12	1,160,199
<ul> <li>Activity &amp; savings for Demand Response resources for each ye represent the savings from all active facilities or devices contract 1, 2011.</li> </ul>															

#### Table 2: Adjustments to Objeville Hurizo Electricity Distribution Inc. Verified Results due to Faces or Omissions (Scenario 1)

Table 5b: Summary of Adjustments to Oakville Hydro's Participation Levels and Savings Achieved as of December 31, 2011

Oakville Hydro Electricity Distribution Inc.

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# 4.2 Evaluation

The OPA has provided the following information with respect to its EM&V findings for all of the OPA Programs and initiatives evaluated in 2012:

# Residential Program

#### Appliance Retirement Initiative

- Decrease in 2012 participation by 39% compared to 2011.
- In-site metering provided updated per-unit assumptions:
  - Small decrease (3.5%) in Savings for refrigerators; and
  - Sizeable increase (17.5%) in Savings for freezers.

# Appliance Exchange Initiative

- Increase of 30% for exchanged dehumidifiers over 2011, leading to an increase of 4% in overall participation.
- Higher per-unit Savings for dehumidifiers drove the overall increase in 2012 savings.

## HVAC Incentives Initiative

- Small decrease (10%) in per-unit Savings assumptions for furnace with electronically commutated motors ("ECMs") due to change in 2012 customer mix and furnace fan usage.
- Small increase (10%) in free-ridership related to furnaces with ECMs.
- Participation remains relatively steady once 2011 true-up values are included.

#### **Conservation Instant Coupon Booklet Initiative**

- The number of coupons associated with the redemption of 2012 Annual Coupons was 90% lower than 2011 Instant Coupon Booklet. Key factors for the decrease include:
  - Shorter duration of available coupons (September 2012 December 2012)
  - In 2012, only online coupons were available; in 2011 both on-line coupons and coupon mailing booklets were available

#### **Bi-Annual Retailer Event Initiative**

- 15% lower Savings due to a change in the net-to-gross factors (increased freeridership, less participant behavior spillover, and less non-participant like spillover).
- Majority of participation, energy, and demand savings are from standard Compact Fluorescent Lights ("CFLs").
- 15% of Savings due to ~73,000 coupons for new LED measures.

## **RDR Program**

- Province-wide per-unit ex ante estimates for a 1-in-10 August peak day were determined to be 0.50 kW for residential CACs and 0.64 kW for small commercial CACs. Evaluation to date has indicated savings from IHDs are not statistically significant (in and around zero).
  - However, since the 2012 evaluation did not include full year analysis (specifically the summer months), these results have been deemed inconclusive. (The OPA may subsequently determine that savings can be attributed to IHDs.)
- The IHD offer had a positive influence on enrollment and re-enrollment with between 20 to 35% of new enrollees said they wouldn't have enrolled without the IHD offer.

## **Residential New Construction Initiative**

• All projects are opting for the prescriptive or performance path – there have been no custom project applications to date.

## C&I Program

## ERII Program

- Reported savings for prescriptive lighting projects continue to be overstated:
  - $\circ~$  Verified wattage reductions were 15% higher than assumed; and
  - Verified operating hours were 11% higher than assumed.
- A lower realization rate in the engineered measure track can be partially explained by overstated lighting operation hour assumptions reported on the application.
- Net-to-gross ratios for this initiative were above 75% in 2012, which is consistent with 2011.

# **DIL Initiative**

- Reported hours of usage continue to be inaccurate; only 12% of site visits had verified annual hours of use within +/-10% of the assumed value.
- The saturation of eligible customers and preferred business types are resulting in participation from building types that may not fully operate during the summer peak period. This trend contributes to lower realization rates for demand savings in 2012.
- Due to changing regulations in lighting measures, the assumed baseline technology will eventually be phased out. This regulation impacts the persistence of savings over the lifetime of lighting measures.

# Existing Building Commissioning Incentive Initiative

- Province-wide there were no applications for this initiative in 2012.
- Market feedback suggests that this initiative's focus on chilled-water spacecooling systems may be too narrow, and participation could be expanded by incenting a wider range of measures.

