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BY RESS & OVERNIGHT COURIER

September 30, 2015

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

Dear Ms. Walli:

Re: Enersource Hydro Mississauga Inc.
Conservation and Demand Management 2014 Annual Report
Board File No. EB-2010-0215

Please find attached Enersource's Conservation and Demand Management 2014 Annual Report.

Two sets of hard copies will be sent to the Board in addition to filing this via RESS.

If you have any questions or concerns with this report, please do not hesitate to contact the undersigned at (905) 283-4098.

Sincerely,

[Original signed by]

Gia M. DeJulio
Director, Regulatory Affairs

cc. Norm Wolff, Executive Vice-President and Chief Financial Officer

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Enersource Hydro Mississauga Inc.

Conservation and Demand Management

2014 Annual Report

Submitted to:

Ontario Energy Board

Submitted on September 30, 2015

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Executive Summary

This annual report is submitted by Enersource Hydro Mississauga Inc. ("Enersource") in accordance with the filing requirements set out in the Conservation and Demand Management ("CDM") Code for Electricity Distributors, issued September 16, 2010, Board File No. EB-2010-0215 specifically, the Appendix C Annual Report Template, as a progress report and update to Enersource's Strategy filed with the Ontario Energy Board ("Board" or "OEB") on November 1, 2010. Accordingly, this report outlines Enersource's CDM activities for the period of January 1, 2014 to December 31, 2014. It includes net peak demand and net energy savings achieved in 2011, 2012, 2013, and 2014, CDM program activities, successes and challenges.

Enersource did not apply for any Board-approved CDM programs during 2014; however, as noted in the Guidelines for Electricity Distributors Conservation and Demand Management ("CDM Guidelines"), released on April 26, 2012, the Board has deemed Time-of-Use ("TOU") pricing to be a province-wide Board-approved CDM program. The Ontario Power Authority ("OPA"), now The Independent Electricity System Operator ("IESO") provides measurement and verification on TOU. The TOU savings allocated to Enersource's 2011 -2014 targets are 3,831 kW in demand savings. No energy savings were realized through TOU.

In 2011 – 2014, Enersource contracted with the IESO to deliver a portfolio of IESO-contracted province-wide CDM programs ("IESO Programs") to all customer segments including residential, commercial, institutional, industrial, and low income. Most of these programs were made available to distributors by the IESO by 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.

As per the IESO's final 2014 Verified Annual Report, Enersource has achieved 40.58 MW of net incremental peak demand savings and 64.513 GWh of net incremental energy savings in 2014. A summary of the achievements towards the CDM targets is shown in the tables below:

Table 1: Enersource Net Demand CDM Savings Results for Programs Implemented 2011 - 2014

	As at December 31, 2014 Net Incremental MW Savings			2011 - 2014 New Annual MW Savings		
CDM PROGRAM	Target Savings	Actual Savings	% Targets Achieved	Target Savings	Actual Savings	% Targets Achieved
Residential	5.89	9.53	161.90	18.50	14.40	77.86
Commercial & Institutional	14.70	9.47	64.43	48.08	31.15	64.78
Industrial	42.95	17.72	41.26	26.40	19.98	75.67
Others	-	0.02	N/A	-	0.02	N/A
Time of Use	-	3.83	N/A	-	3.83	N/A
TOTAL CDM	63.54	40.58	63.86	92.98	69.38	74.62

Table 2: Enersource Net Energy CDM Savings Results for Programs Implemented 2011 - 2014

	As At December 31, 2014 Net Incremental MWh Savings			2011 - 2014 Net Cumulative MWh Savings		
CDM PROGRAM	Target Savings	Actual Savings	% Targets Achieved	Target Savings	Actual Savings	% Targets Achieved
Residential	13,485	9,552	70.84	123,357	52,943	42.92
Commercial & Institutional	15,091	50,883	337.18	197,517	374,773	189.74
Industrial	90,686	3,894	4.29	96,346	36,410	37.79
Others	0	184	N/A	0	184	N/A
Time of Use	0	0	N/A	0	0	N/A
TOTAL CDM	**119,262**	**64,513**	**54.09**	**417,220**	**464,311**	**111.29**

Enersource has achieved 69.38 MW or 74.62%, and 464,311 MWh or 111.29% towards Enersource's 2014 peak demand reduction target and energy consumption reduction targets, respectively. The shortfall of peak demand targets were mainly due to late start of programs, cancellation of planned province-wide programs, including Direct Space Cooling since 2011, and savings from projects which were ultimately not recognized by the IESO. The overachievement of energy targets were mainly due to higher than anticipated uptake and net-to-gross ratios in the Commercial sector.

Enersource is currently negotiating with the IESO a claim of an additional 14.25 MW and 6.085 GWh non-incented savings (see section 4.1.1). Should Enersource be successful in having these savings recognized, Enersource will increase its achievements in CDM targets to 89.9% and 112.7% in demand and energy savings, respectively.

In 2015, the Conservation First Framework (CFF) for the period 2015 -2020 will be implemented effective on pending approval of Enersource's CDM Plans submitted to the IESO before May 1, 2015. To ensure a smooth transition, most 2011 - 2014 Programs and Rules were extended into 2015 until the effective implementation start date under the Conservation First Framework.

Background

On March 31, 2010, the Minister of Energy and Infrastructure of Ontario, under the guidance of sections 27.1 and 27.2 of the *Ontario Energy Board Act, 1998*, directed the OEB to establish Conservation and Demand Management ("CDM") targets to be met by electricity distributors. Accordingly, on November 12, 2010, the OEB amended the distribution license to require Enersource, as a condition of its license, to achieve 417.2 GWh of energy savings and 92.98 MW of 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, Enersource submitted its CDM Strategy on November 1, 2010 which provided a high level description of how Enersource intended to achieve its CDM targets.

The Code also requires a distributor to file annual reports with the Board. This is the fourth Annual Report by Enersource and has been prepared in accordance with the Code requirements and covers the period from January 1, 2014 to December 31, 2014.

Enersource submitted its 2011 Annual Report on September 30, 2012 which summarized the CDM activities, successes and challenges experienced by Enersource 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 IESO, and the absence of some programs negatively impacted the final 2011 results for the LDCs. This issue was also highlighted in Volumes I and II of the Environmental Commissioner's Report on Ontario's Annual Energy Conservation Progress.

On December 21, 2012, the Minister of Energy directed the IESO to fund CDM programs which meet the definition and criteria for IESO-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.

Enersource submitted its 2012 Annual Report on September 30, 2013 which summarized the CDM activities undertaken by Enersource 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) targets 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.

In Enersource's 2013 Annual Report, submitted on September 30, 2014, Enersource noted that although there have been program improvements, there still remain shortcomings to the design and delivery of certain initiatives that created negative impacts to the related programs. As a result, Enersource forecasted a 61% achievement of its demand target and 96% achievement of its energy savings target.

The report identifies that although there have been improvements to programs there still remain some shortcomings to the design and delivery of certain initiatives that have resulted in negative impacts to some programs which were also identified in previous reports. In particular, the change management

process still requires improvements to expedite enhancements to initiatives and the reporting process needs to be timelier to help LDCs adjust their marketing strategies. 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 under the new framework.

1. Conservation Framework

1.1. 2011-2014 Framework

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

The state of Board-approved programs and the current suite of province-wide IESO programs have limited CDM offerings to customers. This has produced limited savings and has restricted the associated opportunity for LDCs to meet their targets. The process to introduce changes to current program initiatives or to pilot new initiatives has been challenging, involving considerable cost and effort, which has resulted in limited benefits to customers and CDM savings.

Challenges faced by LDCs in the 2011-2014 framework, such as an inordinate level of oversight by IESO and unnecessarily excessive legal requirements and misalignment of control and risks, have been addressed by the new directive. However, there are still many challenges to overcome and the new CDM framework should address other challenges of the current framework and build on its strengths.

1.2. Conservation First Framework

LDCs are supportive of the Government's renewed commitment for CDM in Ontario. LDCs are committed to working with the Government, IESO, natural gas utilities and other stakeholders to develop programs for the new framework for CDM in the Province.

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

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

2. Board-Approved CDM Programs

2.1. Introduction

In its Decision and Order dated November 12, 2010 in EB-2010-0215 and EB-2010-0216, the OEB ordered that, to meet its mandatory CDM targets, "Each licensed electricity distributor must, as a condition of its licence, deliver Board-approved CDM programs, OPA-contracted province-wide CDM programs, or a combination of the two".

At this time, the implementation of TOU pricing is the only Board-approved CDM program that is being offered by Enersource.

2.2. TOU Pricing

2.2.1. BACKGROUND

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

In accordance with the Ministry directive dated March 31, 2010 by the Minister of Energy and Infrastructure, the OEB is of the view that any evaluation of savings from TOU pricing should be conducted by the IESO for the Province, and then allocated to distributors.

In 2013, IESO had retained the Brattle Group as the evaluation contractor and has been working with an expert panel convened to provide advice on methodology, data collection, models, savings allocation, etc. The initial evaluations were conducted in 2013 with five LDCs – Hydro One Networks Inc., Toronto Hydro-Electric System Limited, Hydro Ottawa Limited, Thunder Bay Hydro Electricity Distribution Inc., and Newmarket-Tay Power Distribution Ltd. Preliminary results from these five LDCs were issued to the five LDCs involved in the study in August, 2013 and are now publicly available on the IESO 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. The IESO completed the study in the summer of 2015 and final verification was made available for LDCs to include in this 2014 Annual Report.

2.2.2. TOU PROGRAM DESCRIPTION

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

Initiative Frequency: Year-round

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

Description: In August of 2010, the OEB issued a final determination to mandate TOU pricing for Regulated Price Plan ("RPP") customers by June 2011, 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 prices are adjusted twice annually by the OEB. A summary of the RPP TOU pricing is provided Table 3 below.

Table 3: RPP TOU Pricing Summary

	Prices (cents/kWh)		
Effective Date	**On Peak**	**Mid Peak**	**Off Peak**
November 1, 2010	9.9	8.1	5.1
May 1, 2011	10.7	8.9	5.9
November 1, 2011	10.8	9.2	6.2
May 1, 2012	11.7	10.0	6.5
November 1, 2012	11.8	9.9	6.3
May 1, 2013	12.4	10.4	6.7
November 1, 2013	12.9	10.9	7.2
May 1, 2014	13.5	11.2	7.5
November 1, 2014	14.0	11.4	7.7

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

2.2.3 TOU Initiative Activities/Progress

Enersource began transitioning its customers to TOU in September, 2011. The total number of customers on TOU pricing by December 31st of each year is as follows:

- 2011 – 22,880
- 2012 – 163,222
- 2013 – 176,468
- 2014 – 183,069

2.3. Enersource's Application with the OEB

Enersource did not submit a CDM program application to the OEB in 2014.

