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September 30, 2014

Kirsten Walli  
Board Secretary  
Ontario Energy Board  
P.O. Box 2319  
2300 Yonge Street, 27<sup>th</sup> Floor  
Toronto, ON M4P 1E4

**Re: EB-2010-0215 – 2013CDM Annual Report - Innisfil Hydro Distribution Systems Limited**

Dear Ms Walli:

Attached please find the 2013 Annual CDM Report prepared for Innisfil Hydro Distribution Systems Limited.

The Conservation and Demand Management Code for Electricity Distributors requires a distributor to file an annual report with the Board. The attached Annual Report is therefore prepared accordingly and covers the period from January 1, 2013 to December 31, 2013.

The 2013 CDM Report for Innisfil Hydro Distribution Systems Limited (“IHDSL”) also includes an overview document which relates the experience of the CHEC Member LDCs which IHDSL works in collaboration with to deliver CDM programs.

Sincerely,

Original signed by Brenda L Pinke

Brenda L Pinke  
Regulatory/CDM Officer  
(705)431-6870 Ext 262  
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# Cornerstone Hydro Electric Concepts (CHEC)

## Combined Conservation and Demand Management Annual Report 2013

EB-2010-0215

### Collaboration for Conservation



September 30, 2014

## ***Cornerstone Hydro Electric Concepts Association Inc.***

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### **Executive Summary:**

This report represents the 2013 annual reporting as required by the CDM Code for the CHEC Association LDCs. The results and comments provided in this section are based on the combined experience of the CHEC LDCs.

The report format contains an overview section relating the combined experience of CHEC LDCs and thirteen addendums containing the individual LDC Annual CDM Reports. The overview section provides a summary of the overall target achieved, conditions impacting strategy progress and tracking of the CDM Strategy.

In the third year of the program the residential portfolio continued to perform below expectations. The residential program experienced improved kW performance over the previous year due to the HVAC initiative and limited kW contribution from the peaksaverPLUS<sup>®</sup> program. Energy contribution to target on an incremental basis was slightly better than the year before. However, with one less year to accumulate savings the contribution to overall target is less than the previous year. The lower than expected performance in the residential market place has an impact on all of the LDCs. The negative effect continues to be most pronounced in LDCs with primarily residential loads.

Customers continue to show interest in the Demand Response (DR) initiative with a net gain in DR contribution to target. This helps to offset the loss of customers who participated in the first year of the program but exited in subsequent years. DR is seen as a crucial element to achieve the demand target and the limitation of DR in the fourth year of the program will impact on the ability of LDCs to add significantly to the kW target contributions.

The Commercial and Institutional program continues to be a significant contributor to targets achieved. This portfolio accounts for 49% of the kWh achieved to the end of 2013. The retrofit initiative along with the direct install initiative continues to provide savings. The Small Business Lighting initiative is approaching saturation while the retrofit initiative continues to experience good traction although the incremental kWh savings is less than the previous year.

CHEC's Roving Energy Manager (REM) was engaged late in 2012. This position is seen as a key element in successful approaches to industry and commercial customers. The REM has been instrumental in supporting CHEC LDCs and their commercial customers to identify potential savings and to implement programs. The REM along with LDC staff has been active across the service areas and this activity is expected to continue throughout 2014.



## ***Cornerstone Hydro Electric Concepts Association Inc.***

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The combined strategy results (Table 4) indicate a decline in the percentage of target to be achieved by the member LDCs. Based on the two year results, the projected target completion was 87.6% of demand and 99% of the energy targets. After three years, the projected target completion is 64% of demand and 93.4% of the energy targets. The individual reports filed by the member LDCs outline their continued commitment and expectations for the remaining year.

## ***Cornerstone Hydro Electric Concepts Association Inc.***

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### **1.0 Introduction:**

Cornerstone Hydro Electric Concepts Association (CHEC) is an association of thirteen (13) Local Distribution Companies (LDCs) (in 2013). The CHEC member LDCs have prepared this Conservation and Demand Management (CDM) Annual Report 2013 as required by the Conservation and Demand Management Code for Electricity Distributors. The report is a collaborative initiative of CHEC member LDCs. The report is consistent with the combined CDM Strategy filed in November 2010 and includes Orillia Power as of 2012 reporting.

### **1.1 Distributors Included in CHEC Association CDM Strategy:**

CHEC LDCs work collaboratively to meet regulatory and operational requirements. The Association facilitates LDCs' abilities to address initiatives in a cost effective manner, sharing information, expertise and resources. The development of a collaborative CDM Strategy and the subsequent CDM Annual Report is consistent with the CHEC philosophy of working together to meet the needs of the member LDCs and to work effectively for the customers served.

The LDCs, all members of CHEC, covered under this CDM Annual Report include:

- Centre Wellington Hydro Ltd.
- COLLUS PowerStream (COLLUS Power)
- Innisfil Hydro Distribution Systems Limited
- Lakefront Utilities Inc.
- Lakeland Power Distribution Ltd.
- Midland Power Utility Corporation
- Orangeville Hydro Limited
- Orillia Power Distribution Corporation
- Parry Sound Corporation
- Rideau St. Lawrence Distribution Inc.
- Wasaga Distribution Inc.
- Wellington North Power Inc.
- West Coast Huron Energy Inc. (Goderich Hydro).

CHEC LDCs have worked collaboratively and as part of the Association since 2000. The CHEC Combined Annual CDM Report includes an overview section and separate addendums for each LDC. The LDC addendum format follows the provincial template.

## 2.0 CDM Targets for Electricity Demand (MW) and Electricity Consumption (GWh):

The CDM target for each LDC has been established by the Ontario Energy Board (OEB) utilizing a methodology developed by the Ontario Power Authority (OPA). The targets were later revised and incorporated into the LDC license requirements. Table 1 illustrates the final targets for each LDC.

**Table 1 – OEB Defined Targets**

	<b>MW</b>	<b>GWH</b>
<b>LDC</b>	<b>Revised Target</b>	<b>Revised Target</b>
Centre Wellington Hydro	1.64	7.81
COLLUS Power	3.14	14.97
Innisfil Hydro	2.5	9.2
Lakefront Utilities	2.77	13.59
Lakeland Power	2.32	10.18
Midland Power	2.39	10.82
Orangeville Hydro	2.78	11.82
Orillia Power	3.07	15.05
Parry Sound Power	0.74	4.16
Rideau St. Lawrence	1.22	5.1
Wasaga Distribution	1.34	4.01
Wellington North Power	0.93	4.52
West Coast Huron Energy	0.88	8.28
<b>Total</b>	<b>25.72</b>	<b>119.51</b>

### 3.0 Progress toward Achieving Target

Table 2 and Table 3 provide summaries of the progress made by CHEC LDCs in 2013 towards the combined demand and energy targets. The combined results are the summation for all member LDCs and represent reported savings as per the OPA. The individual savings for each LDC are represented in the associated Addendum.

**Table 2** Combined Net Demand Savings at End User Level Including DR Contribution (2011 adjusted to add Orillia Power)

*Note: Table includes DR*

Implementation Period	Annual (MW)			
	2011	2012	2013	2014
2011 - Verified	4.89	4.89	4.89	4.89
2012 - Verified		1.87	1.87	1.87
2013 - Verified			3.42	3.42
2014				
<b>Verified Net Annual Peak Demand Savings in 2014 (including DR):</b>				10.18
<b>Combined CHEC 2014 Annual CDM Capacity Target:</b>				<b>25.72</b>
<b>Verified Portion of Peak Demand Savings Target Achieved to 2013 (%):</b>				39.58%
<b>Combined CHEC Strategy, Milestone submitted to 2013</b>				53.04%
Variance from Strategy Milestones:				-13.46%

Contribution toward the peak target after three years of program delivery continues to lag behind the strategy targets. Actual demand savings vary from the milestones set in the LDC Strategies by 13.46%. At the end of 2012 the variance from the milestones set in the LDC Strategies was 4.5%. The increase in variance, by 9% in 2013, provides an indication of the challenges in obtaining demand oriented projects.

To remain consistent with the CDM Strategies filed and the associated milestones DR savings are included in the reporting. Currently LDCs include 3,400 kW of DR in the strategies with approximately 2,974 kW of DR obtained to date. This represents 11.6% of the 2014 target. The target amount of DR has been reduced in the revised strategy presented in Table 4.

The combined strategies have been adjusted (2011, 2012 and 2013 adjustments) to predict a shortfall of 9.3 MW which represents 64% achievement of the peak target.

**Table 3** Combined Net Energy Savings at End User Level

Implementation Period	Annual (MWh)				Cumulative (MWh)
	2011	2012	2013	2014	2011-2014
2011 - Verified	10,250	10,250	10,250	10,250	41,000
2012 - Verified		10,058	10,058	10,058	30,174
2013 - Verified			9,907	9,907	19,814
2014					
<b>Verified Net Cumulative Energy Savings 2011-2014:</b>					90,988
<b>Combined CHEC 2011-2014 Cumulative CDM Energy Target:</b>					119,510
<b>Verified Portion of Cumulative Energy Target Achieved to 2013 (%):</b>					76.13%
<b>Combined CHEC Strategy, Milestone submitted for 2011, 2012 &amp; 2013</b>					92.73%
Variance from Strategy Milestones:					-16.59%

Energy savings continue to be strong with annual incremental savings remaining consistent in the range of 10 MWh. While significant, the cumulative energy savings is 16.6% below milestones set in the LDCs Strategies to the end of 2013.

Currently the CHEC LDCs have achieved 76.1% of the combined energy target. This is slightly behind the provincial average of 85.7%. LDCs' performance varies due to local parameters which are addressed in the addendums. Revision of the strategies has reduced the expected energy achievement to 93.4% of the combined target.

#### **4.0 General Conditions Impacting Strategy Performance:**

This section outlines issues which have impacted on the progress of Strategies and some of the general lessons learned over the third year of the program. While there have been many successes there remain many challenges within the CDM portfolio and the delivery of programs. Overall the delivery mechanism continues to be improved. Unfortunately opportunities lost early in the program timeframe are difficult to make up later in the program.

#### **4.1 Portfolio Reduction and OEB Approved Programs:**

The overall portfolio reduction as a result of midstream and OEB approved programs not being developed has reduced the overall potential to achieve target. The requirement that local



programs not duplicate any provincial program represented a significant barrier for development of localized programs. Removing these programs from the strategy mix reduced the achievable target by 9.5% for demand and 3% for energy. The requirement for success in the provincial programs to offset this shortfall has been difficult to achieve. The impact of these initiatives not being in market is twofold. First any program savings proposed in the strategies from these initiatives are not realized. Secondly the lack of programs reduces the overall profile of the CDM initiatives. The additional initiatives, with the associated advertisement and engagement, would have reinforced all initiatives and the customers' overall awareness of the conservation effort.

#### **4.2 Roving Energy Manager:**

CHEC LDCs collaborative application for a Roving Energy Manager (REM) provided an excellent resource to assist LDCs and their customers to develop more and deeper reaching energy savings programs. The REM has been active across the CHEC LDC service territories and truly represents a "roving energy manager". The REM has consistently met program requirements for target and this contract has been subsequently renewed twice. As noted in previous reports, the delay in funding approval impacted on the initial start of the REM. An earlier start would have seen more projects implemented within the current framework, recognizing that the lead time for commercial and industrial projects can be extensive. The delay at the beginning has pushed out the final implementation of many projects.

#### **4.3 Residential Program Performance:**

The residential programs performed above the 2012 levels in both demand and energy however, below the projected milestone in the strategies. The residential program experienced contributions from the low income program in 2013 well above the level experienced in previous years. The low income initiative, while not meeting full program expectations, has provided a significant kWh contribution. The peak contribution however, falls below expectations. Within this program the ability to obtain "deep installs" along with the associated savings, has proved to be challenging.

Provincial advertising was more prominent in 2013 and as such this was seen as important to the residential program to drive customer awareness. While LDCs can complete local marketing the widespread campaigns initiated by the OPA are seen as critical for overall success.

The Appliance Retirement program has been in the market for some time and the incremental kWh contributed by the program has been steadily declining. The number of eligible appliances has been significantly impacted by several years of successful delivery.

It is believed that the residential program would benefit from general conservation education programs. There has been limited activity in this sector, led by LDCs, due to the funding and focus on target. To maintain the traction in this sector both advertising and education may better position the programs offered.

For LDCs with a large residential proportion of load, the significance of weaker performance in the residential program impacts heavily on the overall ability to achieve targets. A number of CHEC LDCs are struggling due to the residential program lagging behind in projected savings.

#### **4.4 Peaksaver Plus:**

The residential demand response initiative (*peaksaver PLUS*<sup>®</sup>) has been identified in most strategies as being a key contributor to obtaining significant peak target from the residential sector. This program has fallen well behind expected performance.

CHEC LDCs released an RFP for a supplier of service and technology in late 2012. Issues with respect to launching the program moved the in-market date later than anticipated including postponement into 2014 awaiting communication capabilities for some LDCs. Further complicating the issue was the need to terminate installation as colder weather approached to avoid completing the initial test installations when the AC would not be operating. These issues have impacted negatively on the contribution to target from the initiative.

#### **4.5 Relationships:**

Over the third year of the program there continue to be improvements in relationships within the sector. The relationship with the OPA improved with continued outreach by the OPA and response to LDC enquiries. Customer relationships continue to grow. Contacts within the commercial, industrial and municipal sector continue to be fostered and supported with provincial and local materials. The CHEC Roving Energy Manager and LDC CDM staffs have been instrumental in developing these relationships.

Some confusion with the Energy Efficiency Service Providers (EESPs) occurred during the year. While the initiative to contact on a sector specific basis was recognized there was confusion as to the roles between the LDC and the energy managers. From a customer perspective the “face of conservation” was confused by multiple parties making calls.

