ERIE THAMES POWERLINES CORPORATION

Conservation and Demand Management

2014 Annual Report

Submitted to:

Ontario Energy Board

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Executive Summary

Erie Thames Powerlines Corporation (ETPL) is a regulated Local Distribution Company (LDC) servicing the communities of Port Stanley, Aylmer, Belmont, Ingersoll, Thamesford, Otterville, Norwich, Burgessville, Beachville, Embro, Tavistock, Clinton, Mitchell and Dublin. ETPL strives to provide superior service to its community of customers.

This annual report is submitted by ETPL 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 ETPL's CDM Strategy filed with the Ontario Energy Board ("Board" or "OEB") on November 1, 2010. Accordingly, this report outlines ETPL'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.

ETPL 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 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 Independent Electricity System Operator ("IESO"), is to provide measurement and verification on TOU. The TOU savings allocated to ETPL's 2011 -2014 targets are 215 kW and 0 kWh.

In 2011, ETPL 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 rolled-out by the IESO in June 2011. In 2011 program activities were centered on building a foundation for full program execution over the next three years of the program term, including staffing, procurement, and program delivery.

In 2012, ETPL offered the full suite of CDM programs available from the OPA for its residential, commercial, and industrial customers, with the exception of the Peaksaver Plus Program. ETPL's role in delivery of the initiatives included promotion, customer service, acting as the local "face" for the initiatives in the community, managing channel partner networks, reporting to the OPA, reviewing applications, referral of participants to the OPA, and contracting for delivery with third-party service providers.

In 2013, ETPL continued to offer the full suite of CDM programs to its customers, with the exception of the Peaksaver Plus Program. To date ETPL has achieved 1.1 MW of net incremental peak demand savings and 5.9 GWh of net incremental energy savings in 2013.

In 2014, ETPL continued to offer the full suite of CDM programs to its customers, with the exception of the Peaksaver Plus Program. To date ETPL has achieved 1.8 MW of net incremental peak demand savings and 11.0 GWh of net incremental energy savings in 2013. A summary of the achievements towards the CDM targets is shown below:

IESO-Contracted Province-Wide CDM Programs: 2011-2014 Final Results Report			
LDC: Erie Thames Powerlines Corporation			
Final 2014 Achievement Against Targets	**2014 Incremental**	**2011-2014 Achievement Against Target**	**% of Target Achieved**
Net Annual Peak Demand Savings (MW)	1.8	3.2	**61.2%**
Net Energy Savings (GWh)	11.0	38.8	**168.8%**

Unless otherwise noted, results are presented using scenario 1 which assumes that demand response resources have a persistence of 1 year

From the above table, ETPL has achieved 3.2 MW and 38.8 GWh towards ETPL's 2011-2014 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, because of circumstances beyond its control, as discussed below. ETPL had already exceeded its Cumulative Energy Savings target before the 2014 deadline.

In 2015, the Conservation First Framework (CFF) for the period 2015 -2020 will be implemented effective on December 1, 2015, to ensure a smooth transition; most 2011- 2014 Programs and Rules were extended into 2015 until the effective implementation of December 1, 2015 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 of ETPL to require ETPL, as a condition of its license, to achieve 22.97 GWh of energy savings and 5.22 MW of summer peak demand savings, over the period beginning January 1, 2011 through December 31, 2014.

In accordance with the same Minister's directive, the OEB issued the Conservation and Demand Management Code for Electricity Distributors (the "Code") on September 16, 2010. The Code sets out the obligations and requirements with which electricity distributors must comply in relation to the CDM targets set out in their licenses. To comply with the Code requirements, ETPL submitted its CDM Strategy on June 11, 2011 which provided a high level of description of how ETPL 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 ETPL and has been prepared in accordance with the Code requirements and covers the period from January 1, 2014 to December 31, 2014.

ETPL submitted its 2011 Annual Report on September 28, 2012 which summarized the CDM activities, successes and challenges experienced by ETPL 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.

ETPL submitted its 2013 Annual Report on September 30, 2014 which summarized the CDM activities undertaken by ETPL for the January 1, 2013 to December 31, 2013 period. The OEB's 2013 CDM Results report identified that the majority of LDCs achieved close to 50% of their net peak demand (MW) target from their 2013 results. However, LDCs generally advised the Board that meeting their peak demand (MW) target is not likely and that a shortfall is expected.