2.4. Enersource's Application with the IESO's Conservation Fund

In 2013, the IESO introduced the Conservation Fund's Program Innovation stream to help meet LDCs' 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 IESO portfolio, and the means to test concepts for future local or province-wide programs post 2014.

Four pilots covering both residential and non-residential classes were approved in 2014 with results from the pilots being made available sometime in 2015.

Enersource did not submit a CDM program application to the IESO's Conservation Fund in 2014.

3. IESO-Contracted Province-Wide CDM Programs

3.1. Introduction

Effective March 1, 2011, Enersource entered into an agreement with the OPA (now the IESO) to deliver CDM programs extending from January 1, 2011 to December 31, 2014. The programs included under this agreement are listed in Table 4 below. Further program details are included in Appendix A.

Table 4: IESO-Contracted Province-Wide CDM Program Initiatives

Initiative	Schedule	Date schedule posted	Customer Class
Residential Programs			
Appliance Retirement	Schedule B-1, Exhibit D	*Jan 26,2011*	*All residential rate classes*
Appliance Exchange	Schedule B-1, Exhibit E	*Jan 26, 2011*	*All residential rate classes*
HVAC Incentives	Schedule B-1, Exhibit B	*Jan 26, 2011*	*All residential rate classes*
Conservation Instant Coupon Booklet	Schedule B-1, Exhibit A	*Jan 26, 2011*	*All residential rate classes*
Bi-Annual Retailer Event	Schedule B-1, Exhibit C	*Jan 26, 2011*	*All residential rate classes*
Retailer Co-op	n/a	*n/a*	*All residential rate classes*
Residential Demand Response	Schedule B-3	*Aug 22, 2011*	*All residential rate classes*
New Construction Program	Schedule B-2	*Jan 26, 2011*	*All residential rate classes*
Commercial & Institutional Programs			
Efficiency: Equipment Replacement	Schedule C-2	*Jan 26, 2011*	*All general service classes*
Direct Install Lighting	Schedule C-3	*Jan 26, 2011*	*General Service < 50 kW*
Existing Building Commissioning Incentive	Schedule C-6	*Feb 2011*	*All general service classes*
New Construction and Major Renovation Initiative	Schedule C-4	*Feb 2011*	*All general service classes*
Energy Audit	Schedule C-1	*Jan 26, 2011*	*All general service classes*
Commercial Demand Response (part of the Residential program schedule)	Schedule B-3	*Jan 26, 2011*	*General Service < 50 kW*
Demand Response 3 (part of the Industrial program schedule)	Schedule D-6	*May 31, 2011*	*General Service 50 kW & above*
Industrial Programs			
Process & System Upgrades	Schedule D-1	*May 31, 2011*	*General Service 50 kW & above*
Monitoring & Targeting	Schedule D-2	*May 31, 2011*	*General Service 50 kW & above*
Energy Manager	Schedule D-3	*May 31, 2011*	*General Service 50 kW & above*
Key Account Manager ("KAM")	Schedule D-4	*May 31,2011*	*General Service 50 kW & above*
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	Schedule C-2	*May 31, 2011*	*General Service 50 kW & above*
Demand Response 3	Schedule D-6	*May 31, 2011*	*General Service 50 kW & above*
Home Assistance Program			
Home Assistance Program	Schedule E-1	*May 9, 2011*	*All residential rate classes*

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

- Electricity Retrofit Incentive Program

- High Performance New Construction
- Multifamily Energy Efficiency Rebates

As per Table 5 below, several program initiatives are no longer available to customers or have not been launched. However, administrative charges have been incurred in the early stages of the framework in anticipation of the program launch.

Table 5: OPA CDM Programs Not in Market or Cancelled

Not in Market	Objective	Status
Residential Program		
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.
Commercial & Institutional Program		
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.
Demand Response 1 ("DR1")	This initiative allows distribution customers to voluntarily reduce electricity demand during certain periods of the year pursuant to the DR 1 contract. The initiative provides DR payment for service for the actual electricity reduction provided during a demand response event.	No customer uptake for this initiative. As a result this Initiative was removed from the Schedule in Q4, 2012.
Industrial Program		
DR1	As above	No customer uptake for this initiative. Removed in Q4, 2012.

The Master CDM Program Agreement between each LDC and the IESO includes a program change management provision in Article 3. Collaboration between the IESO and LDC commenced in 2011, and continued in 2012, 2013 and 2014, as the change management process was implemented to enhance the saveONenergy program suite. The change management process allows for modifications to the Master CDM Program Agreement and initiative Schedules. The program enhancements give LDCs additional tools and greater flexibility to deliver programs in a way that meets the needs of customers and further drives participation in the Initiatives.

3.2. Program Descriptions

Full descriptions of IESO-contracted province-wide CDM programs are available on the IESO's intranet 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. Discussion of Enersource's experience with these programs is provided below.

3.2.1. RESIDENTIAL PROGRAM

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

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

Discussion:

The inclusion of Light Emitting Diode ("LED") technology into the bi-annual retailer events in 2012 and the annual coupons in 2013, as well as some LDC-custom coded coupons, has had a positive effect on consumer engagement. The revamped ***peaksaver* PLUS**® program is the main residential initiative which drives savings for LDCs and has been well received by consumers eager to utilize an In-Home Display ("IHD") to help manage their energy consumption.

The residential program portfolio is predominately a carryover of initiatives from previous programs. It is mostly driven by retailers and contractors who may not have fully delivered what was anticipated. Three new initiatives were never 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. Province-wide advertising has provided value in all residential programs except for *peaksaver* **PLUS**® due to technological inconsistency across LDCs.

Work to revitalize and increase the effectiveness and breadth of the initiatives through the residential program needs to be a high priority. There are opportunities within the residential marketplace that need to be identified, developed and offered to customers. The version 5 schedules changes implemented in the first and second quarter of 2014 have increased the number of LDC-coded coupons available and made new installations of central heating and cooling systems eligible for the Heating and Cooling Incentive.

The Heating and Cooling incentives program continues to be one of the strongest performers in the residential suite of programs. This program is mainly driven by contractors participating in the program but they may not always deliver results in the required manner (e.g., allowing customers to apply for their own incentives and tardy reporting).

Overall, IESO-contracted residential programs contributed 15.30% and 12.07%, to Enersource's 2011-2014 demand and energy saving achievements, respectively.

3.2.1.1. ***Appliance Retirement Initiative (Exhibit D)***

Initiative Activities/Progress:

- Enersource received credit for 473 appliances collected in 2014, the lowest participation in the program's lifecycle, contributing an incremental 30 kW and 205,522 kWh.

- Total achievement for 2011-2014 is approximately 235 kW and 5,239,860 kWh, representing approximately 0.25% and 1.26% of Enersource's 2011-2014 demand and energy savings targets, respectively.

Additional Comments:

- Due to the duration of the program, and the revised appliance eligibility requirements to a minimum age of 20 years old, this initiative appears to have reached market saturation and has been under consideration for removal from the portfolio.

- In an effort to capture additional savings in the anticipated last year of the initiative, the eligibility requirement for refrigerators was revised from 20 years old to 15 years old in the second quarter of 2014, prior to the conclusion of this program on December 31, 2014.

3.2.1.2. ***Appliance Exchange Initiative (Exhibit E)***

Initiative Activities/Progress:

- Enersource promoted this program mainly through social media channels.

- This program is not a major contributor in terms of savings for Enersource. Enersource targets to collect 300 units annually through this initiative, but only 127 units were collected in 2014, contributing an incremental 26 kW and 46,919 kWh in demand and energy savings, respectively.

- Total achievement for 2011-2014 is approximately 65 kW and 243,121 kWh, approximately 0.07% and 0.06% of Enersource's 2011-2014 demand and energy savings targets, respectively.

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 IESO 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.

- This initiative, eligible measures and incentive amounts are influenced by the retail partner with very limited involvement from the LDCs. The restrictive, limited and sometimes non-participation of local stores can diminish the savings potential for this initiative.

- To date there has only been one retailer participant in the Appliance Exchange Initiative.

- Evaluation, Measurement, and Verification ("EM&V") results indicated that the value of savings for retired room air conditioners ("AC") has dropped resulting in the retail participant not accepting window ACs during the Spring 2013 event.

- This initiative may benefit from the disengagement of the retailer and allowing LDCs to directly conduct these events, possibly as part of a larger community engagement effort, with the backing of the IESO's contractor for appliance removal.

- The initiative appears to require more promotion from retailers and LDCs.

3.2.1.3. *HVAC Incentives Initiative (Exhibit B)*

Initiative Activities/Progress:

- The HVAC incentives program was reduced to the second best performing residential program in 2014 in terms of demand and energy savings achieved; however, the number of incentives issued in 2014 was the highest compared to other years from 2011-2013.
- Enersource continues to market this program heavily utilizing social media, print, television and radio with a focus on either "cool savings" or "warm up to" messaging, depending on the season, in addition to utilizing an events team to promote the program at local events to create awareness for the program.
- The IESO has issued rebates to Enersource's customers for 7,039 HVAC units, contributing an incremental 1,398 kW and 2,581,153 kWh demand and energy savings, respectively, towards targets.
- Total achievement for 2011-2014 is approximately 5,653 kW and 25,530,072 kWh, approximately 6.08% and 6.12% of Enersource's 2011-2014 demand and energy savings targets, respectively.

Additional Comments:

- Incentive levels appear to be insufficient to prompt participants to upgrade HVAC equipment prior to end of useful life. An Air Miles incentive was introduced in 2013 to try and encourage early replacement.
- Furnace with Electronically Commutated Motor (ECM) provides the greatest energy savings.
- 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 central air conditioner sales to eligible units.
- There are cases where non-participating contractors are offering their own incentives (by discounting their installations to match the value of the IESO incentive) to make the sale. As this occurs outside of the initiative, savings are not credited to LDCs. The IESO should consider this in future program impact evaluation studies.
- Changes to the schedules in 2014 to allow for incentives for new installations, rather than strictly replacement units, did not generate greater participation for Enersource due to the lack of new eligible homes being built in its service territory.

3.2.1.4. *Conservation Instant Coupon Initiative (Exhibit A)*

Initiative Activities/Progress:

- Coupons were made available on Enersource's website for the entire year and LED coupons were printed on bill inserts distributed to customers on a regular basis.
- Additional coupons were printed for distribution at events, through Enersource's main reception and also provided to various contractors for distribution. Additionally, the LED coupon was printed in The Mississauga News flyers several times a year. However, in the absence of Enersource-specific coded coupon performance feedback from the IESO, Enersource was unable to determine the effectiveness of its coupon distribution strategy.