With the continued delivery of CDM, staff not directly related to the CDM portfolio has become more aware of the involvement of their LDC in CDM. This heightened awareness better positions the LDCs to continue to promote and deliver programs within their service territory.

#### **4.6 Commercial Programs:**

The Small Business Lighting initiative has been in market for some time and is approaching saturation. The program has been well received by customers as illustrated by the participation numbers. Continued approach to those who did not participate is generally being met with limited returns.

The evaluation and introduction of new technologies for inclusion in the various commercial programs assists with the target achievement. The inclusion of LED lamps provides opportunity within this program for added savings. While the work of the C&I Working Group has introduced some very positive changes, the application process continues to be challenging for customers in the retrofit program.

#### **4.8 DR 3 Contribution:**

The third year of the program continued to see interest in DR 3. Furthermore, the Roving Energy Manager has assisted in identifying opportunities at a variety of customer installations. Within the strategies filed by CHEC LDCs, DR 3 accounted for approximately 3.4 MW of demand. In evaluating the demand contribution of various programs it becomes apparent that DR 3 is required to obtain the demand reduction. Limited retrofit initiatives have been focused on demand as most have been focused on energy reduction. DR 3 will continue to be promoted to assist obtaining future demand savings although the ability to add to the 2014 demand target is limited due to the March 2014 cancellation of the program.

#### **5.0 Revised CDM Strategy:**

The Addendums for each LDC contain a tracking of the CDM Strategy. A number of the LDCs have modified their strategies based on their results to the end of 2013. The combined strategy for the 13 CHEC LDCs is summarized in Table 4.

The revised Strategies anticipate a total of 16.4 MW and 107.5 GWh to be saved by December 2014. These projected savings represent 64% and 93.4% respectively of the demand and energy targets for the 13 LDCs. This is a reduction of expected target achievements from those previously noted in the 2012 Annual Report.

CHEC LDCs remain committed to CDM and obtaining kW and kWh savings. Results to date however indicate that expectations for full target achievement may not be realistic within the provincial programs.

The specific activities associated with each LDC are outlined in the attached Addendums.

**Table 4 – CHEC CDM Combined Strategy:**

Summary																				
Annual Milestone - Contribution to 2014 Target																				
Category - Consumer	2011 Original Strategy Projection		Actual 2011 Results		2012 Revised Strategy Projection		Actual 2012 Results		2013 Revised Strategy Projection		Actual 2013 Results		2014 Revised Strategy Projection		Actual 2014 Results		Revised Total Projected Reduction		Contribution to Target	
	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh
<b>Provincial Programs</b>																				
Appliance Retirement	92	2,124,285	74	2,102,677	77	1,124,617	72	1,216,018	58	732,121	61	532,404	63	380,084	0	0	270	4,231,182	207	3,851,098
Instant Discounts (Rebates)	28	2,893,444	58	3,942,109	28	1,787,544	33	1,713,721	19	927,638	31	1,008,998	20	459,212	0	0	141	7,124,040	121	6,664,828
HVAC Discounts (Rebates)	205	1,286,117	410	3,173,721	336	1,588,507	280	1,514,923	222	764,551	287	1,047,261	289	607,656	0	0	1,267	6,343,561	978	5,735,905
Demand Response	607	3,846,518	130	338	130	338	0	0	1,018	2,977,503	146	0	832	255,731	0	0	1,108	256,068	276	338
Midstream Incentives	3	82,243	0	0	0	0	0	0	3	19,945	0	0	2	6,207	0	0	2	6,207	0	0
New Construction	25	250,419	0	0	1	6,486	0	1,232	28	131,323	1	24,771	24	106,557	0	0	26	132,560	1	26,003
Low Income	0	0	0	0	12	186,345	13	387,814	157	1,652,205	47	866,648	116	798,077	0	0	177	2,052,539	60	1,254,462
<b>Provincial Consumer Total</b>	<b>960</b>	<b>10,483,027</b>	<b>672</b>	<b>9,218,844</b>	<b>584</b>	<b>4,693,837</b>	<b>398</b>	<b>4,833,707</b>	<b>1,504</b>	<b>7,205,286</b>	<b>573</b>	<b>3,480,082</b>	<b>1,347</b>	<b>2,613,524</b>	<b>0</b>	<b>0</b>	<b>2,990</b>	<b>20,146,158</b>	<b>1,643</b>	<b>17,532,634</b>
<b>OEB Approved Programs</b>																				
General Consumer	36	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0
Low Income	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
<b>OEB Approved Programs Total</b>	<b>41</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Consumer Program Total</b>	<b>1,001</b>	<b>10,483,027</b>	<b>672</b>	<b>9,218,844</b>	<b>584</b>	<b>4,693,837</b>	<b>398</b>	<b>4,833,707</b>	<b>1,519</b>	<b>7,205,286</b>	<b>573</b>	<b>3,480,082</b>	<b>1,347</b>	<b>2,613,524</b>	<b>0</b>	<b>0</b>	<b>2,990</b>	<b>20,146,158</b>	<b>1,643</b>	<b>17,532,634</b>
Annual Milestone - Contribution to 2014 Target																				
Category - Commercial & Institutional	2011 Original Strategy Projection		Actual 2011 Results		2012 Revised Strategy Projection		Actual 2012 Results		2013 Revised Strategy Projection		Actual 2013 Results		2014 Revised Strategy Projection		Actual 2014 Results		Revised Total Projected Reduction		Contribution to Target	
	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh
<b>Provincial Programs</b>																				
rofits – Medium and Large Buildings	987	7,342,065	266	7,087,736	1,712	9,875,529	957	12,473,024	1,443	7,290,139	756	8,360,055	1,760	9,345,757	0	0	3,740	37,266,573	1,979	27,920,815
Existing Building Retrofits – Small Buildings	835	16,571,055	450	5,852,737	576	7,733,791	634	7,346,407	1,259	8,097,565	441	3,260,774	1,004	2,937,019	0	0	2,529	19,396,937	1,525	16,459,918
Small Commercial Demand Response	19	39,713	56	12	19	1,070	0	0	39	58,569	15	148,792	56	291,415	0	0	127	440,218	71	148,804
Demand Response 1 & 3	0	37	526	7,522	120	15,376	-341	19,359	375	60,075	194	6,270	357	13,684	0	0	736	46,835	379	33,150
<b>Provincial Commercial &amp; Inst. Total</b>	<b>1,841</b>	<b>23,952,871</b>	<b>1,298</b>	<b>12,948,007</b>	<b>2,427</b>	<b>17,625,765</b>	<b>1,250</b>	<b>19,838,789</b>	<b>3,117</b>	<b>15,506,348</b>	<b>1,406</b>	<b>11,775,891</b>	<b>3,178</b>	<b>12,587,875</b>	<b>0</b>	<b>0</b>	<b>7,132</b>	<b>57,150,563</b>	<b>3,954</b>	<b>44,562,688</b>
<b>OEB Approved Programs</b>																				
Retrofits	79	0	0	0	0	0	0	0	79	0	0	0	0	0	0	0	0	0	0	0
New Construction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>OEB Approved Programs Total</b>	<b>79</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>79</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Commercial &amp; Inst. Total</b>	<b>1,920</b>	<b>23,952,871</b>	<b>1,298</b>	<b>12,948,007</b>	<b>2,427</b>	<b>17,625,765</b>	<b>1,250</b>	<b>19,838,789</b>	<b>3,196</b>	<b>15,506,348</b>	<b>1,406</b>	<b>11,775,891</b>	<b>3,178</b>	<b>12,587,875</b>	<b>0</b>	<b>0</b>	<b>7,132</b>	<b>57,150,563</b>	<b>3,954</b>	<b>44,562,688</b>

Cornerstone Hydro Electric Concepts Association

Annual Milestone - Contribution to 2014 Target																					
Category - Industrial	2011 Original Strategy Projection		Actual 2011 Results		2012 Revised Strategy Projection		Actual 2012 Results		2013 Revised Strategy Projection		Actual 2013 Results		2014 Revised Strategy Projection		Actual 2014 Results		Revised Total Projected Reduction		Contribution to Target		
	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	
Program Name																					
Industrial Accelerator	55	1,284,928	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Industrial Equipment Replacement	431	10,125,877	53	2,938,736	436	5,576,430	0	0	381	3,361,143	0	0	183	1,026,032	0	0	236	3,964,769	53	2,938,736	
Demand Response 1	0	7	0	0	0	0	0	0	0	4	0	0	1	1	0	0	1	1	0	0	
Demand Response 3	24	524,494	1,549	90,925	21	436,972	66	52,874	410	678	980	48,065	75	775	0	0	2,670	192,638	2,595	191,863	
<b>Provincial Industrial Total</b>	<b>511</b>	<b>11,935,306</b>	<b>1,602</b>	<b>3,029,661</b>	<b>457</b>	<b>6,013,402</b>	<b>66</b>	<b>52,874</b>	<b>791</b>	<b>3,361,825</b>	<b>980</b>	<b>48,065</b>	<b>259</b>	<b>1,026,809</b>	<b>0</b>	<b>0</b>	<b>2,907</b>	<b>4,157,408</b>	<b>2,648</b>	<b>3,130,599</b>	
OEB Approved Programs																					
A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>OEB Approved Programs Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>Industrial Total</b>	<b>511</b>	<b>11,935,306</b>	<b>1,602</b>	<b>3,029,661</b>	<b>457</b>	<b>6,013,402</b>	<b>66</b>	<b>52,874</b>	<b>791</b>	<b>3,361,825</b>	<b>980</b>	<b>48,065</b>	<b>259</b>	<b>1,026,809</b>	<b>0</b>	<b>0</b>	<b>2,907</b>	<b>4,157,408</b>	<b>2,648</b>	<b>3,130,599</b>	
<i>Note: Sums above do not include Orillia Power's projected or actuals as Strategy not itemized by initiatives</i>																					
CDM Strategy Total	2011 Original Strategy Projection		Actual 2011 Results		2012 Revised Strategy Projection		Actual 2012 Results		2013 Revised Strategy Projection		Actual 2013 Results		2014 Revised Strategy Projection		Actual 2014 Results		Revised Total Projected Reduction		Contribution to Target		
	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	
Program Total	3,952	48,501,204	4,319	29,548,017	3,958	32,093,004	1,845	28,356,940	5,726	30,193,459	3,255	17,058,356	6,383	20,658,209	0	0	15,859	95,894,130	9,419	74,963,314	
2010 Contribution	0	0	577	11,452,775	6	29,450	32	307,683	0	0	0	0	0	0	0	0	438	8,540,239	609	11,760,458	
Adjustments to Verified Final Results	0	0	0	0	0	0	-12	1,508,758	0	0	167	2,755,323	0	0	0	0	147	3,055,595	155	4,264,081	
<b>Adjusted Total</b>	<b>3,952</b>	<b>48,501,204</b>	<b>4,896</b>	<b>41,000,793</b>	<b>3,964</b>	<b>32,122,454</b>	<b>1,865</b>	<b>30,173,381</b>	<b>5,726</b>	<b>30,193,459</b>	<b>3,422</b>	<b>19,813,679</b>	<b>6,383</b>	<b>20,658,209</b>	<b>0</b>	<b>0</b>	<b>16,444</b>	<b>107,489,963</b>	<b>10,183</b>	<b>90,987,852</b>	
																Target to Achieve		25,720	119,510,000		
				10,250,198						10,057,794						9,906,839					
Percentage of Target	2011 Original Strategy Projection		Actual 2011 Results		2012 Revised Strategy Projection		Actual 2012 Results		2013 Revised Strategy Projection		Actual 2013 Results		2014 Revised Strategy Projection		Actual 2014 Results		Revised Total Projected Reduction		Contribution to Target		
	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	
	15.4%	40.6%	19.0%	34.3%	15.4%	26.9%	7.3%	25.2%	22.3%	25.3%	13.3%	16.6%	24.8%	17.3%	0.0%	0.0%	64%	93.4%	39.6%	76.1%	
<i>Note: Total Projection is formed of 2011, 2012 &amp; 2013 Actuals added with 2014 Revised Strategy Projection</i>																					

**6.0 Addendums:**

Centre Wellington Hydro ..... Addendum 1  
COLLUS Power Stream..... Addendum 2  
Innisfil Hydro Distribution Systems..... Addendum 3  
Lakefront Utilities..... Addendum 4  
Lakeland Power Distribution..... Addendum 5  
Midland Power Utility..... Addendum 6  
Orangeville Hydro..... Addendum 7  
Orillia Power..... Addendum 8  
Parry Sound Power..... Addendum 9  
Rideau St. Lawrence Distribution..... Addendum 10  
Wasaga Distribution Ltd..... Addendum 11  
Wellington North Power..... Addendum 12  
West Coast Huron Energy..... Addendum 13

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# **Innisfil Hydro Distribution Systems Limited**

**Addendum 3 – CHEC CDM Combined Annual Report 2013**

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## **Conservation and Demand Management 2013 Annual Report**

**Submitted to:  
Ontario Energy Board**

**Submitted on September 30, 2014**

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## Executive Summary

This annual report is submitted by Innisfil Hydro Distribution Systems Limited (IHDSL) in accordance with the filing requirements set out in the CDM Code (Board File No. EB-2010-0215), specifically Appendix C Annual Report Template, as a progress report and modification to IHDSL’s Strategy. Accordingly, this report outlines IHDSL’s CDM activities for the period of January 1, 2013 to December 31, 2013. It includes net peak demand and net energy savings achieved from 2011, 2012 and 2013, with discussion of the current/future CDM framework, CDM program activities, successes and challenges, as well as forecasted savings to the end of 2014.