In 2014, LDCs collectively achieved approximately 6553.0 GWh of the energy savings (GWh) target, adding to the overall cumulative result of approximately 109.2% of the net energy target of 6,000 GWh.

The report identifies that although there have been improvements to programs there still remains some shortcomings to the design and delivery of certain initiatives that have resulted in a negative impact to some programs. In particular, the change management process still requires improvements to expedite enhancements to initiatives. The report also noted that certain initiatives may be reaching the point of market saturation and that new initiatives may need to be developed in order to take the place of the existing initiatives 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 past 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 overbuilt governance 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, IESO-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 in ETPL's service area.

2.2 TOU Pricing

2.2.1 Background

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

In accordance with 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. ETPL will report these results upon receipt from the IESO.

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 publically 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. Preliminary results from this study are planned to be issued to the eight LDCs in September 2014. The IESO advised that the TOU study will be completed in the summer of 2015 and final verified savings will be available for LDCs to include in the 2014 Annual Report.

As of September 2015, the IESO has verified that no savings were attributed to TOU for ETPL.

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 price is adjusted twice annually by the OEB. A summary of the RPP TOU pricing is provided **Error! Reference source not found.**.

Table 1: 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.

ETPL began transitioning its RPP customers to TOU billing on September 1, 2011. At December 31st, 2014, 16 653 RPP customers were on TOU billing.

2.3 ETPL's Application with the OEB

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

ETPL recognizes that IESO Province-wide programs were never designed to meet 100% of LDC's targets, and sees Board-approved programs as a potential means for extending the savings realized from the province-wide programs. In ETPL's CDM strategy, it projected to achieve its targets through delivery of the IESO Province-Wide CDM Programs, but did not rule out the possibility of including Board-approved programs at a later date.

As discussed in earlier Annual Reports, there have been significant barriers to the approval of Board-Approved Programs, which has proven to be a deterrent to any meaningful development of programs among LDCs to date. The cost to develop Board-Approved Programs is also prohibitive for smaller LDCs, such as ETPL. However, ETPL does see a worthwhile benefit to offering tailor-made programs to its customers that can do a better job of meeting their needs and taking advantage of community-specific opportunities. .

2.4 ETPL's Application with the IESO's Conservation Fund

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

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

In 2013 ETPL submitted a draft conservation program, the Residential ECM Motor Upgrade Program to the IESO for further review. Due to staff turnover, and time constraints for new hires, ETPL decided to release this program to other LDC's to continue with the process towards development.

3 IESO-Contracted Province-Wide CDM Programs

3.1 Introduction

Effective March 31, 2012, ETPL entered into an agreement with 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 2 below. Further program details are included in Appendix A. In addition, results include projects started pre 2011 which were completed in or after 2011:

Table 2: IESO-Contracted Province-Wide CDM Program Initiatives

Initiative	Schedule	Date schedule posted	ETPL in Market Date
Residential Programs			
Appliance Retirement	Schedule B-1, Exhibit D	*Jan 26,2011*	*January 2011*
Appliance Exchange	Schedule B-1, Exhibit E	*Jan 26, 2011*	*March 2011*
HVAC Incentives	Schedule B-1, Exhibit B	*Jan 26, 2011*	*February 2011*
Conservation Instant Coupon Booklet	Schedule B-1, Exhibit A	*Jan 26, 2011*	*February 2011*
Bi-Annual Retailer Event	Schedule B-1, Exhibit C	*Jan 26, 2011*	*March 2011*
Retailer Co-op	n/a	*n/a*	*N/A*
Residential Demand Response	Schedule B-3	*Aug 22, 2011*	*Not in Market*
New Construction Program	Schedule B-2	*Jan 26, 2011*	*February 2011*
Home Assistance Program	Schedule E-1	*May 9, 2011*	*January 2012*
Commercial & Institutional Programs			
Efficiency: Equipment Replacement	Schedule C-2	*Jan 26, 2011*	*March 2011*
Direct Install Lighting	Schedule C-3	*Jan 26, 2011*	*June 2011*
Existing Building Commissioning Incentive	Schedule C-6	*Feb 2011*	*February 2011*
New Construction and Major Renovation Initiative	Schedule C-4	*Feb 2011*	*June 2011*
Energy Audit	Schedule C-1	*Jan 26, 2011*	*February 2011*
Commercial Demand Response	Schedule B-3	*Jan 26, 2011*	*Not In Market*
Industrial Programs			
Process & System Upgrades	Schedule D-1	*May 31, 2011*	*November 2011*
Monitoring & Targeting	Schedule D-2	*May 31, 2011*	*November 2011*
Energy Manager	Schedule D-3	*May 31, 2011*	*August 2011*
Key Account Manager ("KAM")	Schedule D-4	*May 31,2011*	*August 2011*
Demand Response 3	Schedule D-6	*May 31, 2011*	*January 2011*