- Enersource has received credit for 42,848 coupons, contributing an incremental 87 kW and 1,166,247 kWh demand and energy savings, respectively, towards targets.

- Total achievement for 2011-2014 is approximately 164 kW and 5,035,089 kWh, approximately 0.18% and 1.21% of Enersource's 2011-2014 demand and energy savings targets, respectively.

Additional Comments:

- The timeframe for retailer submission of redeemed coupons vary from retailer to retailer, and in some cases has been lengthy. The delays and incomplete results reporting limits the ability to react and respond to initiative performance or changes in consumer behaviour.

- 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.

- All coupons have been provided with LDC-custom coding in 2014 which allows LDCs to promote coupons based on local preferences. However, LDCs were not provided with customer-coded coupon results until early 2015 and thus, had no indication of their redemption rates.

- 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 is on the list.

- The saveONenergy programs would benefit from specific end cap displays, aisle product stands and product-specific areas. Having products disbursed throughout a retail store weakens the impact.

3.2.1.5. ***Bi-Annual Retailer Event Initiative (Exhibit C)***

Initiative Activities/Progress:

- As Enersource does not have direct influence over the actual savings as a result of this event (i.e., regardless of the number of coupons claimed by Enersource customers, only approximately 4% is attributed to Enersource), Enersource utilizes best efforts to promote this program.

- Enersource published flyer jackets in The Mississauga News, and dispatched events teams to all Home Depot locations in its service territory at least once during the span of the program.

- Enersource views this as a good opportunity to promote energy efficient products, cross promote other residential initiatives and to survey customer satisfaction/response to saveONenergy programs.

- Addition of the LED light bulb rebate has certainly increased program participation in Mississauga. Retailers with whom Enersource worked on this event have reported higher LED sales during the event period.

- Enersource noted that a major retailer had representatives from one of their key light bulb manufacturers/suppliers in store during the retailer events, educating and promoting energy efficient lighting.

- Enersource has received credit for 189,443 coupons, contributing an incremental 316 kW and 4,825,760 kWh in demand and energy savings, respectively, towards targets.
- Total achievement for 2011-2014 is approximately 491 kW and 14,288,127 kWh, approximately 0.53% and 3.42% of Enersource's 2011-2014 demand and energy savings achieved, respectively.

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 resources.
- The product list has had minimal changes over the past four years.
- Limited engagement of local retailers can restrict the savings potential for this initiative.
- Program evolution, including new products and review of incentive pricing for the coupon initiatives, must be a regular activity to ensure continued consumer interest.
- The product list could be distinctive from the Conservation Instant Coupon Initiative in order to gain more consumer interest and uptake.
- A review conducted by the EDA Residential Working Group in 2011 identified three areas of need for initiative evolution: 1) introduction of product focused marketing; 2) enhanced product selection; and 3) improved training for retailers as retail staffs 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.

3.2.1.6. ***Retailer Co-op***

Initiative Activities/Progress:

This initiative is strongly influenced by the retail participants and has no direct involvement from the LDCs. In 2014, Enersource had no interest from local retailers in this program.

Additional Comments:

- This is a retailer initiative with no direct benefit to 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 demonstrations in store during the events would be an asset. This could be a valuable role for LDCs, however many LDCs are limited by available resources and unable to participate.

3.2.1.7. *New Construction Program (Schedule B-2)*

Initiative Activities/Progress:

- Due to the limited number of eligible new builds in Mississauga, Enersource received only one application for the program period for an infill property.
- The LED lighting-focused application resulted in 1,304 kWh of energy savings, contributing less than 0.01% to Enersource's 2011-2014 cumulative energy savings achieved.

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 consumers regarding the importance of choosing the energy efficient builder upgrade options despite no apparent immediate benefit to the consumer.
- In 2012, the application process was streamlined; however, it continues to be too cumbersome for builders. This, combined with limited return, has resulted in this initiative continuing to under-achieve.
- Administrative requirements, particularly with individual home modeling, must align with perceived stakeholder payback.
- 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.

3.2.1.8. *Residential and Small Commercial Demand Response Program (Schedule B-3)*

Initiative Activities/Progress:

- Enersource performed well in 2014, enrolling an additional 4,000 load control devices, bringing the total number of load control devices installed to 14,734.
- The total number of participants resulted in a total of 7,615 kW and 22,300 kWh demand and energy savings, respectively.
- EM&V results concluded that there are no statistically significant savings contributed by energy displays.
- Enersource also introduced the commercial program in late 2014, resulting in 432 new load control devices installed, contributing 243 kW demand savings.

Additional Comments:

- Energy and demand savings have not been reported for the In Home Display ("IHD") portion of the program as 2013 EM&V results have determined zero savings associated with the IHD. IESO conducted another study in 2014, expanding its study territory beyond those included in the 2013 study to provincial rather than regional results. Results from the second study have not yet been announced.

- The variable funding associated with installing a load controllable thermostat is not sufficient unless it is combined with an IHD. This might not be possible at all times or when IHD is optional.

- Smart meters installed by most LDCs do not have the capability to communicate directly to an IHD and any mass replacement of newly installed meters with communicating abilities is not fiscally responsible. When proposing technical initiatives that rely on existing LDC infrastructure or technology, there should be an extensive consultative process in order to prevent this type of problem in the future.

- 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.

- Given the different LDCs' smart meter environments and needs, each LDC is positioning the initiative with subtle differences. As such, greater program flexibility is required to address unique LDC needs.

3.2.2. COMMERCIAL AND INSTITUTIONAL PROGRAM

Description: Provides commercial, institutional, agricultural, and industrial organizations with energy-efficiency programs to help reduce their electrical costs while helping Ontario defer the need to build new generation and reduce its environmental footprint. Programs help fund energy audits, replace energy-wasting equipment, or pursue new construction that exceeds 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 2014 the Commercial and Institutional ("C&I") Working Group continued its efforts to enhance the existing C&I programs and rectify identified program and system deficiencies. This has proven to be a challenging undertaking, normally taking months to complete sometimes relatively minor changes due to the current CDM framework. Excessive 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 IESO support personnel.

Despite these challenges the C&I Working Group, working in cooperation with the IESO, has managed to resolve many of the issues which could be rectified. In particular, an accomplishment of 2012 was the advent of the expedited change management as a means to accelerate certain program changes. The benefits of expedited change management processes were seen in 2013 and carried over into 2014.

Looking ahead there is an opportunity to make valuable changes to the current program suite for the Conservation First Framework, but LDCs and the IESO should look beyond the current initiatives and work to launch new programs, built on the strengths of the 2011-2014 programs, in order to meet the needs of the industry and consumers.

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

Initiative Activities/Progress:

- Enersource received credit for 837 projects in 2014.
- In 2014, Enersource achieved an incremental net demand and energy savings of 5,981 kW and 41,809,943 kWh, respectively.
- Total achievement for 2011 – 2014 is approximately 2,340 applications with a cumulative savings of 19,027 kW and 248,743,350 kWh, including adjustments, which account for approximately 20.46% and 59.62% of Enersource's 2011-2014 demand and energy savings targets, respectively.

Additional Comments:

- A large proportion of LDC savings are attributed to ERII.
- Capability building programs from industrial programs have had very positive contributions to ERII.
- A number of customer-facing issues in iCON (the IESO's centralized application system) have been resolved; however, key LDC administrative back office processing issues continue to be a challenge. For example, currently LDCs are unable to record back office information to complete review and approval process using iCON.
- 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 ("KAMs"), 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.
- Lighting is still the most popular measure. Other market sectors are not as engaged yet, specifically the mechanical sector. There continues to be significant barriers to program participation from HVAC (Unitary AC) and compressed air channel partners.

- 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 in order to address changing product costs and evolution of the marketplace.

- A focus on demand incentives has limited some energy project opportunities. In particular, night lighting projects have significant savings potential for customers but tend to have incentives of 10% or less of project cost.

- 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 applications 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 which can be extremely onerous, often requiring a dedicated resource.

- Streamlining of the settlements systems resulted in significant improvement in the payment process in 2013.

- IESO implemented a cut-off date of July 31, 2014 for approval of 2014 Social Housing Adder ("SHA") under ERII program. The IESO had instructed that any SHA applications submitted to the IESO after July 31, 2014 would not be honoured. However, the IESO failed to explain that that was the timeline for LDCs to submit the funding request to the IESO and was not the submission date of the applications to IESO's ICON system by the applicants (customers). As a result there was some confusion and some of the applications that were submitted to the IESO's iCON by July 31, 2014 but for which LDCs submitted the funding request to IESO at a later date (once LDCs had completed review of the applications) were not honoured. Additionally, the formal letter confirming that the SHA annual allocation had been exceeded was received by conservation officers on July 15, 2014, leaving them only 15 days to inform the customers. This created a negative customer experience.

- The handling of the exterior lighting incentives was a negative customer experience. In the fall of 2014, a new section was introduced in the prescriptive Lighting worksheet. It offered generous incentives for some exterior lighting projects and many municipal customers took advantage of the available incentives. Within two weeks of introducing the incentives, several incentives were suddenly removed for approximately six weeks until new incentives were created due to the incentive being too high for some of the measures. This caused a negative customer experience in several ways:

    - Some customers who were planning to apply for rebates for exterior prescriptive lighting measures based on the incentives offered were suddenly not allowed to apply for prescriptive rebates.

    - The length of time from pulling out the exterior prescriptive lighting incentives to offering new incentives was too long. There should have been a temporary incentive level offered to allow LDCs to accept new applications.

- The incentives should have been introduced at an appropriate level the first time. While market conditions can change, the incentives offered should have been researched and approved with the expectation that they would be in place for at least 6-12 months.

- Introduction of several new prescriptive measure worksheets (including Plug Loads and Refrigeration) were introduced in September, 2014 allowing for new opportunities, albeit late in the framework.

- The Ministerial Directive provides continuity of the conservation programs for the participant, with clear direction on LDC administrative funding for 2015, which helps to avoid a gap in program delivery.

3.2.2.2. ***Direct Install Initiative ("DIL") (Schedule C-3)***

Initiative Activities/Progress:

- Enersource received credit for 1,468 small business retrofit upgrades in 2014.

- Enersource achieved a net incremental demand savings of 1,348 kW and 4,679,900 kWh energy savings in 2014.

- Total cumulative savings of 6,771 kW and 59,818,234 kWh accounts for 7.28% and 14.34% of Enersource's 2011-2014 demand and energy savings targets.

- The delivery approach involves heavy utilization of internal resources for marketing and promotion activities and utilizes the third party vendor to complete sales, assessment, and retrofit installations.