IHDSL did not apply for any Board-Approved CDM Programs during 2013; however, as noted in the CDM guidelines, released April 26, 2012, the Ontario Energy Board (OEB) has deemed Time-of-Use (TOU) pricing a Province-wide Board-Approved CDM Program. The Ontario Power Authority (OPA) is to provide measurement and verification on TOU. At the time of this report the OPA has not released any verified results of TOU savings to IHDSL.

In 2011, IHDSL contracted with the Ontario Power Authority (OPA) to deliver a portfolio of OPA-Contracted Province-Wide CDM Programs to all customer segments including residential, commercial, institutional, industrial and low income. These programs were rolled-out by the OPA in June 2011. In 2011 Program activities were centered on building a foundation for full program execution over the next three years of the program term, including staffing, procurement, and program delivery.

In 2012 IHDSL continued to place significant emphasis on the programs in market. The delivery of ERIL and Direct Install programs continued to be active and the Home Assistance Program was launched and the Peak Saver RFP released. To date IHDSL has:

- Launched all available OPA Programs following their release by the OPA, with the exception of **peaksaver plus**:
- Delivered marketing to inform consumers in all sectors including **peaksaver plus**:
- Informed industry stakeholders about OPA Programs, the use of online application system,
- Partnered with CHEC LDCs to form partnerships and delivery models for the various programs;
- In conjunction with other CHEC LDCs engaged the services of a Roving Energy Manager:
- Actively participated in Electrical Distribution Association (EDA, LDC and OPA working groups through our own staff or CHEC resources in order to improve and simplify the existing programs and processes; and
- Transitioned pre-2011 projects into 2011.

In 2013 IHDSL again continued to place significant emphasis on programs in market. Although fully engaged in the community to promote the **savonenergy** programs without **peaksaver plus**, IHDSL's momentum was as a result of business program engagement.

- Participant engagement in the business programs increased due primarily to customer feedback and word of mouth
- Successful HAP program results for 2013 resulting from marketing and community engagement
- Successful REM engagement for the Town of Innisfil and our 2 large customers

Although IHDSL has had successes on the business programs we are concerned with saturation as IHDSL is below the Provincial average with respect to the % of business customers and above the Provincial average for residential customers. The Provincial average is 10% for business customers as compared to IHDSL's 6.6%.

To date IHDSL has achieved 526kW of net incremental peak demand savings and 6.85GWh of net incremental energy savings in 2013. A summary of the achievements towards the CDM targets is shown below:

### IHDSL Peak Demand Savings

Implementation Period	Annual			
	2011	2012	2013	2014
2011- Verified	0.3	0.1	0.1	0.1
2012- Verified		0.1	0.1	0.1
2013 - Quarter 1			0.7	0.3
2014				
<b>Un Verified Portion of Peak Demand Savings Target Achieved in 2014 (%)</b>				<b>0.5</b>
<b>IHDSL 2014 CDM Target</b>				<b>2.5</b>
<b>Verified Portion of Peak Demand Savings Target Achieved in 2014 (%)</b>				<b>21.00%</b>

### IHDSL Net Energy Savings

Implementation Period	Annual				Cumulative 2011-2014
	2011	2012	2013	2014	
2011- Verified	0.6	0.6	0.6	0.5	2.2
2012- Verified		0.6	0.6	0.6	1.8
2013 - Quarter 1			1.3	1.3	2.8
2014					
<b>Un Verified Net Cumulative Energy Savings 2011-2014</b>					<b>6.9</b>
<b>IHDSL 2011-2014 Annual CDM Energy Target</b>					<b>9.2</b>
<b>Verified Portion of Cumulative Energy Achieved (%)</b>					<b>74.50%</b>

IHDSL's original strategy submitted in 2010 forecasted a demand savings of 75% of the 2.5 MW target. Based on the 2013 final results, IHDSL is anticipating achieving 57.64% (including demand response) of the target or a 17.36% shortfall of our original submitted forecast by the end of 2014.

On the energy savings side, IHDSL submitted a forecast achieving 80% of the 9.2 GWh. Based on the 2013 final results, IHDSL is anticipating achieving 86.6% of the target therefore exceeding our original forecast but a shortfall on the provincial target of 13.4%.

Given the expected shortfall, IHDSL continues to work actively on participant engagement. In addition IHDSL has partnered with other LDCs, and has been working with the Ontario Power Authority ("OPA") and the Electrical Distribution Association ("EDA") to improve program effectiveness, however it is IHDSL's position that in itself will not fully overcome the forecasted peak demand savings shortfall.

2011 Original Strategy Projection		Actual 2011 Results		2012 Revised Strategy Projection		Actual 2012 Results		2013 Revised Strategy Projection		Actual 2013 Results		2014 Revised Strategy Projection		Actual 2014 Results		Revised Total Projected Reduction		Contribution to Target	
kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh
10.2%	32.9%	5.6%	24.2%	29.0%	45.0%	4.7%	19.9%	18.1%	23.4%	10.7%	30.4%	23.3%	12.1%	0.0%	0.0%	44%	86.6%	21.1%	74.5%

## Background

On March 31, 2010, the Minister of Energy and Infrastructure of Ontario, under the guidance of sections 27.1 and 27.2 of the *Ontario Energy Board Act, 1998*, directed the Ontario Energy Board (OEB) to establish Conservation and Demand Management (CDM) targets to be met by electricity distributors. Accordingly, on November 12, 2010, the OEB amended the distribution license of Innisfil Hydro Distribution Systems Limited (IHDSL) to require IHDSL, as a condition of its license, to achieve 9.2 GWh of energy savings and 2.5 MW of summer peak demand savings, over the period beginning January 1, 2011 through December 31, 2014.

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

The Code also requires a distributor to file annual reports with the Board. This is the third Annual Report by IHDSL and has been prepared in accordance with the Code requirement and covers the period from January 1, 2013 to December 31, 2013.

IHDSL submitted its 2011 Annual Report on September 30, 2012 which summarized the CDM activities, successes and challenges experienced by IHDSL for the January 1, 2011 to December 31, 2011 period. The OEB's 2011 CDM Results report identified that the delay in the full suite of CDM Programs being made available by the OPA, and the absence of some programs negatively impacted the final 2011 results for the LDCs. This issue was also highlighted in Volumes I & II of the Environmental Commissioner's Report on Ontario's Annual Energy Conservation Progress.

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

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

IHDSL submitted its 2012 Annual Report on September 30, 2013 which summarized the CDM activities undertaken by IHDSL for the January 1, 2012 to December 31, 2012 period. The OEB's 2012 CDM Results report identified that the majority of LDCs achieved close to 20% of their net peak demand (MW) target from their 2012 results. However, LDCs generally advised the Board that meeting their peak demand (MW) target is not likely and that a shortfall is expected.

LDCs collectively achieved approximately 8% of the energy savings (GWh) target, which is slightly below the 10% incremental annual savings needed each year to achieve the energy savings target. Overall the cumulative results represent approximately 65% of the net energy target of 6,000 GWh.

The report identified that although there have been improvements to programs there still remains some shortcoming to the design and delivery of certain initiatives that have resulted in a negative impact to some programs. In particular, the change management process still requires improvements to expedite enhancements to initiatives. The report also noted that certain initiatives may be reaching the point of market saturation and that new initiatives may need to be developed in order to take the place of the existing initiatives.

# 1 Board-Approved CDM Program

## 1.1 Introduction

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

At this time, the implementation of Time-of-Use (“TOU”) Pricing has been deemed as a Board-Approved Conservation and Demand Management (“CDM”) program that is being offered in IHDSL’s service area.

## 1.2 TOU Pricing

### 1.2.1 Background

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

In accordance with a Directive dated March 31, 2010 by the Minister of Energy and Infrastructure, the OEB is of the view that any evaluations of savings from TOU pricing should be conducted by the OPA for the province, and then allocated to distributors. IHDSL will report these results upon receipt from the OPA.

The OPA had retained The Brattle Group as the evaluation contractor and has been working with an expert panel convened to provide ongoing advice on methodology, data collection, models, savings allocation, etc. The initial evaluations were conducted in 2013 with five LDCs – Hydro One, THESL, Ottawa Hydro, Thunder Bay and Newmarket. Preliminary results from these five LDCs were issued to the five LDCs involved in the study in August 2013 and are now publically available on the OPA website. Preliminary results demonstrated load shifting behaviours from the residential customer class.

Three additional LDCs were added to the study in 2014 – Cambridge-North Dumphries, Powerstream and Sudbury. Preliminary results from this study are planned to be issued to the eight LDCs in September 2014. The OPA advised that the TOU study will be complete in the summer of 2015 and final verified savings will be available for LDCs to include in the 2014 Annual Report.

As of September 30, 2014, the OPA has not released any verified results of TOU savings to IHDSL. Therefore IHDSL is not able to provide any verified savings related to LDC’s TOU program at this time.

### 1.2.2 TOU PROGRAM DESCRIPTION

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

**Initiative Frequency:** Year-Round

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

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

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

RPP TOU Effective Date	Rates (cents/kWh)		
	On Peak	Mid Peak	Off Peak
November 1, 2010	9.9	8.1	5.1
May 1, 2011	10.7	8.9	5.9
November 1, 2011	10.8	9.2	6.2
May 1, 2012	11.7	10.0	6.5
November 1, 2012	11.8	9.9	6.3
May 1, 2013	12.4	10.4	6.7
November 1, 2013	12.9	10.9	7.2
May 1, 2014	13.5	11.2	7.5

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

**Initiative Activities/Progress:** IHDSL completed the transition of its RPP customers to TOU billing on July 1, 2011.

### 1.3 IHDSL’s Application with the OEB

IHDSL did not submit any applications for OEB approved programs in 2013.

### 1.4 IHDSL’s Application with the OPA’s Conservation Fund

In 2013, the OPA introduced the Conservation Fund to help meet LDC’s interest in the development and launch of new local, regional and province-wide initiatives. The Conservation Fund’s LDC Program Innovation Stream fast-tracks LDC-led program design and the launch of successfully piloted initiatives prior to full scale deployment. By driving program innovation through the Conservation Fund, LDCs have the opportunity to both realize additional savings through the piloting and implementation of initiatives not currently addressed by the OPA portfolio and the means to test concepts for future local or province wide programs post 2014. As per the OPA, as of March 2014, three pilots have been contracted and are underway with Toronto Hydro and Niagara Peninsula Energy and ten others are in various stages of the contracting and development process.

In addition, building on LDC interest in social benchmarking services for the residential sector, in 2013 the Conservation Fund in collaboration with Hydro One, Milton Hydro and Horizon Utilities completed the procurement of three social benchmarking pilot projects. Beginning in 2014 these services will be offered to more than 100,000 customers for a one year period, with evaluation reports published shortly thereafter.

IHDSL did not submit a CDM program application to the OPA’s Conservation Fund in 2013.

## 2 OPA-Contracted Province-Wide CDM Programs

### 2.1 Introduction

Effective February 26, 2011 IHDSL entered into an agreement with the OPA to deliver CDM programs extending from January 1, 2011 to December 31, 2014, which are listed below. Program details are included in Appendix A. In addition, results include projects started pre 2011 which were completed in 2011:

Initiative	Schedule	Date schedule posted	IHDSL in Market Date
<b>Residential Programs</b>			
Appliance Retirement	Schedule B-1, Exhibit D	Jan 26, 2011	February, 2011
Appliance Exchange	Schedule B-1, Exhibit E	Jan 26, 2011	February, 2011
HVAC Incentives	Schedule B-1, Exhibit B	Jan 26, 2011	February, 2011
Conservation Instant Coupon Booklet	Schedule B-1, Exhibit A	Jan 26, 2011	February, 2011
Bi-Annual Retailer Event	Schedule B-1, Exhibit C	Jan 26, 2011	February, 2011
Retailer Co-op	n/a	n/a	n/a
Residential Demand Response	Schedule B-3	Aug 22, 2011	Not in market in 2013
New Construction Program	Schedule B-2	Jan 26, 2011	February, 2011
Home Assistance Program	Schedule E-1	May 9, 2011	May, 2012
<b>Commercial &amp; Institutional Programs</b>			
Efficiency: Equipment Replacement	Schedule C-2	Jan 26, 2011	February, 2011
Direct Install Lighting <ul style="list-style-type: none"> <li>General Service &lt;50 kW</li> </ul>	Schedule C-3	Jan 26, 2011	February, 2011
Existing Building Commissioning Incentive	Schedule C-6	Feb 2011	February, 2011
New Construction and Major Renovation Initiative	Schedule C-4	Feb 2011	February, 2011
Energy Audit	Schedule C-1	Jan 26, 2011	February, 2011
Commercial Demand Response <ul style="list-style-type: none"> <li>General Service &lt;50 kW</li> </ul>	Schedule B-3	Jan 26, 2011	Not in market in 2013
<b>Industrial Programs - General Service 50 kW &amp; above</b>			
Process & System Upgrades	Schedule D-1	May 31, 2011	July, 2011
Monitoring & Targeting	Schedule D-2	May 31, 2011	July, 2011
Energy Manager	Schedule D-3	May 31, 2011	July, 2011
Key Account Manager ("KAM")	Schedule D-4	May 31, 2011	July, 2011
Efficiency Equipment Replacement Incentive <ul style="list-style-type: none"> <li>(part of the C&amp;I program schedule)</li> </ul>	Schedule C-2	May 31, 2011	July, 2011
Demand Response 3	Schedule D-6	May 31, 2011	

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

- Electricity Retrofit Incentive Program
- High Performance New Construction



As per the table below, several program initiatives are no longer available to customer or have not been launched in 2013.