# New Construction and Major Renovation Initiative

• Custom projects account for 66% of program savings, with the remainder coming from the prescriptive track.

## Energy Audit Initiative

- Through this initiative, 280 projects were completed in 2012 based on recommendations from the auditors, resulting in 1.4 MW and 7 GWh of programenabled Savings Province-wide.
- Office buildings represented the largest portion of applicants for 2012.

## Industrial Program

## PSUI

- Energy Managers are seen as important drivers of program-enabled Savings projects.
  - 88% of survey respondents indicated that the assistance provided by Energy Managers was 'somewhat' or 'very' important to implementing projects.
- Energy Managers indicated that additional support (additional training and guides) may further help influence the adoption of energy efficiency measures by the participants.
- Documentation for program-enabled Savings projects varied substantially by LDC. More guidance on documentation requirements would be beneficial to all parties.

#### DR3 Program

• 2012 saw improvements in the performance of DR3 participants resulting higher ex ante realization rates, particularly for the industrial participants.

# Low Income Program

- Participation in this Program ramped up in 2012, with over 5,000 homes participating Province-wide.
- Majority of energy savings (62%) comes from lighting measures, while 21% of energy savings resulting from refrigerator and freezer replacements.

In developing the forecast of Oakville Hydro's performance to its CDM targets, it has been assumed that the net-to-gross ratios and realization rates established by the OPA for 2012 will apply in 2013 and 2014.

# 4.3 Spending

The spending by Oakville Hydro, both in 2012 and program-to-date, for each of the OPA Programs is shown in Tables 6 and 7, respectively.

Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
Residential Program					
Appliance Retirement	\$44,791				\$44,791
Appliance Exchange	\$18,278				\$18,278
HVAC Incentives	\$31,002				\$31,002
Conservation Instant Coupon Booklet					
Bi-Annual Retailer Event	\$42,549				\$42,549
Retailer Co-op					
Residential Demand Response	\$66,569	\$25,770			\$92,339
New Construction Program	\$13,457				\$13,457
Commercial and Instit	utional Program				
Efficiency: Equipment Replacement	\$189,821		\$571,098		\$760,919
Direct Installed Lighting	\$61,218	\$32,175	\$128,490		\$221,883
Existing Building Commissioning Incentive	\$27,040				\$27,040
New Construction and Major Renovation Initiative	\$41,155				\$41,155
Energy Audit	\$67,148				\$67,148
Small Commercial Demand Response (part of the Residential Program schedule)					
Demand Response 3 (part of the Industrial Program schedule)					

# Table 6: 2012 Spending on OPA Programs by Oakville Hydro

Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
Industrial Program					
Process and System Upgrades					
a) Preliminary Engineering Study	\$15,001				\$15,001
b) Detailed Engineering Study	\$14,686				\$14,686
c) Program Incentive	\$6,670				\$6,670
Monitoring and Targeting	\$7,643				\$7,643
Energy Manager					
Key Account Manager ("KAM")					
Efficiency: Equipment Replacement (part of the C&I Program schedule)					
Demand Response 3	\$12,705				\$12,705
Home Assistance Prog	gram				
Home Assistance Program	\$51,281				\$51,281
Pre 2011 Programs					
Electricity Retrofit Incentive Program					
High Performance New Construction					
TOTAL OPA PROGRAMS	\$711,016	\$57,945	\$699,587		\$1,468,548

Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
Residential Program					
Appliance Retirement	\$84,097				\$84,097
Appliance Exchange	\$30,401				\$30,401
HVAC Incentives	\$67,583				\$67,583
Conservation Instant Coupon Booklet	\$32,999				\$32,999
Bi-Annual Retailer Event	\$50,526				\$50,526
Retailer Co-op					
Residential Demand Response	\$146,758	\$281,520	\$16,900		\$445,178
New Construction Program	\$22,518				\$22,518
Commercial and Instit	utional Program	-		-	
Efficiency: Equipment Replacement	\$273,705		\$820,049		\$1,093,754
Direct Installed Lighting	\$93,884	\$87,175	\$342,971		\$524,029
Existing Building Commissioning Incentive	\$42,717				\$42,717
New Construction and Major Renovation Initiative	\$56,832				\$56,832
Energy Audit	\$82,919				\$82,919
Small Commercial Demand Response (part of the Residential program schedule)					
Demand Response 3 (part of the Industrial program schedule)					