- To capture additional savings, specialized teams were established to revisit applicants whose project did not meet the minimum retrofit cost threshold and thus were rejected from the program. Many of these applicants became eligible for the program after the addition of the more expensive and efficient LED lighting and thus, increased participation.

Additional Comments:

- 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 estimated 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.

- 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 offer a standard incentive to prior participants on the remaining measures has potential to provide additional energy and demand savings.

- Many customers are not taking advantage of any additional measures, which may present an opportunity for future savings with a new program offering.

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

Initiative Activities/Progress:

- Enersource did not receive any credit for this program in 2011-2014.

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

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

Initiative Activities/Progress:

- Enersource received credit for 7 HPNC projects in 2014.
- In 2014 Enersource achieved a net incremental demand and energy savings of 120 kW and 204,720 kWh, respectively.
- Total cumulative savings is 314 kW and 1,369,288 kWh, including adjustments, which accounts for 0.33% and 0.34% of Enersource's 2011 - 2014 demand and energy savings targets, respectively.

Additional Comments

- With the Ministerial Directive issued on December 21, 2012, facilities with a completion date near the end of 2014 have some confidence that they will be compensated for choosing efficiency measures.
- Participants had until the end of 2014 to submit their applications for the projects with project completion dates in 2015. However savings achieved will be accounted for under the new framework (2015 - 2020).
- 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, but only for whole building modelling.

- 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.

3.2.2.5. ***Energy Audit Initiative***

Initiative Activities/Progress:

- Enersource has received credit for 64 energy audits contributing to incremental demand and energy savings of 855 kW and 4,177,508 kWh, respectively, in 2014.
- Total cumulative savings of 1,299 kW and 10,378,613 kWh account for 1.40% and 2.49% of Enersource's 2011-2014 demand and energy savings targets, respectively.

Additional Comments

- 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.
- LDCs are receiving some savings towards their targets from an audit which is mainly attributable to operational savings.
- 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 savings calculation requirements should be considered.
- Customers look to the LDCs to recommend audit companies. A centralized prequalified list provided by the IESO may be beneficial.
- Participants are limited to one energy audit which restricts 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 a neutral third party regarding the appropriate lighting solution for their facility instead of what a local supplier would like 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 a potential barrier to participation.

3.2.3. INDUSTRIAL PROGRAM

Description: Owners of 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:

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

Discussion:

The Industrial Program Portfolio has been able to provide valuable resources to large facilities such as the provision of energy managers and enabling engineering studies. The engineering studies in particular provide a unique opportunity for a customer to complete a comprehensive analysis of an energy intensive process that they would not otherwise be able to undertake. Energy managers provide customers with a skilled individual whose only role is to assist them with conservation initiatives. To date these energy managers have played a key role in customer participation. The Key Account Manager ("KAM") and the industrial project supervisors have also been instrumental in managing the embedded energy managers ("EEM") during the first and second half of the year respectively, and promoting activity to the Class A customers.

Due to the size, scope and long lead time of these initiatives and associated projects, the December 2012 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 target of 2011-2014 framework 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 improved the number of projects and savings achieved within Process and Systems Upgrades Initiation ("PSUI"). Likewise, a decision to proceed with applications for natural gas load displacement generation projects also increase uptake, although the limited time to bring new projects into service is a barrier.

3.2.3.1. *Process and Systems Upgrades Initiative ("PSUI") (Schedule D-1)*

Initiative Activities/Progress:

- 7 PES applications were processed in 2014.
- 16 DES applications were processed in 2014.
- The following table summarizes the Engineering Studies submitted and reviewed by the end of 2014 (Preliminary and Detailed Engineering Studies):

Table 6: Summary of Engineering Studies Submitted and Reviewed Between 2011-2014

Number of Studies	50
Study Incentives (Millions $)	$1.48
Estimated Demand Savings (MW)	17.14
Estimated Energy Savings (MWh)	120.7

Additional Comments:

- Numerous energy studies have been submitted and completed. This is a strong indication that there is potential for large projects with corresponding energy savings. Most of these studies have been initiated through 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 a long project development cycle. As such, limited results were expected to be generated in 2014. The majority of the results are expected in 2015 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.
- Given the size of the projects involved, the contract required for PSUI is a lengthy and complicated document. A key to making PSUI successful is the new agreement for 'small' projects with simplified and less onerous conditions for the customer.
- To partially address this, changes were made to the ERII program 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. Therefore, PSUI engineering studies and LDC's industrial resources (e.g., Energy managers, KAMs) contribute significant savings to other programs such as ERII.
- A business case was submitted by the Industrial Working Group in July 2012 which changed the limit for a small project from 700 MWh to $1 million 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 through change management in September 2013.
- With the considerable customer interest in on-site load displacement (co-generation) projects, the initiative should be reviewed to ensure that these projects may be accepted as part of the PSUI Initiative. The IESO was reviewing waste heat projects only and all other co-generation projects were on hold prior to June 2013, when a decision was made to allow natural gas load displacement generation projects to proceed under PSUI. It is expected that a number of projects may proceed although results may not be counted towards LDC 2011-2014 framework target unless applications had been submitted before the end of 2014 and the projects are in service before December 31, 2015.

- The requirement for the customer to invoice the LDC and provide proof of payment to consultants for their incentive is very burdensome and results in a negative customer experience and another barrier to participation.

3.2.3.2. *Monitoring and Targeting ("M&T") Initiative (Schedule D-2)*

Initiative Activities/Progress:

- Four M&T applications were submitted in 2014; estimated savings is 800 kW.
- Two M&T contracts were signed with customers in 2014.

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.
- The savings target required for this initiative can present a significant challenge for smaller customers.
- Through the change management process in 2013, changes were made to ERII to allow smaller facilities to employ M&T systems.

3.2.3.3. *Energy Manager Initiative (Schedule D-3)*

Initiative Activities/Progress:

- By December, 2014, seven facilities had EEMs on board. EEMs generated seven PSUI Project Incentive applications with total estimated savings of 5,000 kW, and were behind multiple ERII/retrofit applications.
- In 2014, Enersource had two REMs on board; the following table summarizes the REMs' activities by December, 2014:

Table 7: Summary of 2011-2014 REM Activities in 2011-2014

Roving Energy Managers	Dec '14	
REMs	2	(New hire Aug '14)
Companies enrolled	39	
Engineering Studies (REMs)	Dec '14	
Number of Studies	13	
Study Incentives	$460,505	

Demand Savings (MW)	5.44
Energy Savings (MWh)	37,832
Projects	
Incentive Projects	
• Number of Projects:	34
• Demand Savings:	2.41
• Energy Savings:	16,223
• Customer Incentive:	$1,524,197
Non-Incentive Projects	
• Number of Projects:	6
• Demand Savings:	0.13 MW
• Energy Savings:	866 MWh
• Customer Incentive:	n/a

Additional Comments:

- Both Embedded Energy Managers ("EEMs") and Roving Energy Managers ("REMs") have proven to be popular and useful resources for larger customers. There are approximately 54 EEMs and 22 REMs being utilized by customers across the province.
- LDCs that are too small to qualify for their own REM are teaming up with other utilities to hire an REM to be shared by the group of utilities.
- At the beginning, it took longer than expected to set up the energy manager application process and unclear communication resulted in marketing and implementation challenges for many LDCs.
- Some LDCs and customers are reporting difficulties in hiring capable REMs and EEMs, in some instances taking up to several months to have a resource in place.
- There have been a number of studies identified by energy managers and they have been able to build capacity and deliver energy savings projects within their respective large commercial/industrial facilities.
- The requirement that 30% of targets must come from non-incented projects is identified as an issue for most EEMs/REMs. The EDA Industrial Working Group proposed to remove this requirement for REMs only as they are not resident full time at a customer facility to find the non-incented savings.

3.2.3.4. *Key Account Manager ("KAM") (Schedule D-4)*

Initiative Activities/Progress:

- Enersource did not utilize a KAM in 2014; however, it is planned to have a KAM on board by the end of 2015.

Additional Comments

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

3.2.3.5. *Demand Response 3 ("DR3") (D-6)*

Initiative Activities/Progress:

- The following table summarizes Enersource's DR3 program activities in 2014:

Table 8: Summary of DR3 Program Activities in 2014

Demand Response (DR3)	Jan '14	Feb '14	Mar '14	Apr '14	May '14	Jun '14	Jul '14	Aug '14	Sep '14	Oct '14
Number of Participants:	25	26	26	27	28	28	28	29	29	29
Total Contracted Capacity:	22.59	22.29	22.29	22.93	22.95	22.98	22.4	22.36	22.51	22.48
Ex ante MW[2]:	18.22	18.22	18.22	18.74	18.76	18.27	18.31	18.28	18.41	18.38

[2]**Estimates based on load reduction capability that can be expected for the purpose of planning. The ex-ante estimates factor in both scheduled non-performance (i.e. maintenance) and historical performance.**

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 confirm savings.
- The Industrial Working Group had a discussion with the IESO and representatives of the Ministry on proposed changes for the DR3 program. No program improvements were made in 2013. However, it was accepted that prior participants who renew their DR3 contract within the 2011-2014 term will contribute to LDC targets.
- As of 2013, aggregators are able to enter into contracts beyond 2014. This has allowed them to offer a more competitive contract price (five years) than the previously limited one- to two-year contracts. However on March 31, 2014 the Minister of Energy issued a directive entitled "Continuance of the IESO's Demand Response Program under IESO management" which restricts the IESO from granting any more contract schedules to aggregators, as the program is being transitioned from the former OPA to the IESO. This decision will prevent the DR3 program from continuing to grow until the IESO is ready to assign DR3 capacity through a new auction process.

- Metering and settlement requirements are complicated and can reduce customer compensation amounts, and present a barrier to some customers.
- Compensation amounts have been reduced from the previous version of this program and subsequently there has been a corresponding decrease in renewal rates.

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

Initiative Activities/Progress:

- Enersource has completed approximately 1,076 projects in 2014 based on the number of projects submitted to the IESO for payment. Although all 1,076 projects were paid out by the IESO, only 1,003 projects were accounted for in the report. Enersource continues to be in discussion with the IESO to resolve the reporting discrepancies.
- Based on the reported 1,003 projects, Enersource achieved an incremental 59 kW and 724,043 kWh savings for a cumulative 118 kW and 1,899,607 kWh demand and energy savings, respectively. This accounts for approximately 0.13% and 0.46% of Enersource's 2011-2014 demand and energy savings targets, respectively.

Additional Comments:

- The financial scope, complexity, and customer privacy requirements of this initiative are challenging for LDCs and most have contracted this program out.