<b>Not in Market</b>	<b>Objective</b>	<b>Status</b>
<b>Residential Program</b>		
Midstream Electronics	Encourages retailers to promote and sell high efficiency televisions, and for distributors to distribute high efficiency set top boxes.	Did not launch and removed from Schedule in Q2, 2013.
Midstream Pool Equipment	Encourage pool installers to sell and install efficient pool pump equipment in residential in-ground pools.	Did not launch and removed from Schedule in Q2, 2013.
Home Energy Audit Tool	This is a provincial online audit tool to engage customers in conservation and help drive customer participation to CDM programs.	Did not launch and removed from Schedule in Q2, 2013.
<b>Commercial &amp; Institutional Program</b>		
Direct Service Space Cooling	Offers free servicing of air conditioning systems and refrigeration units for the purpose of achieving energy savings and demand reduction.	Did not launch in 2011/2012. As per the OPA there no plans to launch this Initiative in 2013.
Demand Response 1 ("DR1")	This initiative allows distribution customers to voluntarily reduce electricity demand during certain periods of the year pursuant to the DR 1 contract. The initiative provides DR payment for service for the actual electricity reduction provided during a demand response event.	No customer uptake for this initiative. As a result this Initiative was removed from the Schedule in Q4, 2012.
<b>Industrial Program</b>		
DR1	As above	No customer uptake for this initiative. Removed in Q4, 2012.

The Master CDM Program Agreement includes program change management provision in Article 3. Collaboration between the OPA and the Local Distribution Companies (LDCs) commenced in 2011, and continued in 2012 and 2013, as the change management process was implemented to enhance the saveONenergy program suite. The change management process allows for modifications to the Master Service Agreement and initiative Schedules. The program enhancements give LDCs additional tools and greater flexibility to deliver programs in a way that meets the needs of customers and further drives participation in the Initiatives.

## 2.2 Program Descriptions

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

### 2.2.1 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 help the environment.

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

**Promotion and Outreach:** As in the 2011 and 2012 periods, IHDSL was active in promoting the full suite of saveONenergy programs to customers in our service territory in 2013. Innisfil Hydro was present at the following community events in 2013, running the saveONenergy booth, promoting the saveONenergy programs, answering questions regarding energy efficiency, and responding to any other inquiries brought to our attention by our customers.

#### Community Events/Sponsorships – saveONenergy Booth

- Sandy Cove Acres Home Show
- Innisfil Pitch-in Day
- Sandy Cove Farmers Market
- Wing Ding Festival
- Innisfil Summerfest
- Innisfil Family Day
- Celebrate Lake Simcoe – Ladies of the Lake Celebration
- GICC Golf Tournament
- Cookstown GICC Golf Tournament
- Mayor's Golf Tournament
- Kids Scoop Bus

IHDSL was also active in undertaking educational initiatives to promote the full suite of saveONenergy programs, as well as to help educate our customers about energy efficiency

#### Educational Initiatives

- Innisfil Hydro Annual Conservation Calendar Contest
- Customer Connect
- "Kill-a-Watt" Reader Loans
- Bill Messaging
- IHDSL Facebook Posts
- IHDSL Website
- Customer Connect
- Quarterly Conservation Newsletter

- Customer Service TV
- CSR Training Updates
- Bill Messaging
- IHDSL Facebook and Website

**Discussion:**

The Residential Program Portfolio is predominately a carryover of Initiatives from previous programs. It is mostly driven by retailers and contractors who many not have fully delivered what was anticipated. Three new initiatives (Midstream Electronics, Midstream Pool Equipment and Home Energy Audit Tool) were not launched and subsequently removed from the schedule in 2013 with no new additions. Delays in communication with regards to Initiative offerings and results reporting have hampered LDCs abilities to engage customers and promote participation.

Since the 2011 program year IHDSL has seen participation in the residential sector diminish year over year, most noticeably in the Appliance Retirement initiative, which we believe indicates some programs available in the Residential Program portfolio are becoming saturated. 2013 Verified Results for the residential programs show the weakest overall results in terms of verified savings that IHDSL has seen in the residential sector since the inception of the programs.

The Residential Demand Response program was expected to be the largest contributor to demand savings in the Residential Program and was expected to gain significant traction in 2013. While the peaksaver PLUS RFP had been released towards the end of 2012 award of contract, technology selection and system preparedness issues resulted in limited market exposure in 2013. IHDSL was not in market with Residential Demand Response in the 2013 program year. IHDSL’s inability to launch the Residential Demand Response program has greatly impacted IHDSL’s progress to achieving peak demand targets. The Residential Demand Response program was forecasted to deliver nearly 20% of IHDSL’s total peak demand target. It is IHDSL’s view that this program for 2011 and 2012 did not meet the criteria as outlined in the Minister’s Directive of being a “provincial program”.

The addition of LED measures to the Bi-Annual Retailer Event and in the Annual Coupon initiative in July 2013 has had a positive impact on customer participation. There was the added benefit of three LDC custom coded coupon options for LDCs to utilize in 2013. Based on 2013 Verified Results, IHDSL has seen an increase in customer participation in the Annual Coupon initiative after a down year with the program in 2012, we expect that participation in this initiative will again increase in 2014. Work to revitalize and increase the effectiveness and breadth of the Initiatives through the Residential Program continue to be a high priority. Opportunities within the Residential marketplace need to be identified, developed and offered to customers. The Version 5 Schedule changes implemented in Q1/Q2 2014 have increased the number of LDC coded coupons available and added new installations to the Heating and Cooling Incentive.

**2.2.1.1 Appliance Retirement Initiative (Exhibit D)**

**Initiative Activities/Progress:** IHDSL has seen a decline in participating in this initiative, 2012 marked a 62% decrease in participation over 2011. Again in 2013 this trend was seen, with a 48% decline in participation in 2013 from 2012. This initiative was promoted year round by IHDSL customer service staff, in IHDSL program brochures made available at the IHDSL office, as well as community events.

**Additional Comments:**

- Due to the duration of the program, and the revised eligibility requirements to a minimum of 20 years old, this Initiative appears to have reached market saturation and has been under consideration for removal from the Portfolio.
- Rather than strictly remove this Initiative from the schedules, the OPA and LDCs could review what opportunities there are to include other measures such as stoves, dishwashers, washers and dryers. The framework of this Initiative may be a suitable foundation for a more holistic residential appliance retirement program. As such, the Residential portfolio could be straightened through program evolution rather than weakened through diminished program offerings.
- As participation is very responsive to province wide advertising, OPA province-wide advertising should continue to play a key role if the initiative continues.
- Better relationships with retailers may play a role in increasing participation in this Initiative. Retailers can provide opportunities to capture replacement appliances and have them decommissioned after a sale has been committed.
- In an effort to capture additional savings in the perceived last year of the Initiative, the eligibility requirement for refrigerators was revised from 20 years old to 15 years old in Q2 2014.

**2.2.1.2      *Appliance Exchange Initiative (Exhibit E)***

**Initiative Activities/Progress:** IHDSL saw an increase in participation in this program from the 2012 program year. After partnering with PowerStream in 2012 to promote the Appliance Exchange Initiative, resulting in weaker than expected results, IHDSL's marketing specific to this initiative in 2013 was not as extensive.

The initiative is promoted by IHDSL at community events, by IHDSL's customer service staff, as well as by participating retailers.

**Additional Comments:**

- The design of the Initiatives, including eligible measures and incentives amounts are developed through the Residential Working Group. Retail Partner(s) are contracted by the OPA to deliver the initiatives province-wide. Individual LDCs have the opportunity to stage in-store events to drive the distribution of LDC coded Coupons and promotion of other programs in the portfolio
- The restrictive, limited and sometimes non-participation of local stores can diminish the savings potential for this Initiative.
- To date there has only been one retailer participant in the Appliance Exchange Initiative.
- In 2012 there was a decrease in the number of window air conditioners being received through the program. A review of eligible measures in the Appliance Exchange program was conducted, and as these units are not

cost effective on their own it was determined that they be removed from the program in order to improve the overall cost effectiveness of the Initiative

- Notification to LDCs regarding retailer participation and eligible measures continues to be delayed. Improved communications will aid in appropriate resource allocation and marketing of the Initiative.
- This Initiative may benefit from the disengagement of the retailer and allowing LDCs to conduct these events, possibly as part of a larger community engagement effort, with the backing of ARCA for appliance removal.
- The initiative appears to require more promotion from retailers and LDCs.

### **2.2.1.3 HVAC Incentives Initiative (Exhibit B)**

**Initiative Activities/Progress:** The HVAC Incentives Initiative is one that is difficult to effectively promote, and participation is largely driven by participating contractors. The program is promoted in IHDSL's Residential Program brochure that is available to customers at the IHDSL office, as well as at community events IHDSL attends. Innisfil Hydro's customer service staff also promotes this initiative to customers.

#### **Additional Comments:**

- Incentive levels appear to be insufficient to prompt customers to upgrade HVAC equipment prior to end of useful life. An Air Miles incentive was introduced in 2013 to try and encourage early replacement.
- This Initiative is contractor driven with LDCs responsible for marketing efforts to customers. More engagement with the HVAC contractor channel should be undertaken to drive a higher proportion of furnace and CAC sales to eligible units.
- In an effort to build capability, mandatory training has been instituted for all participating HVAC contractors. This could present too much of a barrier for participation for some contractors as the application process already presents a restriction to contractor sales. It has been noted that there are approximately 4500-5000 HVAC contractors in the Province, however in 2013, only a total of 1,587 contractors completed the mandatory HVAC training and can participate in the program.
- There are cases where non-participating contractors are offering their own incentives (by discounting their installations to match value of the OPA incentive). As this occurs outside of the Initiative, savings are not credited to LDCs. OPA should consider this in future program impact evaluation studies.
- Changes to the Schedule in 2014 to allow for incentives for new installations, rather than strictly replacement units, may provide greater Initiative results.

#### **2.2.1.4      *Conservation Instant Coupon Initiative (Exhibit A)***

**Initiative Activities/Progress:** As per OPA 2013 Verified Results, IHDSL saw a huge increase in participation in this initiative. In 2013 IHDSL promoted the Instant Coupon Initiative to customers at community events, on the IHDSL Facebook page, IHDSL website and through IHDSL customer service staff. IHDSL has made copies of the Instant Coupons available for pickup at our office, for download at IHDSL's website, as well as at community events. We expect this initiative to perform strongly in 2014 as well.

##### **Additional Comments:**

- The timeframe for retailer submission of redeemed coupons varies depending on the retailer and in some cases has been lengthy. The delays and incomplete results reporting limits the ability to react and respond to Initiative performance or changes in consumer behavior.
- The Initiative may benefit from province-wide marketing as a substitute to a mail out campaign.
- The product list could be distinctive from the Bi-Annual Retailer Event Initiative in order to gain more consumer interest and uptake.
- Program evolution, including new products and review of incentive pricing for the coupon Initiatives, should be a regular activity to ensure continued consumer interest.
- In 2013, LDCs were provided with 3 custom coded coupons. All coupons have been provided with LDC custom coding in 2014 which allows LDCs to promote coupons based on local preferences.
- Consumer experience varies amongst retailers offering Coupon discounts which can limit redemptions. For example, a particular high volume 'participating retailer' does not accept coupons and have their own procedure. In addition, some retailers have static lists of eligible products and will not discount eligible products unless the product on the list.
- The saveONenergy programs would benefit from specific end cap displays, aisle product stands and product-specific areas. Having products throughout a retail environment weakens the impact.

#### **2.2.1.5      *Bi-Annual Retailer Event Initiative (Exhibit C)***

**Initiative Activities/Progress:** Participation in the Bi-Annual Retailer event decreased in 2013 for IHDSL. The event is advertised and promoted with our Customer Service Representatives as a means to buy energy saving products which will assist with your energy consumption.

##### **Additional Comments:**

- This Initiative is strongly influenced by the retail participants and has no direct involvement from the LDCs.

- LDCs have the opportunity to stage in-store events to drive the distribution of LDC coded Coupons and promotion of other programs in the portfolio however this requires cooperation from the local retailer and LDC staff bandwidth.
- Limited engagement of local retailers can restrict the savings potential for this Initiative.
- The Product list has changed very little over the past five years.
- Program evolution, including new products and review of incentive pricing for the coupon Initiatives, must be a regular activity to ensure continued consumer interest.
- The Product list could be distinctive from the Conservation Instant Coupon Initiative in order to gain more consumer interest and uptake.
- A review conducted by the Residential Working Group identified three areas of need for Initiative evolution: 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.
- This Initiative may benefit from a more exclusive relationship with a retailer appropriate to the program. There should be a value proposition for both the retailer and LDC.
- Independently the Retailer Co-op and Bi-Annual Retailer Event Initiative may not present a value for the investment of LDC resources to support these events and should be backed by a strong Residential portfolio.

#### **2.2.1.6      *Retailer Co-op***

**Initiative Activities/Progress:** IHDSL did not participate in any Retailer Co-op in 2013. This decision was primarily based on findings in 2012.

**Additional Comments:**

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

#### **2.2.1.7      *New Construction Program (Schedule B-2)***

**Initiative Activities/Progress:** IHDSL has not had success in the promotion or uptake of this program to date. Sessions held with local contractors and builders received feedback on the concerns of cost benefits of the administration versus the value to the consumer. IHDSL currently has 1 New Construction application underway, completion is 2014 is likely.

**Additional Comments:**

- This Initiative provides incentives to home builders for incorporating energy efficiency into their buildings. To support this, LDCs need to provide education to the consumers regarding the importance of choosing the energy efficient builder upgrade options without an immediate benefit to the consumer.
- In 2012 the application process was streamlined, however continues to be too cumbersome for builders. This combined with limited return has resulted in this Initiative to continue to under-achieve.
- Administrative requirements, in particular individual home modeling, must align with perceived stakeholder payback
- Performance applications are expected to increase in 2014 due to some industry players interest in the Initiative. However, it is anticipated that the performance track will be the primary track used in applications, which provides low savings for the incentive provided. Savings and associated incentives may need to be revised to an appropriate level.
- The addition of LED light fixtures, application process improvement and moving the incentive from the builder to the home-owner may increase participation.
- This Initiative may benefit from collaboration with the Natural Gas utilities.