# Table 7: Cumulative Spending (2011-2012) on OPA Programs by Oakville Hydro

Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
Industrial Program					
Process and System Upgrades					
a) Preliminary Engineering Study	\$21,862				\$21,862
b) Detailed Engineering Study	\$21,346				\$21,346
c) Program Incentive	\$13,330				\$13,330
Monitoring and Targeting	\$11,382				\$11,382
Energy Manager					
Key Account Manager ("KAM")					
Efficiency: Equipment Replacement (part of the C&I Program schedule)					
Demand Response 3	\$20,186				\$20,186
Home Assistance Prog	gram				
Home Assistance Program	\$65,008				\$65,008
Pre 2011 Programs					
Electricity Retrofit Incentive Program	\$18,236		\$47,210		\$65,446
High Performance New Construction					
TOTAL OPA PROGRAMS	\$1,156,290	\$368,695	\$1,227,129		\$2,752,114

As of December 31, 2012, the Program Administration Budget ("PAB") funding spending of \$1.16 million was approximately 32% of the total PAB funding allocation of \$3.58M for Oakville Hydro. The projected spending to the end of 2014 is \$3.05 million, or 85% of the total allocation,

# 4.4 Additional Comments

As indicated for specific OPA Program initiatives in Section 3.2, Oakville Hydro may be at a disadvantage with respect to the achievement of its CDM targets versus other LDCs for a number of reasons. These include:

- Oakville Hydro does not have customers in the Large User class, meaning that there is limited potential for key Industrial Program initiatives.
- The average Savings from ERII Program projects for customers of Oakville Hydro is substantially lower than the Province-wide average.
- Oakville Hydro had very strong participation in the Power Savings Blitz Program prior to 2011, and as such has lower participation in the DIL Program than other LDCs.

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

- The lack of Province-wide advertising from the OPA for the Residential Program portfolio, other than for the RDR Program.
- The impact of downward revisions to the net-to-gross ratios, realization rates and attributed Savings per measure for some initiatives.
- Limited OPA resources and/or processes to address operational concerns.
- The time required to assess, approve and implement even minor changes to improve the existing OPA Programs.

While the OPA did not include specific LDC rankings in its Final 2012 Results Report, data was provided in graph form indicating that 47 LDCs have achieved less than 25% of their target for net peak demand reduction as of the end of 2012. With respect to cumulative net energy savings, at 60.9% of its target Oakville Hydro is close to the Province-wide average for all LDCs.

# 5 Combined CDM Reporting Elements

# 5.1 **Progress Towards CDM Targets**

The following tables, taken from the Final 2012 Results Report published by the OPA, summarize Oakville Hydro's progress towards its CDM targets.

Table 8: Net Peak Demand Savings at the End User Level (MW) (Scenario 1)

Implementation Period	Annual								
Implementation Period	2011	2012	2013	2014					
2011 - Verified	2.2	1.7	1.7	1.7					
2012 - Verified		1.8	1.4	1.3					
2013									
2014									
Ve	rified Net Annual Pe	eak Demand Savin	gs Persisting in 2014:	3.1					
Oakville Hydro El	CDM Capacity Target	20.7							
Verified Po	rtion of Peak Dema	nd Savings Target	Achieved in 2014(%):	14.8%					

Note that the reported net peak demand savings in Table 8 are per Scenario 1, assuming no persistence for demand response initiatives.

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

Implementation Period		Cumulative				
Implementation Period	2011	2012	2013	2014	2011-2014	
2011 - Verified	6.8	6.8	6.8	6.7	26.9	
2012 - Verified		6.0	6.0	5.9	18.1	
2013						
2014						
		Verified	Net Cumulative Energy	Savings 2011-2014:	45.1	
Oakville Hydro Electricity Distribution Inc. 2011-2014 Annual CDM Energy Target					74.1	
	Verified Portion of Cumulative Energy Target Achieved (%):					

As will be discussed in the following sections, Oakville Hydro's progress-to-date to its CDM targets is such that it will achieve 54.4% of the net peak demand reduction target and 83.2% of the cumulative net energy savings reduction target.