3.2.5. PRE-2011 PROGRAMS

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

4. 2014 Enersource CDM Results

4.1. Participation and Savings

Table 9: Enersource Program and Initiative Level Net Savings

Initiative	Unit	Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)				Program-to-Date Verified Progress to Target (excludes DR)	
										2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
		2011	2012	2013	2014	2011	2012	2013	2014	2014	2014
Consumer Program											
Appliance Retirement	Appliances	110	59	37	30	812,064	430,436	247,739	205,529	235	5,239,860
Appliance Exchange	Appliances	10	17	18	26	11,343	30,332	32,880	46,919	65	243,121
HVAC Incentives	Equipment	1,995	1,202	1,289	1,398	3,614,070	2,016,291	2,205,223	2,581,153	5,884	27,496,749
Conservation Instant Coupon Booklet	Items	47	9	20	87	763,430	54,900	302,637	1,166,247	163	4,989,943
Bi-Annual Retailer Event	Items	66	58	46	316	1,153,895	1,051,579	674,564	4,825,760	486	13,945,205
Retailer Co-op	Items	0	0	0	0	87	0	0	0	0	349
Residential Demand Response	Devices	298	1,262	6,291	7,615	773	10,075	10,205	1,247	7,615	22,300
Residential Demand Response (IHD)	Devices	0	0	0	0	0	0	0	0	0	0
Residential New Construction	Homes	0	0	0	0	0	0	0	1,304	0	1,304
Consumer Program Total		**2,526**	**2,608**	**7,701**	**9,472**	**6,355,663**	**3,593,614**	**3,473,248**	**8,828,160**	**14,449**	**51,938,830**
Business Program											
Retrofit	Projects	2,236	4,531	4,348	6,002	12,075,272	24,392,637	23,178,167	41,820,981	16,948	208,972,947
Direct Install Lighting	Projects	3,359	1,340	1,193	1,348	8,483,296	4,890,220	3,914,521	4,679,900	6,723	59,292,864
Building Commissioning	Buildings	0	0	0	0	0	0	0	0	0	0
New Construction	Buildings	0	97	0	120	0	247,001	0	204,720	217	945,723
Energy Audit	Audits	0	192	97	855	0	931,521	532,958	4,177,508	1,144	8,037,990
Small Commercial Demand Response	Devices	0	0	0	243	0	0	0	0	243	0
Small Commercial Demand Response (IHD)	Devices	0	0	0	0	0	0	0	0	0	0
Demand Response 3	Facilities	1,800	2,171	1,079	904	70,271	31,557	17,169	0	904	118,997
Business Program Total		**7,395**	**8,331**	**6,717**	**9,471**	**20,628,839**	**30,492,936**	**27,642,815**	**50,883,109**	**26,178**	**277,368,520**
Industrial Program											
Process & System Upgrades	Projects	0	0	0	0	0	0	0	0	0	0
Monitoring & Targeting	Projects	0	0	0	0	0	0	0	0	0	0
Energy Manager	Projects	0	3	974	478	0	17,296	3,762,469	3,893,879	1,368	9,766,856
Retrofit	Projects	422	0	0	0	1,994,497	0	0	0	422	7,977,989
Demand Response 3	Facilities	3,236	3,670	17,139	17,243	189,961	88,449	416,174	0	17,243	694,584
Industrial Program Total		**3,658**	**3,673**	**18,113**	**17,721**	**2,184,459**	**105,744**	**4,178,643**	**3,893,879**	**19,033**	**18,439,429**
Home Assistance Program											
Home Assistance Program	Homes	0	40	20	59	0	261,837	198,590	724,043	118	1,899,607
Home Assistance Program Total		**0**	**40**	**20**	**59**	**0**	**261,837**	**198,590**	**724,043**	**118**	**1,899,607**
Aboriginal Program											
Home Assistance Program	Homes	0	0	0	0	0	0	0	0	0	0
Direct Install Lighting	Projects	0	0	0	0	0	0	0	0	0	0
Aboriginal Program Total		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Pre-2011 Programs completed in 2011											
Electricity Retrofit Incentive Program	Projects	2,148	0	0	0	12,349,671	0	0	0	2,148	49,398,684
High Performance New Construction	Projects	161	189	0	0	828,974	418,130	0	0	350	4,570,284
Toronto Comprehensive	Projects	0	0	0	0	0	0	0	0	0	0
Multifamily Energy Efficiency Rebates	Projects	0	0	0	0	314	0	0	0	0	1,258
LDC Custom Programs	Projects	0	0	0	0	0	0	0	0	0	0
Pre-2011 Programs completed in 2011 Total		**2,309**	**189**	**0**	**0**	**13,178,959**	**418,130**	**0**	**0**	**2,498**	**53,970,226**
Other											
Program Enabled Savings	Projects	0	0	0	0	0	0	0	0	0	0
Time-of-Use Savings	Homes	0	0	0	3,831	0	0	0	0	3,831	0
LDC Pilots	Projects	0	0	0	24	0	0	0	184,241	24	184,241
Other Total		**0**	**0**	**0**	**3,831**	**0**	**0**	**0**	**0**	**3,831**	**0**
Adjustments to 2011 Verified Results			**331**	**1**	**2**		**1,650,430**	**900**	**10,998**	**324**	**6,627,722**
Adjustments to 2012 Verified Results				**496**	**377**			**3,946,292**	**1,259,300**	**867**	**15,599,249**
Adjustments to 2013 Verified Results					**2,059**				**19,773,441**	**2,059**	**38,283,048**
Energy Efficiency Total		**10,554**	**7,736**	**8,043**	**14,574**	**42,086,913**	**34,742,180**	**35,049,747**	**64,512,186**	**40,127**	**402,964,972**
Demand Response Total (Scenario 1)		**5,335**	**7,104**	**24,508**	**26,005**	**261,006**	**130,081**	**443,548**	**1,247**	**26,005**	**835,881**
Adjustments to Previous Years' Verified Results Total		**0**	**331**	**497**	**2,438**	**0**	**1,650,430**	**3,947,192**	**21,043,739**	**3,250**	**60,510,019**
OPA-Contracted LDC Portfolio Total (inc. Adjustments)		**15,889**	**15,171**	**33,048**	**43,017**	**42,347,919**	**36,522,691**	**39,440,488**	**85,557,172**	**69,382**	**464,310,872**
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).	*Includes adjustments after Final Reports were issued							**Full OEB Target:**		**92,980**	**417,220,000**
	Results presented using scenario 1 which assumes that demand response resources have a persistence of 1 year							**% of Full OEB Target Achieved to Date (Scenario 1):**		**74.6%**	**111.3%**

Table 10: Enersource 2011 - 2014 CDM Program Activities - Participation Results

#	Initiative	Activity Unit	Uptake/ Participation Units			
			2011	2012	2013	2014
Consumer Programs						
1	Appliance Retirement	Appliances	2,062	1,075	575.55	472.55
2	Appliance Exchange	Appliances	98.414	118.078	89	127
3	HVAC Incentives	Equipment	6,055	5,784	6,490	7,039
4	Conservation Instant Coupon Booklet	Items	20,708	1,213	13,662	42,848
5	Bi-Annual Retailer Event	Items	37,386	41,656	37,096	189,443
6	Retailer Co-op	Items	5	0	0	0
7	Residential Demand Response (switch / Programmable Thermostat)	Devices	533	2,742	11,098	14,734
8	Residential Demand Response (IHD)	Devices	0	587	10,425	14,298
9	New Construction Program	Houses	0	0	0	2
Business Programs						
10	Efficiency: Equipment Replacement - Retrofit	Projects	240	421	641	840
11	Direct Installed Lighting	Projects	3,450	1,558	1,248	1,468
12	Existing Building Commissioning Incentive	Buildings	0	0	0	0
13	New Construction and Major Renovation Incentive	Buildings	0	1	6	7
14	Energy Audit	Audits	9	48	16	64
15	Commercial Demand Response (part of the Residential program schedule)	Devices	0	0	0	432
16	Demand Response 3 (part of the Industrial program schedule)	Facilities	10	12	7	7
Industrial Programs						
17	Process & System Upgrades	Projects	0	0	0	0
18	Monitoring & Targeting	Projects	0	0	0	0
19	Energy Manager	Managers	0	1	16	13
20	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	Projects	32	0	0	0
21	Demand Response 3	Facilities	8	10	18	22
Home Assistance Program						
22	Home Assistance Program	Homes	0	276	459	1003
Pre-2011 Programs						
23	Electricity Retrofit Incentive Program	Projects	185	0	0	0
24	High Performance New Construction	Projects	5	5	0	0
25	Toronto Comprehensive	Projects	0	0	0	0
26	Multifamily Energy Efficiency Rebates	Projects	2	0	0	0
27	LDC Pilots	Projects	0	0	0	1

Table 11: EM&V Results for Enersource

#	Initiative	Realization Rate		Gross Savings		Net-to-Gross Ratio		Net Savings		Contribution to Targets	
		Peak Demand Savings	Energy Savings	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Peak Demand Savings	Energy Savings	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Program-to-Date: Net Annual Peak Demand Savings in 2014 (kW)	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh)
Consumer Programs											
1	Appliance Retirement	n/a	n/a	64	435,868	42%	44%	30	205,529	235	5,239,860
2	Appliance Exchange	100%	100%	50	89,143	53%	53%	26	46,919	65	243,121
3	HVAC Incentives	100%	100%	2,930	5,431,422	51%	51%	1,398	2,581,153	5,884	27,496,749
4	Conservation Instant Coupon Booklet	100%	100%	51	675,508	166%	169%	87	1,166,247	163	4,989,943
5	Bi-Annual Retailer Event	100%	100%	182	2,758,532	174%	175%	316	4,825,760	486	13,945,205
6	Retailer Co-op	n/a	n/a	0	0	n/a	n/a	0	0	0	349
7	Residential Demand Response Load Control	n/a	n/a	7,615	1,247	n/a	n/a	7,615	1,247	7,615	22,300
7	Residential Demand Response Energy Display	n/a	n/a	0	0	n/a	n/a	0	0	0	0
8	Residential New Construction	154%	72%	0	2,070	63%	63%	0	1,304	0	1,304
Business Programs											
9	Efficiency: Equipment Replacement	86%	100%	8,351	57,628,454	72%	72%	6,002	41,820,981	16,948	208,972,947
10	Direct Install Lighting	78%	83%	1,427	4,958,203	94%	94%	1,348	4,679,900	6,723	59,292,864
11	Existing Building Commissioning Incentive	n/a	n/a	0	0	n/a	n/a	0	0	0	0
12	New Construction and Major Renovation Incentive	84%	92%	223	379,110	0.54	54%	120	204,720	217	945,723
13	Energy Audit	96%	100%	1,267	6,225,795	68%	67%	855	4,177,508	1,144	8,037,990
14	Commercial Demand Response Load Control	n/a	n/a	243	0	n/a	n/a	243	0	243	0
14	Commercial Demand Response Energy Display	n/a	n/a	0	0	n/a	n/a	0	0	0	0
15	Demand Response 3* (part of the Industrial program schedule)	0.76	n/a	904	0	n/a	n/a	904	0	904	118,997