**2.2.1.8 Residential Demand Response Program (Schedule B-3)**

**Initiative Activities/Progress:** The RFP was released late in 2012 to engage providers and to finalize technology to commence the delivery of the program in 2013. It was anticipated that the initial year would allow any technology issues to be resolved and marketing of the program to begin.

Technology issues launching the program moved the in-market date later than anticipated, postponed into late 2014 awaiting communication capabilities. Further complicating the issue was the need to terminate installation as colder weather approached to avoid completing the initial test installations when the AC would not be operating.

IHDSL was active in promoting the Residential Demand Response program in 2013, continuing to add names to IHDSL's program waiting list. Unfortunately due to delays implementing technology required, IHDSL was unable to offer the Residential Demand Response program in 2013. IHDSL's 2011-2014 CDM Strategy was dependent on this program to deliver peak demand savings for the residential sector since 2011. The lack of availability of this program in 2012 and 2013 has greatly impacted progress towards achieving IHDSL's 2011-2014 peak demand target.

As discussed in Section 2.2.1 it is IHDSL's view that this program for 2011, 2012 and 2013 did not meet the criteria as outlined in the Minister's Directive of being a "provincial program".

**Additional Comments:**



- In Home Energy Display units that communicate with installed smart meter technology continue to mostly be in the development phase and are not ready for market deployment. There continues to be a lack of Energy Display selection in the marketplace.
- Smart Meters installed by most LDCs do not have the capability to communicate directly to an In Home Display and any mass replacement of newly installed meters with communicating abilities would not be fiscally responsible. When proposing technical Initiatives that rely on existing LDC hardware or technology there should be an extensive consultative process.
- Introduction of new technology requires incentives for the development of such technology. Appropriate lead times for LDC analysis and assessment, product procurement, and testing and integration into the Smart Meter environment are also required. Making seemingly minor changes to provincial technical specifications can create significant issues when all LDCs attempt to implement the solution in their individual environments.
- The variable funding associated with installing a load controllable thermostat is not sufficient unless it is combined with an In Home Display (IHD) which might not be possible all the time and when IHD is optional.
- Given the different LDC environments, and needs, each LDC is positioning the Initiative slightly differently. While a Thermostat has high marketability, it also carries a higher maintenance liability due to no-heat and no-AC calls. A switch with an independent IHD is seen as a lower liability option but also has a much lower marketability.
- This is the main Initiative within the Residential portfolio that was to drive savings for LDC, however the 2012 evaluation indicated savings realized from the IHD were not statistically significant. LDCs were advised that the evaluation of the IHDs would continue with 2013 data.
- Verified demand savings in 2012 from the load control devices were less than originally anticipated. This prompted an increase to the load cycling strategy in 2013 in order to increase savings closer to the original business case.
- There currently is not an avenue for participants without the ability to provide demand response capabilities to obtain an IHD and gain energy saving benefits.
- Provincial wide marketing needs to be sensitive to the variations of the Initiative and provide solid, consistent messaging.

### 2.2.2 COMMERCIAL AND INSTITUTIONAL PROGRAM

**Description:** Provides commercial, institutional, agricultural and industrial organizations with energy-efficiency programs to help reduce their electrical costs while helping Ontario defer the need to build new generation and reduce its environmental footprint. Programs to help fund energy audits, to replace energy-wasting equipment or to pursue new construction that exceeds our existing codes and standards. Businesses can also pursue incentives for controlling and reducing their electricity demand at specific times.

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

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

**Discussion:**

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

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

Despite these challenges the C&I Working Group, working in cooperation with the OPA, have managed to iron out many of the issues which could be rectified. In particular, an accomplishment of 2012 was the advent of the expedited change management as means to accelerate certain program changes. 2013 saw the benefits of expedited change management process.

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

The C&I portfolio does appear to be maintaining traction within the industry; IHDSL has seen multiple businesses within the IHDSL service area complete multiple saveONenergy applications. The 2013 period represents the greatest results in terms of both savings, and participation IHDSL has seen in the program since 2011. The continued availability of the program is being incorporated into business cases within the sector

Throughout 2013 IHDSL along with the other CHEC LDCs benefited from the efforts of the Roving Energy Manager. The ability to collaboratively obtain this resource has been very beneficial.

#### **2.2.2.1 Efficiency: Equipment Replacement Incentive (ERII) (Schedule C-2)**

**Initiative Activities/Progress:** IHDSL has seen customer interest and uptake in ERII continue to grow. OPA 2013 Verified Results show participation in this initiative, as well as savings generated are the highest IHDSL has seen during the 2011-2013 period. IHDSL has raised concerns with the OPA around accuracy of OPA Results, and discrepancies that have been identified by IHDSL, at this time IHDSL is not confident that all ERII projects have been captured, and attributed to the correct program year.

IHDSL expects 2014 to be another strong year for ERII, it is likely this initiative will contribute the most energy, and peak demand savings towards IHDSL's 2011-2014 Target, aside from Demand Response.

**Additional Comments:**

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- A large proportion of savings are attributed to ERIL.
- CHEC LDC's REM has been instrumental in driving increase in ERIL participation in IHDSL service territory.
- This Initiative is limited by the state of the economy and the ability of commercial/institutional facility to complete capital upgrades.
- Applicants and Applicant Representatives continue to express dissatisfaction and difficulty with the online application system. This issue has been addressed by LDCs through application training workshops, Key Account Managers, channel partner/contractor training and LDC staff acting as customer Application Representatives. Although this has been an effective method of overcoming these issues and encouraging submissions, it also reflects on the complexity and time consuming nature of the application process. As such, Applicant Representatives continue to influence the majority of applications submitted. Continued development of Channel Partners is essential to program success.
- Prescriptive and Engineered worksheets provide a much needed simplified application process for customers. However, the eligible measures need to be updated and expanded in both technology and incentive amounts to address changing product costs and evolution of the marketplace.
- A focus on demand incentives has limited some kWh project opportunities. In particular, night lighting projects have significant savings potential for customers but tend to have incentives of 10% of project cost or less.
- The requirement to have a customer invoice the LDC for their incentive is very burdensome for the customer and results in a negative customer experience and another barrier to participation.
- There is redundancy in the application process as customers may need to complete a worksheet and then enter most of that information over to the online application form. This can be cumbersome.
- Processing Head Office application became much easier for the Lead LDC after Schedule changes came into effect in August 2013. The changes implemented allowed the Lead LDC to review and approve all facilities in a Head Office application on behalf of all satellite LDCs under certain circumstances.
- The application process for Head Office projects remains a significant barrier. Applicants need to manually enter one application per facility associated with the project can be extremely onerous, often requiring a dedicated resource.
- Streamlining of the settlements systems resulted in significant improvement in the payment process in 2013.

#### **2.2.2.2      *Direct Install Initiative (DIL) (Schedule C-3)***

**Initiative Activities/Progress:** DIL has been a very successful initiative in the IHDSL service territory; however the majority of the participation in this initiative took place prior to 2011, which has impacted the level of results IHDSL could achieve in this initiative in the 2011-2014 period. The inclusion of LED in the initiative unlocked further potential and has resulted in more projects. Further improvements or changes to the program are required to unlock more potential in the IHDSL service territory, such as increased incentives, or expanded eligibility to include customers with peak demand >50kW.

**Additional Comments:**

- Successful execution of the previous rendition of this Initiative has resulted in diminished potential for the 2011-2014 Initiative for IHDSL.
- LED lighting was introduced in 2013 as a new measure and has been well received by customers who may not have previously qualified for DIL eligible upgrades. This is an efficient product with a long estimate useful life.
- Cold start high output lighting was removed from the program. This particularly affected the farming customers who now have limited options within the program to utilize.
- The inclusion of a standard incentive for additional measures increased project size and drove higher energy and demand savings results in some situations. However, LDCs are unable to offer these standard incentives to prior participants. The ability to return to prior participants and offer a standard incentive on the remaining upgrades has potential to provide additional energy and demand savings
- Many customers are not taking advantage of any additional measures, which may present an opportunity to for future savings with a new program offering.
- Electrical contractor's margins have been reduced due to no labour rate increase, increase cost of materials, greater distances between retrofit and more door knocking required before a successful sale. This has led to a reduction in vendor channel participation in some regions.
- Measure incentives and additional funding for fork lifts were introduced in September 2013 and were well received by installers. However, adjustments like these require longer lead times. As such, many customers were not able to benefit from this change in late 2013. Consideration should be given to providing advanced notification to LDCs and contractors of the upcoming changes to allow for planning.

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

**Initiative Activities/Progress:** General promotion of this initiative with similar programs was utilized. The opportunity for chilled water systems is limited in IHDSL's service territory.

**Additional Comments:**

- Initiative name does not properly describe the Initiative.
- There was minimal participation for this Initiative. It is suspected that the lack of participation in the program is a result of the Initiative being limited to space cooling and a limited window of opportunity (cooling season) for participation.
- Participation is mainly channel partner driven, however the particulars of the Initiative have presented a significant for many channel partners to participate.

- The customer expectation is that the program be expanded to include a broader range of measures for a more holistic approach to building recommissioning and chilled water systems used for other purposes should be made eligible and considered through Change Management.
- This initiative should be reviewed for incentive alignment with ERII, as currently a participant will not receive an incentive if the overall payback is less than 2 years.

#### **2.2.2.4 New Construction and Major Renovation Initiative (HPNC) (Schedule C-4)**

**Initiative Activities/Progress:** To date there have been no HPNC projects completed in the IHDSL service territory in the 2011-2014 period. At the present time there are 5 HPNC projects underway, and there is potential all 5 projects could be completed in 2014. There are other opportunities under investigation which may also result in projects, although it is not likely they will be completed in the 2011-2014 period. HPNC is a difficult initiative to effectively promote, IHDSL monitors development to try and encourage participation in the initiative.

New Construction initiatives represent strong savings potential in the IHDSL service territory, as significant growth and new development is forecasted in coming years.

#### **Additional Comments**

- With the Ministerial Directive issued December 21, 2012, facilities with a completion date near the end of 2014 currently have some security that they will be compensated for choosing efficient measures. However, buildings that are in the planning phase with completion dates post-2015 may not participate due to funding uncertainty.
- Participants estimated completion dates tend to be inaccurate and are usually six months longer. This could result in diminished savings towards target when facilities are not substantially completed by December 31, 2014.
- The custom application process requires considerable customer support and skilled LDC staff. The effort required to participate through the custom stream exceeds the value of the incentive for many customers.
- There are no custom measure options for items that do not qualify under the prescriptive or engineered track as the custom path does not allow for individual measures, only whole building modelling.
- This Initiative has a very low net-to-gross ratio, which results in half the proposed target savings being 'lost'.
- The requirement to have a customer invoice the LDC for their incentive is very burdensome for the customer and results in a negative customer experience and a potential barrier to participation.

#### **2.2.2.5 Energy Audit Initiative**

**Initiative Activities/Progress:** No Energy Audit applications were received in 2013, but IHDSL is active in promoting this initiative. The CHEC LDC REM has been able to provide IHDSL customers with in depth energy assessments, reducing the need for customers to bring in 3<sup>rd</sup> party energy auditors. There is still potential for IHDSL customers to take advantage of this initiative, in particular in scenarios where they are looking for expertise on a specific end use.

- The introduction of the new audit component for one system (i.e. compressed air), has increased customer participation.
- The energy audit Initiative is considered an ‘enabling’ Initiative and ‘feeds into’ other saveONenergy Initiatives.
- Evaluators in 2012 and 2013 recognized savings towards LDCs targets as a result of customers implementing low/no cost recommendations from their energy audits.
- Audit reports from consultants vary considerably and in some cases, while they adhere to the Initiative requirements, do not provide value for the Participant. A standard template with specific energy saving calculation requirements should be considered.
- Customers look to the LDCs to recommend audit companies. A centralized prequalified list provided by the OPA may be beneficial.
- Participation has been limited to one energy audit per customer which has restricted enabling and direction to the other Initiatives. This has been revised in 2014 and LDCs are now able to consider additional customer participation when presented with a new scope of work.
- Consideration should be given to allowing a building owner to undertake an audit limited to their lighting system. This way they may receive valuable information from neutral third party regarding the appropriate lighting solution for their facility instead of what a local supplier wants to sell.
- The requirement to have a customer invoice the LDC for their incentive is very burdensome for the customer and results in a negative customer experience and another barrier to participation

### **2.2.3 INDUSTRIAL PROGRAM**

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

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

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

**Discussion:**

The Industrial Program Portfolio has been able to provide significant incentives and valuable resources to large facilities to help them with energy efficiency upgrades and process system improvements. The Engineering Studies in particular as well as the Monitoring and Targeting initiative provide a unique opportunity for a customer to complete a comprehensive analysis of an energy intensive process that they otherwise may not undertake. The Energy Manager Initiative provides customers with a skilled individual whose only role is to assist them with conservation initiatives. To date these Energy Managers have played a key role in customer participation.

Within IHDSL's service territory there are a limited number of customers who can take advantage of the industrial program portfolio. In many instances the focus has been on the ERII program from the C&I program portfolio. The promotion of the industrial programs has been assisted by the CHEC Roving Energy Manager, a position which was filled in the 3<sup>rd</sup> quarter of 2012.

Due to the size, scope and long lead time of these Initiatives and associated projects, the Ministerial Directive provides some security for the continuation of the conservation programs and associated compensation for the participant; however the subsequent savings would not be attributed to an LDC's current target for projects that go into service after 2014.