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

- Electricity Retrofit Incentive Program
- High Performance New Construction
- Toronto Comprehensive
- Multifamily Energy Efficiency Rebates
- Data Centre Incentive Program
- EnWin Green Suites

As per the table below, several program initiatives are no longer available to customer or have not been launched in Table 3.

Table 3: Pre-2011 IESO Programs

Not in Market	Objective	Status
Residential Program		
Midstream Electronics	Encourages retailers to promote and sell high efficency 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 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 LDC 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 LDC'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 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:

ETPL 2014 Results:

The portfolio of IESO Residential Programs ETPL made available to its customers in 2014 was similar to 2013, 2012 and 2011 and included: Appliance Retirement, Appliance Exchange, HVAC Incentives, Conservation Instant Coupon Booklet, Bi-annual Retailer Event, and Residential New Construction.

ETPL marketed these programs through direct customer outreach including participating in several community events and engaging customers through social media. ETPL also continued its engagement, in partnership with our shareholder municipalities, in a municipal energy committee that will assist in identifying new conservation programs and initiatives. The mandate of this committee is to provide leadership and educate citizens within the Township of South-West Oxford's community in energy conservation.

While the specific results of each of those programs are discussed below, overall participation in the programs offered by ETPL was mixed in 2014. Several programs began to decline in participation (likely due to market saturation) and other programs increasing or maintaining participation levels. Mixed results were also achieved at a provincial level.

The IESO Residential Programs available in 2014 that were not offered by ETPL or saw no uptake included Peak Saver Plus and the Retailer Co-Op. As discussed in further details below, ETPL explored options to introduce Peak Saver Plus to residents in 2014/2015 but ultimately could not find a product to offer to customers that would prove sustainable in the long-term and opted to delay implementation until such time as a sustainable solution could be offered to potential customers. The Retailer Co-Op program saw no uptake by retailers in ETPL's territory in 2014.

The addition of Light Emitting Diode ("LED") technology into the bi-annual retailer events in 2012 and the annual coupons in 2013, as well as LDC custom coded coupons, has had a positive effect on consumer engagement and provided LDC with opportunities to achieve additional savings in their service territory. The Residential Demand Response 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. Unfortunately, there were no savings associated with the Energy Display attributed to LDCs in the IESO's verified results to date.

The Heating and Cooling incentives program continues to be one of the strongest performer 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).

The Residential Program Portfolio is predominately a carryover of initiatives from previous programs. 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 addressed, programs developed and offered to customers. The Version 5 schedules changes under the Master Agreement implemented in Q1/Q2 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.

3.2.1.1 Appliance Retirement Initiative (Exhibit D)

Initiative Activities/Progress:

The Appliance Retirement Initiative has been offered by ETPL since 2007 (previously called *The Great Refrigerator Round-Up*). ETPL continued marketing the program to residents through direct engagement with local appliance retailers, promotion to customers at community events, and through social media and bill inserts, as well as province-wide marketing. Beginning in 2013, the eligibility requirement for appliances changed from a minimum 20 years to a minimum of 15 years.

Participation in this initiative in ETPL territory declined in 2014 over 18.5% compared to 2013, with a total of 163 appliances collected, likely due to market saturation.