#	Initiative	Realization Rate		Gross Savings		Net-to-Gross Ratio		Net Savings		Contribution to Targets	
		Peak Demand Savings	Energy Savings	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Peak Demand Savings	Energy Savings	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Program-to-Date: Net Annual Peak Demand Savings in 2014 (kW)	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh)
Industrial Programs											
16	Process & System Upgrades	n/a	n/a	0	0	n/a	n/a	0	0	0	0
17	Monitoring & Targeting	n/a	n/a	0	0	n/a	n/a	0	0	0	0
18	Energy Manager	0.91	96%	531	4,326,533	90%	90%	478	3,893,879	1,368	9,766,856
19	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)			0	0			0	0	422	7,977,989
20	Demand Response 3*	n/a	n/a	17,243	0	n/a	n/a	17,243	0	17,243	694,584
Home Assistance Program											
21	Home Assistance Program	91%	85%	59	724,043	100%	100%	59	724,043	118	1,899,607
Pre-2011											
22	Electricity Retrofit Incentive Program	-	-	0	0	-	-	0	0	2,148	49,398,684
23	High Performance New Construction	100%	100%	0	0	50%	50%	0	0	350	4,570,284
24	Toronto Comprehensive	-	-	0	0	-	-	0	0	0	0
25	Multifamily Energy Efficiency Rebates	-	-	0	0	-	-	0	0	0	1,258
Others											
26	Time of Use	-	-	3,831	0	-	-	3,831	0	3,831	0
27	LDC Pilots	-	-	24	184,241	-	-	24	184,241	24	184,241

Table 12: Summarized 2014 Program Results

Program	Gross Savings		Net Savings		Contribution to Targets	
	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Incremental Peak Demand Savings in 2014 (kW)	Incremental Energy Savings in 2014 (kWh)	Program-to-Date: Net Annual Peak Demand Savings in 2014 (kW)	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh)
Consumer Program Total	10,893	9,393,790	9,472	8,828,152	14,449	51,938,830
Business Program Total	12,414	69,191,563	9,471	49,109,674	26,178	277,368,520
Industrial Program Total	17,774	4,326,533	17,721	4,552,792	19,033	18,439,429
Home Assistance Program Total	59	724,043	59	625,163	118	1,899,607
Pre-2011 Programs	0	0	0	0	2,498	53,970,226
Others	3,855	184,241	3,855	184,241	3,855	184,241
Adjustments to Previous Year's Verified Results	3,157	27,364,400	2,438	21,043,739	3,250	60,510,019
Total OPA-Contracted Province-Wide CDM Programs	**48,153**	**111,000,328**	**43,017**	**85,557,172**	**69,382**	**464,310,872**

4.1.1. EMBEDDED ENERGY MANAGER LOAD DISPLACEMENT DEMAND REDUCTIONS AND ENERGY SAVINGS

Enersource is undergoing a dispute resolution process via a senior conference with the IESO pursuant to the 2011-2014 CDM Master Agreement, to include 14.125 MW non-incented demand savings and 6.085 GWh energy consumption savings as per the Non-Incented Savings Report issued by IESO's Technical Reviewer.

Enersource aims to resolve this dispute with the IESO by proving that it invested considerable effort to influence its customer to participate in this Operational Change Program Enabled Savings initiative in accordance with the Master Agreement between Enersource and the IESO, program guidelines, directions and instructions. Furthermore, Enersource would have been in a stronger position to claim up to 35 MW or a substantial part thereof by registering the said customer into the DR3 program initiative in 2014 had DR 3 program not been removed by a directive issued on March 31, 2014.

Table 13 and Table 14 below summarize the revised savings achieved should Enersource successfully resolve the dispute and the savings be credited towards Enersource's 2011-2014 achievements.

Table 13: Enersource 2011-2014 Peak Demand Savings Achievement, Including Disputed Savings Claims

Implementation Period	Annual (MW)			
	2011	2012	2013	2014
2011 - Verified	15.9	10.6	10.5	10.1
2012 - Verified	0.3	15.2	8.0	7.9
2013 - Verified	0.0	0.5	33.0	8.4
2014 – Verified plus Non-Incented Savings	0.0	0.4	2.4	57.3
Net Annual Peak Demand Savings Persisting in 2014:				**83.6**
Enersource Hydro Mississauga Inc. 2014 Annual CDM Capacity Target:				**93.0**
Verified Portion of Peak Demand Savings Target Achieved in 2014 (%):				**89.9%**

Table 14: Enersource 2011-2014 Energy Savings Achievement, Including Disputed Savings Claims

Implementation Period	Annual (GWh)				Cumulative (GWh)
	2011	2012	2013	2014	2011-2014
2011 - Verified	42.3	42.1	41.8	40.7	167.0
2012 - Verified	1.7	36.5	36.3	35.9	110.4
2013 - Verified	0.0	3.9	39.4	36.9	80.3
2014 – Verified plus non-Incented Savings	0.0	1.3	19.8	85.6	112.7
Net Cumulative Energy Savings 2011-2014:					**470.4**
Enersource Hydro Mississauga Inc. 2011-2014 Annual CDM Energy Target:					**417.2**
Portion of Cumulative Energy Target Achieved in 2014 (%):					**112.7%**

Enersource intends to submit a claim to the OEB for its 2011-2014 performance incentive based on the revised savings.

4.2. Evaluation, Measurement and Verification ("EM&V") Findings

The following table provides a summary of the 2014 EM&V findings for the evaluated saveONenergy program initiatives. These key evaluation findings are derived from the 2014 evaluations of the saveONenergy programs at a Provincial level and issued by the IESO.

Table 15: Evaluation Findings

#	Initiative	IESO Province-Wide Key Evaluation Findings
Consumer Programs		
1	Appliance Retirement	• Participation increased slightly to 22,563 (7.7%) in 2014 compared with 20,952 in 2013. • Since 2011, overall Initiative participation has decreased nearly 60%. • The greatest decrease was seen in the number of refrigerators collected year-over-year. • Of appliances collected, refrigerators and freezers remain the most dominate measures accounting for 90%. However, window AC units and dehumidifiers saw a marked increase of 29.6% and 27% respectively in 2014. • Net to gross ratio (NTG) increased slightly to 47% compared to 43% as reported for 2013 and 2012 program years.
2	Appliance Exchange	• Participation in 2014 increased by 6.5% to 5,685 appliances from 5,337 in 2013. • Per-unit savings has increased by 36.6% as ENERGY STAR criteria increases and more participants purchase ENERGY STAR replacements appliances. This resulted in a 6.5% increase in Net Energy & Demand savings. • Net to Gross ratio (NTG) remained unchanged from 2013 at 52.6%.
3	HVAC Incentives	• In 2014, net savings increased by 20% from 2013 and overall participation increased by 17% to 113,002, compared to 2013 • The ECM measure has remained the dominant source of savings since 2011. • Per unit furnace savings increased 12.7% due to a shift in the number of participants who use their furnace fan continuously both before and after the retrofit. • Per unit energy and demand savings assumptions for central air conditioners decreased by 56% due to reduced run hours. • Net to Gross ratio (NTG) remained unchanged from 2013 at 48%.
4	Conservation Instant Coupon Booklet	• Customers redeemed more than five times as many annual coupons in 2014 as in 2013. In total, approximately 500,000 Annual Coupons were redeemed in 2014 with 110,000 being LDC-Coded Coupons. • There was a further reduction in savings for lighting measures from changes in the baseline due to the phase out of 72W and 100W incandescent bulbs. • Despite the significant per unit savings reductions for lighting measure, the Net Annual Savings from Annual Coupons in 2014 was more than six times that in 2013. This is primarily because of higher participation and the inclusion of LED coupons and full year availability of all coupons. • Measured NTG ratios grew significantly in 2014. The NTG ratio is 53% higher in 2014 relative to 2013 due to the inclusion of participant spillover, i.e., purchase of additional coupon initiative measures and general energy efficient measures without the use of a coupon but influenced by the coupon program.

#	Initiative	IESO Province-Wide Key Evaluation Findings
5	Bi-Annual Retailer Event	• Over 2.5 million more coupons were redeemed in 2014 compared with 2013 redemptions • The Bi-Annual Coupon Event saw a substantial increase in the number of coupons redeemed during the Spring and Fall Events in 2014 compared to 2013. The increase can be linked to a substantial increase in LED purchases with event coupons accounting for 84% of all Bi-Annual Coupons redeemed. • Reductions in per unit savings were overshadowed by the increase in coupon redemptions. Overall savings increased by approximately 85% in 2014 compared with 2013 Demand and Energy Savings. • Similar to the Annual Coupon Event, measured NTG ratios rose by 53% compared to 2013 NTG ratios. The rise is due to the inclusion of participant spillover, i.e., purchase of additional coupon initiative and general energy efficient measures without the use of a coupon but influenced by the Bi-Annual Coupon event.
7	Residential Demand Response	• There were an additional 55,000 central air conditioner load control devices enrolled in the program in 2014 relative to 2013, which increased the capacity of the residential segment of the program from 129 MW in 2013 to 143 MW in 2014. • Ex-ante impacts on a per device basis were lower than 2013 average. • There were no energy savings in 2014 because there were no system-wide events. • Load impact estimates for the average small and medium businesses and for electric water heaters among residential customers remain consistent with the prior year's analysis. • IHD's yielded no statistically significant energy savings.
8	Residential New Construction	• The most significant growth in the initiative has been participation in the prescriptive track. MW savings in the prescriptive track increased from zero summer peak MW savings in 2011 to 352 summer peak kW savings in 2014. • The custom track saw participation for the first time in 2014. One custom project of 55 homes contributed 37 kW demand savings and 0.5 GWh of energy savings. • New deemed savings for performance track homes were developed and implemented, resulting in more consistent realization rates for 2014. • ENERGY STAR New Homes was introduced as an eligible measure within the performance track in 2014. As a result, these ENERGY STAR New Homes provided 1% of peak demands savings and 4% of energy savings.
Business Programs		