Extensive legal documents, complex program structure and lengthy change management have restricted the change and growth of this Portfolio. While the expedited change management has benefited the Commercial Portfolio, the Industrial Portfolio has not seen the same results due to the narrow scope of the process. For 2013 the change to the threshold for small capital projects and the new small capital project agreement are expected to improve the number of projects and savings achieved within PSUI. Likewise, a decision to proceed with 2012 natural gas load displacement generation projects applications will also increase uptake although the limited time to bring new projects into service is a barrier.

### **2.2.3.1 Process & Systems Upgrades Initiative (PSUI) (Schedule D-1)**

**Initiative Activities/Progress:** At this time, there are two PSUI Engineering Studies underway in the IHDSL service territory, project completion is not likely in the 2011-2014 period. Promotion of this initiative is completed largely through the CHEC LDC's REM.

#### **Additional Comments:**

- Numerous energy studies have been submitted and completed across the province. This is a strong indication that there is the potential for large projects with corresponding energy savings. Most of these studies have been initiated through the Energy Manager and KAM resources.
- This Initiative is limited by the state of the economy and the ability of a facility to complete large capital upgrades.
- There is typically a long sales cycle for these projects, and then a long project development cycle. As such, limited results are expected to be generated in 2013. The majority of the results are expected in 2014 with a much reduced benefit to cumulative energy savings targets.

- Delays with processing funding payments have caused delayed payments to Participants beyond contract requirements. In some cases, LDCs have developed a separate side agreement between the LDC and Participant acknowledging that the Participant cannot be paid until the funds are received.
- The contract required for PSUI is a lengthy and complicated document. A key to making PSUI successful is a new agreement which is a simplified with less onerous conditions for the customer.
- To partially address this, changes were made to the ERII Initiative which allowed smaller projects to be directed to the Commercial stream. Most industrial projects to-date have been submitted as ERII projects due to less onerous contract and M&V requirements.
- A business case was submitted by the Industrial Working Group in July 2012 which would change the upper limit for a small project from 700 MWh to 1 million dollars in incentives. This would allow more projects to be eligible for the new small capital project agreement and increase participant uptake, while still protecting the ratepayer. This small capital project agreement was finalized in August 2013.
- While there is considerable customer interest in on-site Load Displacement (Co-Generation) projects, in 2012 the OPA was accepting waste heat/waste fuel projects only. Natural gas generation projects were on hold awaiting a decision on whether PSUI will fund these types of projects. In June 2013, a decision was made to allow natural gas load displacement generation projects to proceed under PSUI. It is expected that a number of projects will proceed although results may not be counted towards LDC targets due to in-service dates beyond 2014.
- The requirement to have a customer invoice the LDC for their incentive is very burdensome for the customer and results in a negative customer experience and another barrier to participation.

### ***2.2.3.2 Monitoring & Targeting Initiative (Schedule D-2)***

**Initiative Activities/Progress:** To date, IHDSL has not received any Monitoring and Targeting applications. The CHEC LDC REM promotes this initiative where appropriate.

#### **Additional Comments:**

- The M&T initiative is targeted at larger customers with the capacity to review the M&T data. This review requires the customer facility to employ an Energy Manager, or a person with equivalent qualifications, which has been a barrier for some customers. As such, a limited number of applications have been received to date.
- The savings target required for this Initiative can present a significant challenge for smaller customers.
- Changes were made to ERII in 2013 to allow smaller facilities to employ M&T systems.

### ***2.2.3.3 Energy Manager Initiative (Schedule D-3)***



**Initiative Activities/Progress:** The Roving Energy Manager has been actively engaging customers across the CHEC LDCs. Typically the LDC initiates the site visit to introduce the Roving Energy Manager to the customer along with the offer of assistance. The Roving Energy Manager has been very successful across the LDCs and provides a significant contribution to the awareness of conservation options and to the evaluation and implementation of programs.

To support the efforts of the Roving Energy Manager access to the OPA training and other programs has been made available to the REM. This assists in building capacity and will lead to continued good performance in future years.

Specific to the IHDSL service territory, the REM was instrumental in working with the Town of Innisfil and securing multiple Demand Response contracts. During the 2013 period the REM also was an asset in assisting IHDSL further promote, and encourage participation in ERII.

**Additional Comments:**

- The Energy Managers have proven to be a popular and useful resource for larger customers.
- CHEC LDCs qualified for their own REM to share among the Member LDCs.
- Some LDCs and Customers are reporting difficulties in hiring capable Roving and Embedded Energy Managers (REM/EEM), in some instances taking up to 7 months to have a resource in place.
- New energy managers require training, time to familiarize with facilities and staff and require time to establish “credibility”. Energy Managers started filling their pipeline with projects in 2012 but few projects were implemented until 2013.

**2.2.3.4 Key Account Manager (Schedule D-4)**

**Initiative Activities/Progress:** IHDSL does not have any customers within this rate class in our service territory.

**Additional Comments**

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

### **2.2.3.5 Demand Response 3 (D-6)**

**Initiative Activities/Progress:** In 2013 the CHEC LDC REM was instrumental in assisting with securing three DR3 contracts with the Town of Innisfil, making a large contribution to IHDSL's peak demand target, should these agreements persist until December 31, 2014.

**Additional Comments:**

- Until early 2013 customer data was not provided on an individual customer basis due to contractual requirements with the aggregators. This limited LDCs' ability to effectively market to prospective participants and verify savings.
- No program improvements were made in 2013 however, it was accepted that prior participants who renew their DR3 contract within the 2011-2014 term will contribute to LDC targets.
- As of 2013, Aggregators were able to enter into contracts beyond 2014 which has allowed them to offer a more competitive contract price (5 year) than if limited to 1 or 2 year contracts.
- Metering and settlement requirements are expensive and complicated and can reduce customer compensation amounts, and present a barrier to smaller customers.
- Compensation amounts for new contracts and renewals have been reduced from the initial launch of this program (premium zones and 200 hour option have been discontinued) and subsequently there has been a corresponding decrease in renewal revenue. This can impact on customers remaining in the program.

### **2.2.4 LOW INCOME INITIATIVE (HOME ASSISTANCE PROGRAM) (Schedule E-1)**

**Initiative Activities/Progress:** After experiencing some delays in launching HAP in 2012, IHDSL was in market with HAP for all of 2013. IHDSL has been active promoting HAP to customers in our service territory, hosting sessions for customers to come and learn about the program, as well as making a HAP brochure available to customers at the IHDSL office, and community events IHDSL has attended.

IHDSL has observed discrepancies between OPA Results and the projects that have been reported to the OPA. At this time IHDSL is not confident that all HAP results have been captured, and attributed to the correct program year in OPA 2013 Final Verified Results.

**Additional Comments:**

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

### **2.2.5 PRE-2011 PROGRAMS**

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

### 3 2013 LDC CDM Results

#### 3.1 Participation and Savings

IHDSL has enclosed the OPA – IHDSL 2013 Final Verified Results for review. The following two Tables provide participation and program results for IHDSL.

**Table 1:**

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)				Program-to-Date Verified Progress to Target (excludes DR)	
		2011*	2012*	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
<b>Consumer Program</b>															
Appliance Retirement	Appliances	250	94	49		14	5	3		100,309	38,037	19,120		22	553,162
Appliance Exchange	Appliances	17	5	19		2	1	4		2,387	1,178	7,019		5	26,283
HVAC Incentives	Equipment	133	192	206		58	46	46		113,459	81,926	83,619		150	866,853
Conservation Instant Groupon Booklet	Items	2,128	122	1,371		5	1	2		78,462	5,524	30,452		8	391,323
Bi-Annual Retailer Event	Items	3,762	4,192	3,733		7	6	5		116,108	105,813	67,876		17	917,623
Retailer Co-op	Items	0	0	0		0	0	0		0	0	0		0	0
Residential Demand Response	Devices	233	0	0		130	0	0		338	0	0		0	338
Residential Demand Response (IHD)	Devices	0	0	0		0	0	0		0	0	0		0	0
Residential New Construction	Homes	0	0	0		0	0	0		0	0	0		0	0
<b>Consumer Program Total</b>						<b>216</b>	<b>58</b>	<b>60</b>		<b>411,063</b>	<b>232,478</b>	<b>208,086</b>		<b>203</b>	<b>2,755,602</b>
<b>Business Program</b>															
Retrofit	Projects	1	10	16		0	37	53		44,014	221,113	282,136		89	1,402,285
Direct Install Lighting	Projects	11	25	30		14	23	29		35,938	88,865	116,579		60	625,078
Building Commissioning	Buildings	0	0	0		0	0	0		0	0	0		0	0
New Construction	Buildings	0	0	0		0	0	0		0	0	0		0	0
Energy Audit	Projects	2	0	0		0	0	0		0	0	0		0	0
Small Commercial Demand Response	Devices	5	0	0		3	0	0		12	0	0		0	12
Small Commercial Demand Response (IHD)	Devices	0	0	0		0	0	0		0	0	0		0	0
Demand Response 3	Facilities	0	0	2		0	0	166		0	0	2,828		0	2,828
<b>Business Program Total</b>						<b>17</b>	<b>60</b>	<b>248</b>		<b>79,964</b>	<b>309,977</b>	<b>401,542</b>		<b>150</b>	<b>2,830,204</b>
<b>Industrial Program</b>															
Process & System Upgrades	Projects	0	0	0		0	0	0		0	0	0		0	0
Monitoring & Targeting	Projects	0	0	0		0	0	0		0	0	0		0	0
Energy Manager	Projects	0	0	8		0	0	149		0	0	356,400		68	712,800
Retrofit	Projects	0	0	0		0	0	0		0	0	0		0	0
Demand Response 3	Facilities	0	1	1		0	0	166		0	0	3,780		0	3,780
<b>Industrial Program Total</b>						<b>0</b>	<b>0</b>	<b>315</b>		<b>0</b>	<b>0</b>	<b>360,180</b>		<b>68</b>	<b>716,580</b>
<b>Home Assistance Program</b>															
Home Assistance Program	Homes	0	32	97		0	8	18		0	58,650	99,879		26	373,891
<b>Home Assistance Program Total</b>						<b>0</b>	<b>8</b>	<b>18</b>		<b>0</b>	<b>58,650</b>	<b>99,879</b>		<b>26</b>	<b>373,891</b>
<b>Aboriginal Program</b>															
Home Assistance Program	Homes	0	0	0		0	0	0		0	0	0		0	0
Direct Install Lighting	Projects	0	0	0		0	0	0		0	0	0		0	0
<b>Aboriginal Program Total</b>						<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>
<b>Pre-2011 Programs completed in 2011</b>															
Electricity Retrofits Incentive Program	Projects	1	0	0		29	0	0		481	0	0		29	1,926
High Performance New Construction	Projects	1	0	0		13	0	0		64,306	433	0		13	258,843
Toronto Comprehensive	Projects	0	0	0		0	0	0		0	0	0		0	0
Multifamily Energy Efficiency Rebates	Projects	0	0	0		0	0	0		0	0	0		0	0
LDC Custom Programs	Projects	0	0	0		0	0	0		0	0	0		0	0
<b>Pre-2011 Programs completed in 2011 Total</b>						<b>41</b>	<b>0</b>	<b>0</b>		<b>64,868</b>	<b>433</b>	<b>0</b>		<b>42</b>	<b>260,769</b>
<b>Other</b>															
Program Enabled Savings	Projects	0	0	0		0	0	0		0	0	0		0	0
Time-of-Use Savings	Homes	0	0	0		0	0	0		0	0	0		0	0
<b>Other Total</b>						<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>	<b>0</b>
<b>Adjustments to 2011 Verified Results</b>											7,220	0		-9	28,879
<b>Adjustments to 2012 Verified Results</b>												229,344		47	688,033
<b>Energy Efficiency Total</b>						<b>141</b>	<b>127</b>	<b>309</b>		<b>555,545</b>	<b>601,538</b>	<b>1,063,080</b>		<b>488</b>	<b>6,130,088</b>
<b>Demand Response Total (Scenario 1)</b>						<b>134</b>	<b>0</b>	<b>332</b>		<b>350</b>	<b>0</b>	<b>6,608</b>		<b>0</b>	<b>6,958</b>
<b>Adjustments to Previous Years' Verified Results Total</b>						<b>0</b>	<b>-9</b>	<b>47</b>		<b>0</b>	<b>7,220</b>	<b>229,344</b>		<b>38</b>	<b>716,912</b>
<b>OPA-Contracted LDC Portfolio Total (inc. Adjustments)</b>						<b>275</b>	<b>118</b>	<b>688</b>		<b>555,895</b>	<b>608,758</b>	<b>1,299,033</b>		<b>526</b>	<b>6,853,957</b>
Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (reported cumulatively).												Full OEB Target:		2,500	9,200,000
*Includes adjustments after Final Reports were issued												% of Full OEB Target Achieved to Date (Scenario 1):		21.0%	74.5%

**Table 2: Summarized Program Results**

Program	Gross Savings		Net Savings		Contribution to Targets	
	Incremental Peak Demand Savings (MW)	Incremental Energy Savings (GWh)	Incremental Peak Demand Savings (MW)	Incremental Energy Savings (GWh)	Program-to-Date: Net Annual Peak Demand Savings (MW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (GWh)
Consumer Program Total	0.118	0.322	0.060	0.208	0.203	2.755
Business Program Total	0.270	0.510	0.248	0.401	0.150	2.030
Industrial Program Total	0.332	0.399	0.315	0.360	0.068	0.716
Home Assistance Program Total	0.018	0.099	0.018	0.099	0.026	0.373
Pre-2011 Programs completed in 2011 Total	0	0	0	0	0.042	0.260
Other Adjustments	0.066	0.302	0.047	0.229	0.038	0.716
<b>Total OPA Contracted Province-Wide CDM Programs</b>	<b>0.804</b>	<b>1.634</b>	<b>0.729</b>	<b>1.299</b>	<b>0.526</b>	<b>6.853</b>

## 3.2 Evaluation

### CONSUMER PROGRAM

#### Appliance Retirement Initiative

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

#### Appliance Exchange Initiative

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

#### Heating and Cooling Initiative

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

### Annual Coupons

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

### Bi-Annual Coupon Events

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

### *peaksaverPLUS*

- The cycling strategy for CAC load control was changed from 50% simple cycling to 60% simple cycling.
- Under 1-in-10 year weather conditions, the 2013 estimated impacts for load control devices are higher than the 2012 estimates in all

months and are between 10 and 15% higher during the core summer months of June through August.