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.
- IESOs results are very responsive to province-wide advertising, IESO provincial marketing should continue to play a key role.
- Better relationships with retailers may play a role in increasing participation in this initiative. Retailers can provide opportunities to capture replacement appliances and have them decommissioned after a sale has been committed.

- Due to the announcement by the IESO that the Appliance Retirement program was going to cease at the end of 2014, many LDCs lowered (or removed) their marketing support for the program.

3.2.1.2 Appliance Exchange Initiative (Exhibit E)

Initiative Activities/Progress:

ETPL maintained a similar marketing initiative in 2014 when compared to 2013, including customer engagement sessions and social media advertising, participation in the Appliance Exchange Initiative increased slightly in 2014 with a total of 36 units collected, representing an increase of over 100% from 2013. While there was a modification to the program in 2013 which removed window air conditioners as eligible appliances for exchange, this likely had little to no impact on participation in the program.

If this initiative is to continue, consideration should be given to disengaging with retailers and allowing LDCs to conduct the appliance removal in partnership with other organizations. To date, there has only been one retailer participant in this initiative, which may have had a serious impact on its success. Greater promotion activities on a province-wide basis and at the LDC level may also be beneficial in driving up participation. Lastly, improved communication to LDCs regarding retailer participation and eligible measures will also assist in improving participation.

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.

- 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.

- Notification to LDCs regarding retailer participation and eligible measures continues to be delayed. Improved communications will aid in appropriate resource allocation and marketing of the initiative.

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

3.2.1.3 HVAC Incentives Initiative (Exhibit B)

Initiative Activities/Progress:

In 2014, ETPL continued to promote participation in the HVAC Incentives Initiative directly to customers through participation in community events, bill inserts, and notifications on the ETPL website and through social media. Currently, 12 contractors have registered for the program within ETPL's service territory.

During the 2014 period, ETPL realized 23% increase in program uptake from over 2013. The increase may be attributed to ETPL's increase in efforts to market the OPA-suite of saveONenergy programs and additional HVAC contractors offering the program.

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.
- 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. 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, may prove to be effective in providing greater results, increasing provincial participation by 20% over 2013.

3.2.1.4 Conservation Instant Coupon Initiative (Exhibit A)

Initiative Activities/Progress:

The Conservation Instant Coupon Initiative was considerably more successful in 2014 over 2013, with a 200% increase in uptake. This initiative proved to be one of the best performing programs for ETPL. The program was marketed at all of its community events, as well as on social media and through ETPL's website. The lack of printed coupon booklets likely did have a negative impact on program uptake as those who were not able to download and print the coupons could not participate.

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 on the list.

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

3.2.1.5 Bi-Annual Retailer Event Initiative (Exhibit C)

Initiative Activities/Progress:

ETPL does not have any direct involvement in driving retailer participation in this program as it is negotiated at the provincial level. However, once a local retailer agrees to participate 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. As with 2013, ETPL found the Bi-Annual Retailer Event Initiative to be one of the most effective community engagement events to communicate with customers about conservation and the residential programs available to them. In total, ETPL participated in 3 retail events in 2014. There was a significant increase of 410% in uptake in the program over 2013. This can be attributed to the price of LED's decreasing in price, and consumers being more educated in the benefits of LED lights and conservation.

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:

ETPL had no participation in the Retailer Co-Op 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 demonstration in store during the events would be an asset. This could be a valuable role for LDCs, however many LDCs are limited by available resources and unable to participate.

3.2.1.7 New Construction Program (Schedule B-2)

Initiative Activities/Progress:

Although ETPL saw no results for this program in 2014, progress was made and is expected to be reflected in 2015 as a number of Energy Star 83 or 85 rated houses reach completion. ETPL is working with a builder in the Ingersoll area in conjunction with this initiative and, to date, eight houses have been paid out under this program and it is expected that more will be completed and paid out in 2015.

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 without an immediate benefit to the consumer.