# 5.2 Variance from Strategy

Oakville Hydro's performance-to-date and forecast performance to the Annual Milestones and CDM targets, set out in its CDM Strategy, is shown in Table 10:

	Net	Peak Dema	nd Savings	(MW)	Cumul	ative Net Ene	ergy Saving	s (GWh)
Program	2011 Verified	2012 Verified <sup>8</sup>	2013 Forecast	2014 Forecast	2011 Verified	2012 Verified <sup>8</sup>	2013 Forecast	2014 Forecast
Residential	1.18	1.51	3.73	5.05	9.21	12.56	14.89	15.99
Commercial and Institutional / pre-2011	0.95	1.93	2.66	3.34	16.38	31.17	38.34	44.01
Industrial	0.08	0.06	0.60	0.60	1.35	1.35	1.35	1.35
Low Income	0.00	0.00	0.01	0.02	0.00	0.00	0.19	0.30
Total OPA Programs	2.21	3.50	7.01	9.01	26.94	45.08	54.77	61.64
Board-Approved Programs (TOU pricing only)	0.00	0.00	0.00	2.26	0.00	0.00	0.00	0.00
Total	2.21	3.50	7.01	11.27	26.94	45.08	54.77	61.64
Milestones from CDM Strategy <sup>9</sup>	5.3	10.5	15.8	20.7	7.5	22.5	45.0	74.1

**Table 10**: Performance of Oakville Hydro to Annual Milestones (Scenario 2)

As indicated in Table 10, Oakville Hydro has exceeded the 2012 Milestone for cumulative net energy savings of 22.5 GWh by 100%, but has achieved only 33% of the Milestone for net peak demand savings. The key factors for the negative variance for net peak demand savings may be summarized as follows:

- For the Residential Program:
  - Lower-than-anticipated participation rates in the Appliance Retirement, HVAC Incentives and Conservation Instant Coupon Booklet initiatives,

<sup>&</sup>lt;sup>8</sup> Includes adjustments made by the OPA to 2011 results.

<sup>&</sup>lt;sup>9</sup> Milestones have been restated from the CDM Strategy. Net peak demand savings Milestones are now reported to only one significant figure. Net energy savings Milestones are now reported on a cumulative basis.

- The delay in the launch of the RDR Program by Oakville Hydro until December 2012 (which impacts primarily on net peak demand savings),
- Downward adjustments to the net-to-gross ratios for a number of Residential Program initiatives, as well as downward revisions to the attributed demand savings for programmable thermostats installed under the RDR Program, and
- That a number of initiatives within the Residential Program portfolio were never launched by the OPA.
- For the C&I Program:
  - Lower-than-anticipated results for the DIL initiative, impacted by Oakville Hydro's success with the prior Power Savings Blitz Program,
  - Lower-than-anticipated results for the ERII Program, where the average project size for participating customers of Oakville Hydro is well below the Province-wide average, and
  - The delay in the introduction of the Direct Service Space Cooling initiative by the OPA, as well as the lack of customer interest in and eventual cancellation of the DR1 initiative.
- Lower than anticipated participation levels in the Industrial Program initiatives, reflecting the more limited market potential for this Program within the service area of Oakville Hydro versus other areas of the Province.
- The absence of any Board-Approved CDM Programs.

The primary factors for the positive variance for cumulative net energy savings, which arise primarily from the results in the C&I Program, are:

- The impact of the results from the pre-2011 Programs, which were not included in Oakville Hydro's CDM Strategy, and
- Stronger than anticipated contributions from the ERII Program in 2011 and 2012, in part due to higher net-to-gross ratios than originally expected.