- Load impact estimates for the average small and medium business and for electric water heaters among residential customers are also unchanged from the prior year's analysis
- This year's IHD analysis has yielded an estimate of no statistically significant energy savings.

#### **Residential New Construction**

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

### **HOME ASSISTANCE PROGRAM**

#### **Home Assistance Program**

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

### **BUSINESS PROGRAM**

#### **Retrofit**

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



### Small Business Lighting

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

### Audit Funding

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

### Existing Building Commissioning

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

### High Performance New Construction

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

## INDUSTRIAL PROGRAM

### Process and Systems Upgrade Initiative

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

### DR-3

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

#### Note:

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

### 3.3 Spending

Table 3 and 4 summarize the total spending by initiative that IHDSL has incurred in 2013 and cumulatively since 2011. It is detailed by the Program Administration Budget (PAB), Participant Based Funding (PBF), Participant Incentives (PI) and Capability Building Funding (CBF).

**Table 3: 2013 Spending**

Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
Consumer Program	\$ 49,347.50				\$ 49,347.50
Business Program	\$ 87,560.31	\$ 7,395.00	\$ 55,450.88		\$ 150,406.19
Industrial Program (including REM)	\$ 128,888.00	\$ -			\$ 128,888.00
Home Assistance Program	\$ 28,638.54	\$ 27,000.00	\$ 62,220.30		\$ 117,858.84
Pre 2011 Programs Completed in 2011	\$ -	\$ -	\$ -	\$ -	\$ -
Total Province Wide CDM Programs	\$ 294,434.35	\$ 34,395.00	\$ 117,671.18	\$ -	\$ 446,500.53

Initiative	Program Administration Budget (PAB)	Partipant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding	TOTAL
<b>Consumer Program</b>	<b>\$ 49,347.50</b>				<b>\$ 49,347.50</b>
Appliance Retirement	\$ 6,168.43				
Appliance Exchange	\$ 6,168.43				
HVAC Incentives	\$ 6,168.43				
Coupon Booklet	\$ 6,168.43				
Retailer Event	\$ 6,168.43				
Retailer Co-op	\$ 6,168.43				
Residential Demand Response	\$ 6,168.43				
New Construction	\$ 6,168.43				
<b>Business Program</b>	<b>\$ 87,560.31</b>	<b>\$ 7,395.00</b>	<b>\$ 55,450.88</b>		<b>\$ 150,406.19</b>
ERII	\$ 21,845.30				
Direct Install Lighting	\$ 19,059.00				
Building Commissioning	\$ 11,664.00				
New Construction	\$ 11,664.00				
Energy Audit	\$ 11,664.00				
Direct Space Cooling	\$ 11,664.00				
<b>Industrial Program</b>	<b>\$ 128,888.00</b>	<b>\$ -</b>			<b>\$ 128,888.00</b>
Preliminary Eng Study	\$ 386.76				
Detailed Eng Strudy	\$ 386.76				
Project Incentive Initiative	\$ 386.76				
Monitoring & Targeting	\$ 386.76				
Energy Manager	\$ 126,180.67				
Key Account Manager	\$ 386.76				
DR1	\$ 386.76				
DR3	\$ 386.76				
<b>Home Assistance Program</b>	<b>\$ 28,638.54</b>	<b>\$ 27,000.00</b>	<b>\$ 62,220.30</b>		<b>\$ 117,858.84</b>
Pre 2011 Programs Completed in 2011	\$ -	\$ -		\$ -	\$ -
<b>Total Province Wide CDM Programs</b>	<b>\$ 294,434.35</b>	<b>\$ 34,395.00</b>	<b>\$ 117,671.18</b>	<b>\$ -</b>	<b>\$ 446,500.53</b>

**Table 4: Cumulative Spending (2011-2013)**

Initiative	Program Administration		Participant Based Funding		Capability Building Funding		TOTAL	
	Budget (PAB)		(PBF)		Participant Incentives (PI)	(CBF)		
Consumer Program	\$	204,829.06	\$	-	\$	-	\$	204,829.06
Business Program	\$	200,730.63	\$	16,575.00	\$	88,921.63	\$	306,227.26
Industrial Program	\$	167,071.00	\$	-	\$	-	\$	167,071.00
Home Assistance Program	\$	37,876.54	\$	37,050.00	\$	78,393.96	\$	153,320.50
Pre 2011 Programs Completed in 2011	\$	-	\$	-	\$	99,106.00	\$	99,106.00
Total Province Wide CDM Programs	\$	610,507.23	\$	53,625.00	\$	266,421.59	\$	930,553.82

### **3.4 Additional Comments**

With the Conservation First framework fast approaching it is imperative that new effective programs for residential consumers are developed. Although the momentum in contribution to IHDSL's targets is primarily being achieved by the business programs, this only represents a small component of our customer base. Without maximizing measures from our residential customer base IHDSL will continue to struggle meeting our allocated targets.

## 4 Combined CDM Reporting Elements

### 4.1 Progress Towards CDM Targets

Table 5: Net Peak Demand Savings at the End User Level (MW)

Implementation Period	Annual (MW)			
	2011	2012	2013	2014
2011 – Verified by OPA	0.3	0.1	0.1	0.1
2012 – Verified by OPA		0.1	0.1	0.1
2013 – Verified by OPA			0.7	0.3
2014				
<b>Verified Net Annual Peak Demand Savings in 2014:</b>				<b>0.5</b>
<b>Innisfil Hydro Distribution Systems 2014 Annual CDM Capacity Target:</b>				<b>2.5</b>
<b>Verified Portion of Peak Demand Savings Target Achieved (%):</b>				<b>21%</b>

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

Implementation Period	Annual (GWh)				Cumulative (GWh)
	2011	2012	2013	2014	2011-2014
2011 – Verified by OPA	0.6	0.6	0.6	0.5	2.2
2012 – Verified by OPA		0.6	0.6	0.6	1.8
2013 – Verified by OPA		.2	1.3	1.3	2.8
2014					
<b>Verified Net Cumulative Energy Savings 2011-2014:</b>					<b>6.85</b>
<b>Innisfil Hydro Distribution Systems Limited 2011-2014 Cumulative CDM Energy Target:</b>					<b>9.2</b>
<b>Verified Portion of Cumulative Energy Target Achieved (%):</b>					<b>74.5%</b>

### 4.2 Variance from Strategy

IHDSL continues to re-focus on increasing ERIL opportunities with our limited General Service customer base. This focus has contributed to the increase in overall energy savings. The rollout of *peaksaver plus* in the 2<sup>nd</sup> quarter of 2014 will also contribute to 2014 achieved measurements.

### **4.3 Outlook to 2014 and Strategy Modifications**

On March 31st, 2014 the Minister of Energy issued a directive entitled “Continuance of the OPA’s Demand Response Program under IESO management” which effectively halts new customer enrollments in the DR3 program until the IESO has a program in market. This is estimated to be some time in 2015.

The DR3 Initiative is a significant contributor to helping LDCs achieve their demands savings target. The program has taken some time to get traction and LDCs have been diligently working with their customers to encourage participation in the DR3 program. LDC customers are now in a position where many of them have contracted with an Aggregator but will be unable to participate due to the inability of the Aggregator to receive new contract schedules resulting in the current “pipeline” of potential DR contributors being stranded.

IHDSL will continue to work with the current portfolio to ensure the maximum contribution to target is achieved. Moving forward LDCs and the OPA can build on the strengths and key successes of the 2011-2014 programs to launch new programs which will meet the needs of the industry and consumers.



Innisfil Hydro	Annual Milestone - Contribution to 2014 Target																			
	2011 Original Strategy Projection		Actual 2011 Results		2012 Revised Strategy Projection		Actual 2012 Results		2013 Revised Strategy Projection		Actual 2013 Results		2014 Revised Strategy Projection		Actual 2014 Results		Revised Total Projected Reduction		Contribution to Target	
Category - Consumer	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh
<b>Provincial Programs</b>																				
Appliance Retirement	9	207,602	16	410,784	20	143,298	6	117,645	6	66,921	7	51,035	6	30,024			35	609,489	29	579,465
Instant Discounts (Rebates)	4	393,464	12	778,278	3	180,005	7	334,011	3	120,003	7	196,657	3	60,002			28	1,368,947	25	1,308,946
HVAC Discounts (Rebates)	28	176,449	58	453,837	58	113,459	46	245,779	31	96,707	46	167,237	33	50,843			183	917,696	150	866,853
Demand Response	41	196,409	0	338	130	338	0	0	87	293,166	0	0	90	151,470			90	151,808	0	338
Midstream Incentives	0	4,144	0	0	0	0	0	0	0	2,072	0	0	0	1,036			0	1,036	0	0
New Construction	3	30,372	0	0	0	0	0	0	5	22,663	0	0	5	12,912			5	12,912	0	0
Low Income	0	0	0	0	0	0	8	175,950	30	271,000	18	197,942	30	135,000			56	508,891	26	373,891
<b>Provincial Consumer Total</b>	<b>85</b>	<b>1,008,440</b>	<b>86</b>	<b>1,643,237</b>	<b>211</b>	<b>437,100</b>	<b>66</b>	<b>873,384</b>	<b>162</b>	<b>872,533</b>	<b>78</b>	<b>612,872</b>	<b>166</b>	<b>441,285</b>	<b>0</b>	<b>0</b>	<b>396</b>	<b>3,570,778</b>	<b>230</b>	<b>3,129,493</b>
<b>OEB Approved Programs</b>																				
General Consumer		0	0	0	0	0	0	0			0	0		0			0	0	0	0
Low Income		0	0	0	0	0	0	0			0	0		0			0	0	0	0
<b>OEB Approved Programs Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Consumer Program Total</b>	<b>85</b>	<b>1,008,440</b>	<b>86</b>	<b>1,643,237</b>	<b>211</b>	<b>437,100</b>	<b>66</b>	<b>873,384</b>	<b>162</b>	<b>872,533</b>	<b>78</b>	<b>612,872</b>	<b>166</b>	<b>441,285</b>	<b>0</b>	<b>0</b>	<b>396</b>	<b>3,570,778</b>	<b>230</b>	<b>3,129,493</b>
	Annual Milestone - Contribution to 2014 Target																			
	2011 Original Strategy Projection		Actual 2011 Results		2012 Revised Strategy Projection		Actual 2012 Results		2013 Revised Strategy Projection		Actual 2013 Results		2014 Revised Strategy Projection		Actual 2014 Results		Revised Total Projected Reduction		Contribution to Target	
Category - Commercial & Institutional	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh
<b>Provincial Programs</b>																				
rofits – Medium and Large Buildings	81	564,048	0	176,058	297	1,293,610	37	663,338	150	479,393	121	1,275,689	180	287,592			338	2,402,677	158	2,115,085
Existing Building Retrofits – Small Buildings	84	1,448,208	14	143,753	198	2,413,558	23	266,595	134	785,850	22	214,730	155	382,205			215	1,007,282	60	625,077
Small Commercial Demand Response	3	6,776	0	12	18	72	0	0	7	10,048	0	0	7	5,185			7	5,197	0	12
Demand Response 1 & 3	0	0	0	0	0	0	0	0	0	0	0	2,828	0	0			0	2,828	0	2,828
<b>Provincial Commercial &amp; Inst. Total</b>	<b>169</b>	<b>2,019,031</b>	<b>14</b>	<b>319,822</b>	<b>513</b>	<b>3,707,240</b>	<b>60</b>	<b>929,932</b>	<b>291</b>	<b>1,275,291</b>	<b>143</b>	<b>1,493,248</b>	<b>342</b>	<b>674,982</b>	<b>0</b>	<b>0</b>	<b>560</b>	<b>3,417,984</b>	<b>218</b>	<b>2,743,002</b>
<b>OEB Approved Programs</b>																				
Retrofits			0	0			0	0			0	0					0	0	0	0
New Construction			0	0			0	0			0	0					0	0	0	0
<b>OEB Approved Programs Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Commercial &amp; Inst. Total</b>	<b>169</b>	<b>2,019,031</b>	<b>14</b>	<b>319,822</b>	<b>513</b>	<b>3,707,240</b>	<b>60</b>	<b>929,932</b>	<b>291</b>	<b>1,275,291</b>	<b>143</b>	<b>1,493,248</b>	<b>342</b>	<b>674,982</b>	<b>0</b>	<b>0</b>	<b>560</b>	<b>3,417,984</b>	<b>218</b>	<b>2,743,002</b>