#	Initiative	IESO Province-Wide Key Evaluation Findings
9	Efficiency: Equipment Replacement	• The number of prescriptive projects increased slightly (1.2%) in 2014 to a total of 4,812. However, total net verified savings and peak demand savings dropped significantly (19% and 30%, respectively). This is due to a 19% drop in per-project net verified savings, which can be attributed to a lower track level realization rate and a net-to-gross ratio, and is related to smaller average project sizes. • The quantity of engineered projects increased 22% to a total of 3,906 in 2014; combined with a net verified savings per project increase of 17%, the track saw a dramatic 47% increase in net energy savings. • Lower demand realization rates across the program as a whole were tied to equipment differences between reported and calculated values. For lighting projects the difference was most often seen in baseline and retrofit lamp wattages and ballast factors. Non-lighting tracks exhibited lower demand realization rates due to the following factors: o Variations in load profiles where the evaluation team found equipment that operated fewer hours or at a lower capacity than expected from the project documentation. o Inconsistencies in equipment nameplate data (typically efficiency or capacity) between project documentation and equipment installed on-site. o Weather dependent control systems leading to shifts in how often the equipment operated.
10	Direct Install Lighting	• 23,784 projects were completed in 2014 (34% increase from 2013). • The category of 'Other' business type projects increased 71% when compared to 2013. Agribusinesses make up 74% of the 'Other' business type category. While growth in the number of projects is good, agribusinesses projects, in particular, have a realization rate of only 58.5%. This is primarily due to the verified annual operating hours being approximately 45% less than the assumed annual operating hours. • In 2014, LED measures provide the most net savings of any other SBL measure making up 59% of net energy savings in 2014. Their long effective useful life and retention of a larger amount of savings after the baseline adjustment, allow LED measures to also contribute substantially more lifetime savings than CFLs and linear fluorescents. • Overall energy and demand realization rates decreased by 1.8% and 3.1%, respectively, from 2013. o Sampled rural projects have lower energy realization rates than urban projects (63.8% compared to 83.5%) across the 2011 – 2014 sample. o Sampled rural projects have even lower demand realization rates than urban projects (49.7% compared to 74.1%) across the 2011 – 2014 sample. • The annual proportion of net energy savings from rural projects has increased from 30% in 2011 to 41% in 2014.
11	Existing Building Commissioning Incentive	• 5 projects completed the Hand-off stage in 2014. • Energy realization rate was estimated at 116% and demand realization rate at 202%. • About 31 participants are still in the scoping stage or implementation stage.

#	Initiative	IESO Province-Wide Key Evaluation Findings
12	New Construction and Major Renovation Incentive	• Savings have increased every year of the initiative with an increased participation of 50% over 2013. • In 2014, most savings came from the custom track providing 71% of demand savings. • Participation from HVAC measures occurred for the first time in 2014 (providing 14% of summer peak demand savings and 5% of energy savings). • The measures with the greatest impact on low realization rates for prescriptive measures were high volume low speed (HVLS) fans and variable frequency drives (VFDs). • Province-wide realization rates declined slightly for 2014, as a result of the wider variety of measures being implemented. • Key drivers for participation are the initial project cost, followed by electricity costs, and then expected energy savings.
13	Audit Funding	• The number of audits carried out in 2014 decreased by 20% when compared to 2013. • The average per audit net energy savings attributable to the Audit Funding Initiative was estimated to be 65 MWh, and 13 kW of summer peak demand savings. • Time series analysis quantified additional savings from measures implemented after the initial program year. It was found that an additional 7.2%, 5.0%, and 0.1% can be added to all previously reported projects in 2011, 2012, and 2013 projects, respectively.
Industrial Programs		

16	Process & System Upgrades	• There were 10 PSUI Capital Incentive projects implemented in 2014, compared to 5 in 2013.
		  ○ 4 projects are Behind the Meter Generation (BMG) projects.
		  ○ The remaining projects were energy efficiency improvements in pumping, cooling, compressed air systems and industrial processes.
		• Each project received its own Net to Gross (NTG) value. NTG ratios ranged from 62% to 100% for the 10 projects.
		• Realization rates remained high in 2014, ranging from 90 to over 100%.

17	Monitoring and Targeting	• 5 projects were completed in 2014, compared to 3 in 2013. • Low realization rates (36% for energy savings and 59% for demand savings) are attributed to reported savings based on total potential savings rather than non-incentivized realized savings, while the verified savings only include non-incentivized savings.
18	Energy Manager	• 379 Energy Manager projects were completed in 2014 compared to 306 in 2013. • Energy Managers are important drivers of non-incented savings projects. • In 2014, the Energy Managers initiative has contributed to 35% of energy savings for Industrial Programs.

#	Initiative	IESO Province-Wide Key Evaluation Findings
20	Demand Response 3	• The largest 25 contributors account for 60% of the contractual demand reduction – that is, less than 4% of contributors account for the majority of the load reductions. • A multi-year analysis indicates 2012 was the best year for program performance. After 2012, a single large contributor left the program, resulting in a decrease in overall performance in 2013 and 2014. This highlights the risk of having a highly concentrated program with a few large contributors representing a large share of the program capacity. • There were no events called in 2014 and the contracted capacity was similar to 2013.
Home Assistance Program		
21	Home Assistance Program	• Participation decreased by 5% to 25,424 participants compared with 26,756 in 2013. The decrease was due to six LDCs not participating in the Home Assistance Program in 2014. • Realization rates for demand doubled in 2014 to 56% compared with 2013 (26%). However, energy realization rates decreased by 10% to 77% compared with 2013 results. • Realization rate for demand savings increased due to the adoption of the new FAST Tool which incorporated updated kW savings for weatherization measures, in particular, insulation measures.

Note from IESO:

The Key Evaluation findings are derived from the 2014 evaluations of the saveONenergy programs. These findings were developed by third party evaluation contractors. Complete findings are detailed in the contractors' full evaluation reports, which will be available publicly in Q4 2015.

4.3. Spending

Table 16 and Table 17 below summarize the total spending by initiative that Enersource incurred in 2014 and cumulatively since 2011. It is detailed by the Program Administration Budget (PAB), Participant Based Funding (PBF), Participant Incentives (PI) and Capability Building Funding (CBF).

Table 16: 2014 Spending ($)

Initiative	PAB	PBF	PI	CBF	TOTAL
Consumer Program					
Appliance Retirement	87,471.48	-	-	-	87,471.48
Appliance Exchange	11.92	-	-	-	11.92
HVAC Incentives	168,333.24	-	-	-	168,333.24
Conservation Instant Coupon Booklet	98,971.65	-	-	-	98,971.65
Bi-Annual Retailer Event	70,323.06	-	-	-	70,323.06
Retailer Co-op	-	-	-	-	-
Residential Demand Response (include C&I Small Commercial Demand Response)	876,507.19	-	1,749,545.67	-	2,626,052.86
New Construction Program	4,272.24	-	1,350.00	-	5,622.24
Business Program					
Efficiency: Equipment Replacement	1,474,162.73	-	5,026,228.91	-	6,500,391.64
Direct Installed Lighting	477,833.39	410,300.00	1,817,145.90	-	2,705,279.29
Existing Building Commissioning Incentive	-	-	2,500.00	-	2,500.00
New Construction and Major Renovation Initiative	115,690.84	-	149,568.00	-	265,258.84
Energy Audit	435,309.73	-	192,194.23	-	627,503.96
Small Commercial Demand Response (part of the Residential program schedule)	-	-	-	-	-
Demand Response 3 (part of the Industrial program schedule)	-	-	-	-	-
Industrial Program					
Process & System Upgrades					
a) preliminary engineering study	44,800.10	-	-	-	44,800.10
b) detailed engineering study	48,034.65	-	282,400.50	-	330,435.15
c) program incentive	437,376.20	-	-1,233,562.00[1]	-	-796,185.80
Monitoring & Targeting	533.33	-	52,452.14	-	52,985.47
Energy Manager	3,088.85	-	-	308,240.76	311,329.61
Roving Energy Manager	786.00	-	-	256,657.84	257,443.84
Key Account Manager ("KAM")	-	-	-	-	-
Demand Response 3	347,779.96	-	-	-	347,779.96
Home Assistance Program					
Home Assistance Program	217,070.49	-	388,654.35	-	605,724.84
TOTAL SPEND	**4,908,357.05**	**410,300.00**	**8,428,477.70**	**564,898.60**	**14,312,033.35**

1. *Negative amount reflects the incentive amount returned to Enersource by the participant as a result of a cancelled incented project at the sole discretion of the participant.*

Table 17: 2011-2014 Cumulative Spend ($)

Initiative	PAB	PBI	PI	CBF	TOTAL
Consumer Program					
Appliance Retirement	499,779.91	-	-	-	499,779.91
Appliance Exchange	59,435.95	-	-	-	59,435.95
HVAC Incentives	636,765.25	-	-	-	636,765.25
Conservation Instant Coupon Booklet	326,908.10	-	-	-	326,908.10
Bi-Annual Retailer Event	406,021.27	-	-	-	406,021.27
Retailer Co-op	-	-	-	-	-
Residential Demand Response	2,648,528.51	-	5,029,024.28	-	7,677,522.79
New Construction Program	26,499.06	-	1,350.00	-	27,849.06
Business Program					
Efficiency: Equipment Replacement	4,244,039.81	-	15,529,187.53	-	19,773,227.34
Direct Installed Lighting	873,815.19	2,029,805.00	7,914,989.10	-	10,818,609.29
Existing Building Commissioning Incentive	4,126.06	-	2,500.00	-	6,626.06
New Construction and Major Renovation Initiative	234,094.82	-	214,109.50	-	448,204.32
Energy Audit	880,923.63	-	492,851.38	-	1,373,775.01
Small Commercial Demand Response (part of the Residential program schedule)	16,454.46	-	-	-	16,454.46
Demand Response 3 (part of the Industrial program schedule)	39,963.43	-	-	-	39,963.43
Industrial Program					
Process & System Upgrades					
a) preliminary engineering study	82,228.84	-	9,950.00	-	92,178.84
b) detailed engineering study	86,762.68	-	392,030.00	-	478,792.68
c) program incentive	858,033.90	10,330.00	201,398.00	-	1,069,761.90
Monitoring & Targeting	12,000.67	-	52,452.14	-	64,452.81
Energy Manager	18,173.11	-	-	902,345.06	920,518.17
Roving Energy Manager	42,473.55	-	-	654,586.90	697,060.45
Key Account Manager ("KAM")	19.20	-	-	307,875.80	307,895.00
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	144,509.00	-	572,301.00	-	716,810.00
Demand Response 3	493,317.75	-	-	-	493,317.75
Home Assistance Program					
Home Assistance Program	461,694.39	-	733,158.10	-	1,194,852.49
Pre 2011 Programs					
Electricity Retrofit Incentive Program	-	-	2,317,102.00	-	2,317,102.00
High Performance New Construction	-	-	-	-	-
Multifamily Energy Efficiency Rebates	-	-	-	-	-
Data Centre Incentive Program	-	-	-	-	-
Initiatives Not In Market					
Midstream Electronics	-	-	-	-	-
Midstream Pool Equipment	-	-	-	-	-
Home Energy Assessment	929.72	-	-	-	929.72
Demand Response 1	715.04	-	-	-	715.04
Direct Space Cooling	1,266.68	-	-	-	1,266.68
Total 2011-2014 CDM Program Spend	**13,099,479.98**	**2,040,135.00**	**33,462,403.03**	**1,864,807.76**	**50,466,825.77**

5. Combined CDM Reporting Elements

5.1. Progress towards CDM Targets

Table 18 and Table 19 below provide a summary of Enersource's progress towards meeting its CDM Targets. In 2014 Enersource achieved a cumulative 69.4 MW of peak demand reductions and 464.3 GWh of energy savings.