# 5.3 Outlook to 2014 and Strategy Modifications

As indicated in Table 10, Oakville Hydro's forecast of performance to its CDM targets is to achieve 11.27 MW in net peak demand reduction, or 54.4% of the target of 20.70 MW; and 61.64 GWh in cumulative net energy savings reduction, or 83.2% of the target of 74.06 GWh. The most significant reasons for these variances include:

- For the Residential Program:
  - For all initiatives, the original forecast assumed an increase in participation levels throughout the planning period; and further that all initiatives originally envisioned for this Program would be available. As has been noted earlier, for

many key initiatives participation levels are expected to decline. The greatest impact from these factors with respect to contributions to Savings is for the Appliance Retirement, HVAC Incentives and Conservation Instant Coupon Booklet initiatives,

- Downward adjustments to the net-to-gross ratios for a number of Residential Program initiatives, as well as to the attributed demand savings for programmable thermostats installed under the RDR Program, and
- There was inconclusive evaluation of energy savings for IHDs installed in the RDR Program. In previous Preliminary Results Reports issued by the OPA, the (unverified) Province-wide results indicated that each IHD installed would contribute over 200 kWh in incremental energy savings. Oakville Hydro currently expects to install more than 6,500 IHDs by the end of 2014; as such, the impact of attributing no energy savings to this measure is significant. Should the OPA subsequently determine that energy savings can be attributed to IHDs, the forecast results for the RDR Program may be increased.
- For the C&I Program:
  - $\circ$   $\,$  Continuing poor participation levels for the DIL initiative, and
  - Continuing results for the ERII Program where the average project size for participating customers of Oakville Hydro is below the Province-wide average.
- Continuing limited potential for the Industrial Program portfolio within Oakville Hydro's service area.

A summary of the estimated impact of the above-noted factors on the forecasted achievement to Oakville Hydro's CDM targets, which are outside the control of Oakville Hydro, is shown in Table 11:

	Total Estimated Impact on Net Peak Demand Savings (MW)	Total Estimated Impact on Cumulative Net Energy Savings (GWh)
Variances identified for Residential Program initiatives	1.09	7.90
Variances identified for C&I Program initiatives	0.85	8.16
Variances identified for Industrial Program initiatives	2.32	9.35
Total	4.27	25.41
Current Forecast for Performance to CDM Targets	9.01	61.64
Estimated Results Without Impact of Key Factors	13.28	87.05
CDM Targets	20.70	74.06

<u>Table 11</u>: Summary of Estimated Impact of Key Factors on Oakville Hydro's Performance to its CDM Targets (Scenario 2)

As shown in Table 11, without the impact of these factors Oakville Hydro could achieve 64% of the target for net peak demand savings; and could exceed the target for cumulative net energy savings by13 GWh (18% of the target).

Irrespective of the forecast, however, Oakville Hydro continues to strive for improved participation in the OPA Programs. Through its collaborative efforts with other LDCs, Oakville Hydro will continue review its processes and procedures for implementation of the OPA Programs; providing feedback to the OPA on potential enhancements, and seeking to adopt successful practices from other LDCs. Oakville Hydro will also to continue to refine its marketing and promotional activities to reinforce existing consumer awareness levels and provide compelling reasons for customers to participate in the OPA Programs and otherwise adopt energy-conserving behaviours.

With respect to Board-Approved CDM Programs, as noted previously Oakville Hydro has not applied for any such Programs. Hydro One Networks Inc. and Hydro One Brampton Networks Inc. (jointly) as well as Toronto Hydro-Electric System Limited each made applications to the OEB for Board-Approved CDM Programs, (Board File No. EB-2010-0331/0332 and EB-2010-0011) but were not successful in having them approved as filed. Among the reasons for this outcome was the requirement that Board-Approved CDM Programs be non-duplicative of the OPA Programs. Primarily because of this limitation, Oakville Hydro did not apply for any Board-Approved CDM Programs during 2011 or 2012. Oakville Hydro acknowledges that PowerStream Inc. has been successful in its application for a Board-Approved CDM Program in 2013.

At this point, however, the likelihood of any new Board-Approved CDM Programs having a measurable impact on Oakville Hydro's performance to its CDM targets is very low. The process to design and receive approval for any such Programs would take many months, and similarly the length of time to launch any such Programs into the market would also be lengthy.