Annual Milestone - Contribution to 2014 Target																				
Category - Industrial	2011 Original Strategy Projection		Actual 2011 Results		2012 Revised Strategy Projection		Actual 2012 Results		2013 Revised Strategy Projection		Actual 2013 Results		2014 Revised Strategy Projection		Actual 2014 Results		Revised Total Projected Reduction		Contribution to Target	
	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh
<b>Program Name</b>																				
Industrial Accelerator	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Industrial Equipment Replacement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Demand Response 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Demand Response 3	0	0	0	0	0	0	0	0	0	666	0	3,780	74	766	0	0	74	4,546	0	3,780
<b>Provincial Industrial Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>666</b>	<b>0</b>	<b>3,780</b>	<b>74</b>	<b>766</b>	<b>0</b>	<b>0</b>	<b>74</b>	<b>4,546</b>	<b>0</b>	<b>3,780</b>
<b>OEB Approved Programs</b>																				
A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>OEB Approved Programs Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Industrial Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>666</b>	<b>0</b>	<b>3,780</b>	<b>74</b>	<b>766</b>	<b>0</b>	<b>0</b>	<b>74</b>	<b>4,546</b>	<b>0</b>	<b>3,780</b>
<b>CDM Strategy Total</b>																				
2011 Original Strategy Projection		Actual 2011 Results		2012 Revised Strategy Projection		Actual 2012 Results		2013 Revised Strategy Projection		Actual 2013 Results		2014 Revised Strategy Projection		Actual 2014 Results		Revised Total Projected Reduction		Contribution to Target		
kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	
Program Total	254	3,027,472	100	1,963,059	724	4,144,340	127	1,803,317	453	2,148,490	221	2,109,899	583	1,117,033	0	0	1,030	6,993,309	448	5,876,275
2010 Contribution			41	259,472			0	1,298			0	0					41	260,770	41	260,770
Adjustments to Verified Final Results							-9	28,883			47	688,033					38	716,916	38	716,916
<b>Adjusted Total</b>	<b>254</b>	<b>3,027,472</b>	<b>141</b>	<b>2,222,531</b>	<b>724</b>	<b>4,144,340</b>	<b>118</b>	<b>1,833,497</b>	<b>453</b>	<b>2,148,490</b>	<b>268</b>	<b>2,797,932</b>	<b>583</b>	<b>1,117,033</b>	<b>0</b>	<b>0</b>	<b>1,109</b>	<b>7,970,994</b>	<b>527</b>	<b>6,853,961</b>
																Target to Achieve	2,500	9,200,000		
<b>Percentage of Target</b>																				
2011 Original Strategy Projection		Actual 2011 Results		2012 Revised Strategy Projection		Actual 2012 Results		2013 Revised Strategy Projection		Actual 2013 Results		2014 Revised Strategy Projection		Actual 2014 Results		Revised Total Projected Reduction		Contribution to Target		
kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh	
10.2%	32.9%	5.6%	24.2%	29.0%	45.0%	4.7%	19.9%	18.1%	23.4%	10.7%	30.4%	23.3%	12.1%	0.0%	0.0%	44%	86.6%	21.1%	74.5%	

Note: Total Projection is formed of 2011, 2012 & 2013 Actuals added with 2014 Revised Strategy Projection

## 5 Conclusion

Over the course of 2013, IHDSL has achieved 526 kW in peak demand savings and 6.85GWh in energy savings, which represents 21% and 74.5% of IHDSL's 2014 target, respectively. These results are representative of a considerable effort expended by IHDSL, in cooperation with other LDCs, customers, channel partners and stakeholders to overcome many operational and structural issues that limited program effectiveness across all market sectors. This achievement is a success and the relationships built within the 2011-2014 CDM program term will aid results in a subsequent CDM term.

From the submission of our original strategy IHDSL knew that achievement of the CDM targets would be a challenge based on the current suite of OPA programs and customer class breakdown. IHDSL expects to meet 86% of the energy savings target and 57% of the demand target by the end of 2014.

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

## Appendix A: Initiative Descriptions

### Residential Program

#### APPLIANCE RETIREMENT INITIATIVE (Exhibit D)

**Target Customer Type(s):** Residential Customers

**Initiative Frequency:** Year round

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

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

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

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

**Additional Detail:** Schedule B-1, Exhibit D on the OPA extranet and SaveONEnergy website

**In Market Date:** February, 2011

#### APPLIANCE EXCHANGE INITIATIVE (Exhibit E)

**Target Customer Type(s):** Residential Customers

**Initiative Frequency:** Spring and Fall

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

**Description:** This Initiative involves appliance exchange events. Exchange events are held at local retail locations and customers are encouraged to bring in their old room air conditioners (AC) and dehumidifiers in exchange for coupons/discounts towards the purchase of new energy efficient equipment. Window ACs were discontinued from the program in 2013.

**Targeted End Uses:** Window air conditioners and portable dehumidifiers

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

**Additional Detail:** Schedule B-1, Exhibit C on the OPA extranet and SaveONEnergy website

**In Market Date:** February, 2011

## HVAC INCENTIVES INITIATIVE (Exhibit B)

**Target Customer Type(s):** Residential Customers

**Initiative Frequency:** Year round

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

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

**Targeted End Uses:** Central air conditioners and furnaces

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

**Additional Detail:** Schedule B-1, Exhibit B on the OPA extranet and SaveONenergy website

**In Market Date:** February, 2011

## CONSERVATION INSTANT COUPON INITIATIVE (Exhibit A)

**Target Customer Type(s):** Residential Customers

**Initiative Frequency:** Year round

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

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

**Targeted End Uses:** ENERGY STAR® qualified Standard Compact Fluorescent Lights (“CFLs”), ENERGY STAR® qualified Light Fixtures lighting control products, weather-stripping, hot water pipe wrap, electric water heater blanket, heavy duty plug-in Timers, Advanced power bars, clothesline, 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:** Schedule B-1, Exhibit A on the OPA extranet and SaveONenergy website

**In Market Date:** February, 2011

## BI-ANNUAL RETAILER EVENT INITIATIVE (Exhibit C)

**Target Customer Type(s):** Residential Customers

**Initiative Frequency:** Bi-annual events

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

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

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

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

**Additional Detail:** Schedule B-1, Exhibit C on the OPA extranet and saveONenergy website

**In Market Date:** February, 2011

#### RETAILER CO-OP

**Target Customer Type(s):** Residential Customers

**Initiative Frequency:** Year Round

**Objective:** Hold promotional events to encourage customers to purchase energy efficiency measures (and go above-and-beyond the traditional Bi-Annual Coupon Events).

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

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

**Delivery:** Retailers apply to the OPA for co-op funding to run special promotions that promote energy efficiency to customers in their stores. LDCs can refer retailers to the OPA. The OPA provides each LDC with a list of retailers who have qualified for Co-Op Funding as well as details of the proposed special events.

**In Market Date:** February, 2011

#### NEW CONSTRUCTION PROGRAM (Schedule B-2)

**Target Customer Type(s):** Residential Customers

**Initiative Frequency:** Year round

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

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

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

**Targeted End Uses:** All off switch, ECM motors, ENERGY STAR® qualified central a/c, lighting control products, lighting fixtures, Energuide 83 whole home, energuide 85 whole homes

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

**Additional Detail:** Schedule B-1, Exhibit C on the OPA extranet and SaveONEnergy website

**In Market Date:** February, 2011

#### RESIDENTIAL DEMAND RESPONSE PROGRAM (Schedule B-3)

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

**Initiative Frequency:** Year round

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

**Description:** In *peaksaver*PLUS™ participants are eligible to receive a free programmable thermostat or switch, including installation. Participants also receive access to price and real-time consumption information on an In Home Display (IHD).

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

**Delivery:** LDC's recruit customers and procure technology

**Additional Detail:** Schedule B-1, Exhibit C on the OPA extranet and SaveONEnergy website

**In Market Date:** Not in market at this time

## C&I Program

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

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

**Initiative Frequency:** Year round

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

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

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

**Delivery:** LDC delivered.

**Additional Detail:** Schedule C-2 on the OPA extranet and saveONenergy website

**In Market Date:** February, 2011

### **Lessons Learned:**

## **DIRECT INSTALL INITIATIVE (DIL) (Schedule C-3)**

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

**Initiative Frequency:** Year round

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

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

**Target End Uses:** Lighting and electric water heating measures

**Delivery:** Participants can enroll directly with the LDC, or would be contacted by the LDC/LDC-designated representative.

**Additional Detail:** Schedule C-3 on the OPA extranet and SaveONenergy website

### **Initiative Activities/Progress:**



**In Market Date:** February, 2011

EXISTING BUILDING COMMISSIONING INCENTIVE INITIATIVE (Schedule C-6)

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

**Initiative Frequency:** Year round

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

**Description:** This Initiative offers Participants incentives for the following:

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

**Targeted End Uses:** Chilled water systems for space cooling

**Delivery:** LDC delivered.

**Additional Detail:** Schedule C-6 on the OPA extranet and SaveONenergy website Additional detail is available:

**Initiative Activities/Progress:**

**In Market Date:** February, 2011

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

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

**Initiative Frequency:** Year round

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

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

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

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

**Additional Detail:** Schedule C-4 on the OPA extranet and SaveONenergy website

**Initiative Activities/Progress:**

**In Market Date:** February, 2011

ENERGY AUDIT INITIATIVE (Schedule C-1)

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

**Initiative Frequency:** Year round

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

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

**Targeted End Uses:** Various

**Delivery:** LDC delivered.

**Additional Detail:** Schedule C-1 on the OPA extranet Schedule C-1 and SaveONenergy website

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

**Initiative Activities/Progress:**

**In Market Date:** February, 2011

## Industrial Program

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

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

**Initiative Frequency:** Year round

**Objectives:** The objectives of this Initiative are to:

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

**Description:** PSUI is an energy management Initiative that includes three Initiatives: (preliminary engineering study, detailed engineering study, and project incentive Initiative). The incentives are available to large

distribution connected customers with projects or portfolio projects that are expected to generate at least 350 MWh of annualized electricity savings or, in the case of Micro-Projects, 100 MWh of annualized electricity savings. The capital incentive for this Initiative is the lowest of:

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

**Targeted End Uses:** Process and systems

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

**Additional Detail:** Schedule D-1 on the OPA extranet and saveONenergy website  
<https://saveonenergy.ca/Business.aspx>

**In Market Date:**

MONITORING & TARGETING INITIATIVE (Schedule D-2)

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

**Initiative Frequency:** Year round

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

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

**Targeted End Uses:** Process and systems

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

**Additional Detail:** Schedule D-2 on the OPA extranet and saveONenergy website  
<https://saveonenergy.ca/Business.aspx>

**In Market Date:**

ENERGY MANAGER INITIATIVE (Schedule D-3)

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

**Initiative Frequency:** Year round

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

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

**Targeted End Uses:** Process and systems

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

**Additional Detail:** Schedule D-3 on the OPA extranet and SaveONenergy website  
<https://saveonenergy.ca/Business.aspx>

**In Market Date:**

KEY ACCOUNT MANAGER (KAM) (Schedule D-4)

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

**Initiative Frequency:** Year round

**Objective:** This initiative offers LDCs the opportunity to access funding for the employment of a KAM in order to support them in fulfilling their obligations related to the PSUI.

**Description:** This Initiative provides LDCs the opportunity to utilize a KAM to assist their customers. The KAM is considered to be a key element in assisting the consumer in overcoming traditional barriers related to energy management and help them achieve savings since the KAM can build relationships and become a significant resource of knowledge to the customer.

**Targeted End Uses:** Process and systems

**Delivery:** LDC delivered

**Additional Detail:** Scheduled-4 on the OPA extranet.

**In Market Date:**

DEMAND RESPONSE 3 (Schedule D-6)

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

**Initiative Frequency:** Year round

**Objective:** This Initiative provides for Demand Response ("DR") payments to contracted participants to compensate them for reducing their electricity consumption by a pre-defined amount during a DR event.

**Description:** Demand Response 3 (“DR3”) is a demand response Initiative for commercial and industrial customers, of 50 kW or greater to reduce the amount of power being used during certain periods of the year. The DR3 Initiative is a contractual resource that is an economic alternative to procurement of new generation capacity. DR3 comes with specific contractual obligations requiring participants to reduce their use of electricity relative to a baseline when called upon. This Initiative makes payments for participants to be on standby and payments for the actual electricity reduction provided during a demand response event. Participants are scheduled to be on standby approximately 1,600 hours per calendar year for possible dispatch of up to 100 hours or 200 hours within that year depending on the contract.

**Targeted End Uses:** Commercial and Industrial Operations

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

**Additional Detail:** Schedule D-6 available on the OPA and SaveONenergy website  
<https://saveonenergy.ca/Business.aspx>

**In Market Date:** January 2011

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

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

**Target Customer Type(s):** Income Qualified Residential Customers

**Initiative Frequency:** Year Round

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

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

**Targeted End Uses:** End use measures based on results of audit (i.e. compact fluorescent light bulbs)

**Delivery:** LDC delivered.

**Additional Detail:** Schedule E available on the OPA extranet.

**Initiative Activities/Progress:**

BPI took the lead on a group RFP for Home Assistance Program provider in 2011. Due to the delay in schedule release, and the time required for the RFP process, BPI was not in market in 2011, however launched in early 2012.

**In Market Date:**

## Appendix B: Pre-2011 Programs

### ELECTRICITY RETROFIT INCENTIVE PROGRAM

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

**Initiative Frequency:** Year Round

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

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

**Targeted End Uses:** Electricity savings measures

**Delivery:** LDC Delivered

### HIGH PERFORMANCE NEW CONSTRUCTION

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

**Initiative Frequency:** Year round

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

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

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

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

### TORONTO COMPREHENSIVE INITIATIVE

**Target Customer Type(s):** Commercial and Institutional Customers

**Initiative Frequency:** Year round

#### MULTIFAMILY ENERGY EFFICIENCY REBATES

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

**Initiative Frequency:** Year round

**Objective:** Improve energy efficiency of Multi-unit building

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

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

**Targeted End Uses:** Electricity saving measures

**Delivery:** OPA contracted with Greensaver

#### DATA CENTRE INCENTIVE PROGRAM

**Initiative Frequency:** Year round

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

#### ENWIN GREEN SUITES

**Initiative Frequency:** Year round

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