Table 18: Net Peak Demand Savings at the End User Level (MW)

Implementation Period	Annual (MW)			
	2011	2012	2013	2014
2011 – Verified by IESO	15.9	10.6	10.5	10.1
2012 – Verified by IESO	0.3	15.2	8.0	7.9
2013 – Verified by IESO	0.0	0.5	33.0	8.4
2014 – Verified by IESO	0.0	0.4	2.4	43.0
Verified Net Annual Peak Demand Savings in 2014:				69.4
Enersource 2014 Annual CDM Capacity Target:				93.0
Verified Portion of Peak Demand Savings Target Achieved (%):				74.6%

Table 19: Net Energy Savings at the End-User Level (GWh)

Implementation Period	Annual (GWh)				Cumulative (GWh)
	2011	2012	2013	2014	2011-2014
2011 – Verified by IESO	42.3	42.1	41.8	40.7	167.0
2012 – Verified by IESO	1.7	36.5	36.3	35.9	110.4
2013 – Verified by IESO	0.0	3.9	39.4	36.9	80.3
2014 – Verified by IESO	0.0	1.3	19.8	85.6	106.6
Verified Net Cumulative Energy Savings 2011-2014:					**464.3**
Enersource 2011-2014 Cumulative CDM Energy Target:					**417.2**
Verified Portion of Cumulative Energy Target Achieved (%):					**111.3%**

5.2. Variance from Strategy

Table 18 and Table 19 above show a peak demand reduction shortfall of 23.6 MW and the energy savings target was exceeded by 47.1 GWh.

The main reasons for the shortfall towards the demand savings targets include the following factors:

(i) The withdrawal of several program initiatives in the marketplace in 2012 including Residential Program Midstream Electronics and Midstream Pool Equipment, Small Business Direct Service Space Cooling, and Demand Response 1.

(ii) Several program initiatives continued to attract zero or very low uptake by participants, including Residential New Construction, New Construction and Major Renovations, Building Commissioning, Process and Systems Upgrade Initiatives.

(iii) Long lead times are expected for project completion under the Industrial Programs Process and Systems Upgrade Initiative, which would result in savings being achieved beyond December 31, 2014.

(iv) Cancellation of a major PSUI project due to a change in management resulted in lost demand and energy savings opportunity.

(v) Some of the program initiatives or similar programs were being run prior to 2011 and are now experiencing the market saturation phase, along with smaller average project savings, including Residential Appliance Retirement, Small Business Direct Install Program, and Equipment Replacement Incentive Initiative.

6. Conclusion

Over the course of 2014, Enersource achieved an incremental 40.58 MW in peak demand savings and 64,512 MWh in energy savings. As a result, the cumulative savings achieved for the 4 year period, 2011-2014, through programs implemented during the same period are 69.4 MW demand savings and 464.31 MWh energy savings, which represent 74.6 and 111.3% of Enersource's 2014 savings targets, respectively. Should the currently disputed additional non-incented savings be recognized towards Enersource's 2011-2014 achievements, the savings will represent a total of 89.9% and 112.7% of its demand and energy savings targets, respectively.

These results are representative of a considerable effort expended by Enersource, 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.

However, despite continuing improvements to existing programs, Enersource faced challenges with the 2011 - 2014 CDM framework, resulting in a demand savings shortfall of 23.6 MW (not including savings currently under dispute).

Future reports on Conservation First will be provided by LDCs to the IESO who will report annually to the OEB.

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

Additional detail is available:

- Schedule B-1, Exhibit D. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Consumer/Programs/Appliance-Retirement.aspx.

In Market Date: March 5, 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.

Targeted End Uses: Window air conditioners and portable dehumidifiers

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

Additional detail is available:

- Schedule B-1, Exhibit C. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Consumer.aspx.

In Market Date: March 5, 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: IESO contracts centrally for delivery of the program. LDCs provide local marketing and encourage local contractors to participate in the initiative.

Additional detail is available:

- Schedule B-1, Exhibit B. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Consumer.aspx.

In Market Date: March 5, 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.

Targeted End Uses: ENERGY STAR® qualified standard CFLs, ENERGY STAR® qualified Light Fixtures lighting control products, weather-stripping, hot water pipe wrap, electric water heater blanket, heavy duty plug-in Timers, Advanced power bars, clothesline, baseboard programmable thermostats.

Delivery: The IESO 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 IESO enters into agreements with retailers to honour the coupons.

Additional detail is available:

- Schedule B-1, Exhibit A. Available on IESO's extranet;

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

In Market Date: March 5, 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 IESO enters into arrangements with participating retailers to promote the discounted products, and to post and honour related coupons. LDCs also refer retailers to the IESO and market this initiative locally.

Additional detail is available:

- Schedule B-1, Exhibit C. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Consumer.aspx.

In Market Date: March 5, 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 IESO for co-op funding to run special promotions that promote energy efficiency to customers in their stores. LDCs can refer retailers to the IESO. The IESO 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: March 5, 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 IESO air coverage driving builders to their LDC for additional information.

Additional detail is available:

- Schedule B-1, Exhibit C. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Consumer.aspx.

In Market Date: March 5, 2011

RESIDENTIAL AND SMALL COMMERCIAL DEMAND RESPONSE PROGRAM (Schedule B-3)

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

Initiative Frequency: Year round

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

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

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

Delivery: LDC's recruit customers and procure technology

Additional detail is available:

- Schedule B-1, Exhibit C. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Consumer.aspx.

In Market Date: June 27, 2011 (Residential), September 1, 2015 (Small Commercial)

LOW INCOME INITIATIVE (Schedule E)

Target Customer Type(s): Income Qualified Residential Customers

Initiative Frequency: Year Round

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

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

Targeted End Uses: End use measures based on results of audit (i.e., CFL bulbs)

Delivery: LDC delivered.

Additional detail is available:

- Schedule E. Available on IESO's extranet.

is lower than expected due to a lack of electrically heated homes in the program.

In Market Date: June 2012

C&I Program

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

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

Initiative Frequency: Year round

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

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

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

Delivery: LDC delivered.

Additional detail is available:

- Schedule C-2. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Business/Program-Overviews/Retrofit-for-Commercial.aspx.

In Market Date: Enersource registered with the IESO in March 2011 for this initiative, but experienced delays in program launch due to the IESO CRM / ICON system not fully functional and the requirements for competitive procurement process.

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

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

Initiative Frequency: Year round

Objective: The objective of this Initiative is to offer a free installation of eligible lighting and water heating measures of up to $1,500 to eligible owners and tenants of small commercial, institutional and agricultural facilities and multi-family buildings, for the purpose of achieving electricity and peak demand savings.

Description: The Direct Installed Lighting Initiative targets customers in the General Service <50kW account category. This Initiative offers turnkey lighting and electric hot water heater measures with a value up to $1,500 at no cost to qualifying small businesses. In addition, standard prescriptive incentives are available for eligible equipment beyond the initial $1,500 limit.

Target End Uses: Lighting and electric water heating measures

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

Additional detail is available:

- Schedule C-3. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Business.aspx.

In Market Date: Enersource registered with the IESO in March 2011 for this initiative, but experienced delays in launching the program to small business customers until June 2011 due to the competitive procurement process.

EXISTING BUILDING COMMISSIONING INCENTIVE INITIATIVE (Schedule C-6)

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

Initiative Frequency: Year round

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

Description: This Initiative offers Participants incentives for the following:

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

Targeted End Uses: Chilled water systems for space cooling

Delivery: LDC delivered.

Additional detail is available:

- Schedule C-6. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Business/Program-Overviews/Existing-Building-Commissioning.aspx.

In Market Date: Enersource registered with the IESO in March 2011 for this initiative, but experience delays in launching program to business customer until June 2011 due to competitive procurement process.

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

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

Initiative Frequency: Year round

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

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

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

Delivery: LDC delivers to customers and design decision makers.

Additional detail is available:

- Schedule C-4. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Business/Program-Overviews/New-Construction.aspx.

In Market Date: Enersource registered with the IESO in March 2011 for this initiative, but experience delays in launching program to business customer until June 2011 due to competitive procurement process.

ENERGY AUDIT INITIATIVE (Schedule C-1)

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

Initiative Frequency: Year round

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

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

Targeted End Uses: Various

Delivery: LDC delivered.

Additional detail is available:

- Schedule C-1. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Business/Program-Overviews/Audit-Funding.aspx.

In Market Date: Enersource registered with the IESO in March 2011 for this initiative but experienced further delays in launching the program to business customers due to the competitive procurement process, thus in market date was June 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 cost

c) A one year pay back

Targeted End Uses: Process and systems

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

Additional detail is available:

- Schedule D-1. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Business.aspx.

In Market Date: This initiative was available from June 2011.

MONITORING & TARGETING INITIATIVE (Schedule D-2)

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

Initiative Frequency: Year round

Objective: This initiative offers access to funding for the installation of Monitoring and Targeting ("M&T") 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 MM&T system to help them understand how their energy consumption might be reduced. A facility energy manager, who regularly oversees energy usage, will now be able to use historical energy consumption performance to analyze and set targets.

Targeted End Uses: Process and systems

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

Additional detail is available:

- Schedule D-2. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Business.aspx.

In Market Date: This initiative was available June 2011.

ENERGY MANAGER INITIATIVE (Schedule D-3)

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

Initiative Frequency: Year round

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

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

Targeted End Uses: Process and systems

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

Additional detail is available:

- Schedule D-3. Available on IESO's extranet;
- saveONenergy website https://saveonenergy.ca/Business.aspx.

In Market Date: May 2011

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

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

Initiative Frequency: Year round

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

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

Targeted End Uses: Process and systems

Delivery: LDC delivered

Additional detail is available:

- ScheduleD-4. Available on IESO's extranet.

In Market Date: Enersource had the key account manager start in December 2011.

DEMAND RESPONSE 3 (Schedule D-6)

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

Initiative Frequency: Year round

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

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

Targeted End Uses: Commercial and Industrial Operations

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

Additional detail is available:

- Schedule D-6. Available on IESO's extranet;
- 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.

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 IESO (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)