Oakville Hydro does see potential for participation in LDC Program Innovation Stream introduced by the OPA in 2013. The process for designing and receiving funding for new CDM programs may be faster through this new avenue than for Board-Approved CDM Programs. Oakville Hydro may pursue this opportunity further with the OPA.

# 6 Conclusion

Program-to-date, Oakville Hydro has achieved 3.50 MW in net peak demand savings and 45.08 GWh in cumulative net energy savings, which represents 16.9% and 60.9% of Oakville Hydro's 2014 CDM targets, respectively. These results are representative of 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 have limited the effectiveness of some of the OPA Program initiatives across all market sectors. This achievement is a success and the relationships built with customers and supply channel partners within the 2011-2014 CDM program term will aid results in subsequent years.

The current forecast to the end of 2014 is that Oakville Hydro will achieve approximately 54% of its net peak demand reduction target and 83% of its cumulative net energy savings reduction target. Existing strength seen in Oakville Hydro's delivery of the Residential Program portfolio is expected to continue such that participation levels are expected to continue to be at or above the Province-wide results. Efforts will also continue to achieve the maximum CDM potential for the C&I and Industrial Program portfolios within Oakville Hydro's service area.

While there is limited opportunity to make substantive changes to the current OPA Program portfolios, or to pursue Board-Approved CDM Programs, and meaningfully impact Oakville Hydro's forecast results for 2013 or 2014, the pursuit of such improvements are critical to the achievement of the Province's long-term vision of 'Conservation First'. The LDC community can build on the strengths and key successes of the current suite of CDM programs to launch new programs which will assist consumers and businesses in better managing their energy costs.

Oakville Hydro is committed to ensuring that existing and future CDM programs are a cost-effective resource in addressing the long-term energy requirements of our customers, and for households and businesses throughout Ontario. We look forward to working with the Ministry of Energy, the OEB and other agencies supporting the energy sector in Ontario, other LDCs, customers, and other stakeholders to develop and implement the new 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: <u>http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/curren\_t\_electricity\_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf and</u>
- saveONenergy website: <u>https://saveonenergy.ca/Consumer/Programs/Appliance-</u> <u>Retirement.aspx</u>

# 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.

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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
   <u>http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/curren
  t\_electricity\_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf</u> and
- saveONenergy website: <u>https://saveonenergy.ca/Consumer/Programs/EXCHANGE-EVENT.aspx</u>

# 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<sup>®</sup> 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
   <u>http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/curren</u>
   t\_electricity\_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf and
- 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.

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**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 <u>www.saveoneenergy.ca</u>.

**Targeted End Uses:** ENERGY STAR qualified standard CFLs, ENERGY STARqualified 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:
   <u>http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/curren</u>
   <u>t\_electricity\_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf</u> and
- save**ON**energy website: <u>https://saveonenergy.ca/Consumer.aspx</u>

# **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: <u>http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/curren</u> <u>t\_electricity\_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf</u> and • save**ON**energy website: <u>https://saveonenergy.ca/Consumer.aspx</u>

# Retailer Co-op Initiative

## Target Customer Type(s): Residential Customers

#### Initiative Frequency: Year Round

**Objective:** Encourage customers to purchase energy efficient products (and go aboveand-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: <u>http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/curren</u> <u>t\_electricity\_contracts/pdfs/Schedule%20B-2%20New%20Construction%20Program.pdf</u> and
- saveONenergy website: <u>https://saveonenergy.ca/Consumer.aspx</u>

# 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: <a href="http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/current\_electricity\_contracts/pdfs/SCHED\_2011\_ResDR\_B\_3\_110727%28MJB%29v15\_redact\_ed.pdf">http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/current\_electricity\_contracts/pdfs/SCHED\_2011\_ResDR\_B\_3\_110727%28MJB%29v15\_redact\_ed.pdf</a> and
- save**ON**energy website: <u>https://saveonenergy.ca/Consumer.aspx</u>

# 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:
   <u>http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/curren</u>
   t electricity\_contracts/pdfs/Schedule%20C-2%20ERII%20Initiative.pdf and
- saveONenergy website: <u>https://saveonenergy.ca/Business/Program-</u> Overviews/Retrofit-for-Commercial.aspx

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

# 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: <u>http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/curren</u> <u>t\_electricity\_contracts/pdfs/Schedule%20C-6%20Commissioning%20Initiative.pdf</u> and
- saveONenergy website: <u>https://saveonenergy.ca/Business/Program-</u> 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

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

Additional detail is available:

- Schedule C-4:
   <u>http://www.powerauthority.on.ca/sites/default/files/page/ScheduleC-4NewContructionInitiativeV2.pdf</u> and
- saveONenergy website: <u>https://saveonenergy.ca/Business/Program-Overviews/New-Construction.aspx</u>

# 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, multifamily buildings and agricultural facilities for the purpose of undertaking assessments to identify all possible opportunities to reduce electricity demand and consumption within their buildings or premises.

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

#### Targeted End Uses: Various

**Delivery:** LDC delivered.

Additional detail is available:

- Schedule C-1:
   <u>http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/curren\_t\_electricity\_contracts/pdfs/Schedule%20C-1%20Energy%20Audit%20Initiative.pdf and
  </u>
- saveONenergy website: <u>https://saveonenergy.ca/Business/Program-Overviews/Audit-Funding.aspx</u>

# 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

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**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:
   <a href="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">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</a> and
- save**ON**energy website: <u>https://saveonenergy.ca/Business.aspx</u>

# 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:
   <a href="http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/curren">http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/curren</a>
   <a href="http://contracts/pdfs/Schedule%20D-2%20Monitoring%20and%20Targeting%20Initiative.pdf">http://contracts/pdfs/Schedule%20D-2%20Monitoring%20and%20Targeting%20Initiative.pdf</a>
   and
- save**ON**energy website: <u>https://saveonenergy.ca/Business.aspx</u>

## 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: <u>http://www.powerauthority.on.ca/sites/default/files/new\_files/industry\_stakeholders/curren</u> <u>t\_electricity\_contracts/pdfs/Schedule%20D-</u> <u>3%20Energy%20Manager%20Initiative%202011-2014.pdf</u> and
- saveONenergy website: <u>https://saveonenergy.ca/Business.aspx</u>

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

# 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:
   <a href="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">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</a> and
- save**ON**energy website: <u>https://saveonenergy.ca/Business.aspx</u>

# 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: <u>http://www.powerauthority.on.ca/sites/default/files/page/Low%20Income%20Schedule%2</u> 0-%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:** Provide 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:** Provide 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)

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	Oakville Community Events for 2012
Date(s) of Event	Event Name / Location
3/31	Earth Hour
04/05 - 04/07	The Oakville Lifestyle Home Show
4/13	The Home Depot
4/14	12th Annual Halton Eco Festival
4/14	The Home Depot
4/21	The Home Depot
4/27	Canadian Tire
4/28	Canadian Tire
5/25	Town of Oakville's Energy Conservation Fair
6/2	Oakville Conserves Fair
6/9	Community Sustainability Plan, "Let's be Livable"
06/16 - 06/17	Canadian Tire Appliance Exchange (2 locations)
6/18	Town Councillors Ice Cream Social
06/22 - 06/24	Oakville Family Rotary Ribfest
7/7	4th Annual Environmental Day
7/20	Midnight Madness
09/07 - 09/09	Lifestyle Fall Home Show
9/22	Fire Prevention Week
9/29	The Home Depot
10/13	Canadian Tire
10/20	The Home Depot
10/24	Eco Celebration, Halton District School Board
10/27	Canadian Tire
11/10	Glen Abbey Energy Conservation Fair

# Appendix C: Promotional Events in Support of OPA Programs

	Business Customer Events for 2012							
Date(s) of Event Event Name / Purpose								
4/11	Lunch & Learn, Compressors							
5/8	save <b>ON</b> energy Training for Enistic Canada							
5/30	Lunch & Learn, Chillers and Commercial HVAC							
6/28	Lunch & Learn, DR3 Program							
11/8	Lunch & Learn, Demand Response Explained							