- In 2012 the application process was streamlined, however continues to be too cumbersome for builders. This, combined with limited return, has resulted in this initiative 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 Demand Response Program (Schedule B-3)

Initiative Activities/Progress:

Additional Comments:

ETPL explored options to introduce Peaksaver Plus to residents in 2013/14 but ultimately could not find a product to offer to customers that would prove sustainable in the long-term and opted to delay implementation until such time as a sustainable solution could be offered to potential customers. ETPL's concern is that the speed of technological advancement in the areas of in home displays (IHM) and residential demand response will result in stranded assets if LDCs rush to introduce yesterday's technology. In particular, ETPL is monitoring Cambridge-North Dumphries' pilot program with the Nest thermostat or a "bring your own" thermostat program.

- Energy and demand savings have not been reported for the 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 to 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. Overbuilt governance, numerous initiative requirements, complex program structure and lengthy change management have restricted growth without providing the anticipated improved measurement and verification results. In addition, Evaluation, Measurement and Verification (EM&V) has not yet achieved transparency. LDCs are held accountable for these results yet are mostly completely removed from the process.

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

The net incremental energy savings realized in 2014 through the Commercial and Institutional ("C&I") Programs represented 69% of the total net incremental energy savings for the year. The number of retrofit projects increased over 2013 as well the number of direct install lighting projects also increased. Participation in other C&I programs remained stagnant due to the lack of eligible participants within ETPL's service territory.

Despite these challenges the C&I Working Group, working in cooperation with the IESO, have managed to iron out many of the issues which could be rectified. In particular, an accomplishment of 2012 was the advent of the expedited change management as a mean to accelerate certain program changes. The benefits of expedited change management process 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, which will meet the needs of the industry and consumers.

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

Initiative Activities/Progress:

For 2014, ETPL realized a 14% increase in the number of projects over 2013, and expects to see upward momentum in this initiative continuing into 2014 and beyond. ETPL is working very closely with medium and large-size commercial customers to encourage additional retrofit projects in the future.

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 program.

- 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 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 application became much easier for the lead LDC after schedule changes came into effect in August 2013. The changes implemented allowed the lead LDC to review and approve all facilities in a head office application on behalf of all satellite LDCs under certain circumstances.

- The application process for head office projects remains a significant barrier. Applicants need to manually enter one application per facility associated with the project 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. IESO had instructed that any SHA applications that will be submitted to IESO after July 31, 2014 will not be honored for SHA; however, they failed to mention that it is the timeline to submit the funding request to the IESO by the LDCs and not the submission date of the applications to IESO's ICON system by the Applicant (Customer). As a result there were some confusions and some of the applications that were submitted to IESO's iCON by July 31, 2014 but LDCs submitted the funding request to IESO at a later date (once LDCs have completed review of the applications) were not honored for SHA. Additionally, the formal letter confirming that the SHA annual allocation has been exceeded was received by

conservation officers on July 15, 2014 leaving them only 15 days to inform the customers and 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 2 weeks of introducing the incentives, several incentives were suddenly removed for approximately 6 weeks until new incentives were created due to $/kWh incentive being too high for some of the measures. This caused a negative customer experience in several ways:
    - Some customers were planning on applying for rebates exterior prescriptive lighting measures based on the incentives offered but 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 take in 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 allowed 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:

The number of projects in 2014 increased from 65 to 134 over 2013, participation in the program continued to be fairly strong and improvements to the program will likely help to ensure that it continues to be a strong contributor to energy savings for ETPL in future years. In addition to working with business partners in the community, ETPL is going to continue its strategy of working with municipal partners to identify municipal buildings that have not participated in the program and encourage future participation as it can fit in with the municipality's Municipal Energy Plan under the *Green Energy Act*.

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 estimate useful life.
- Cold start high output lighting was removed from the program. This particularly affected the farming customers who now have limited options within the program.
- Successful execution of the previous version of this initiative has resulted in reduced potential for the 2011-2014 initiative in some LDC's territories.

- The inclusion of a standard incentive for additional measures increased project size and drove higher energy and demand savings results in some situations. However, LDCs are unable to offer these standard incentives to prior participants. The ability to return to prior participants and offer a standard incentive on the remaining 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:

Similar to the rest of the province, ETPL achieved no savings in the Existing Building Commissioning Incentive Initiative in 2014. This is likely due to the initiative being limited to space cooling and a limited window of opportunity (i.e. summer months) for participation. Additionally, it does not appear as though the incentive provided is enough to sway potential participants to take part.

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.

  If the program remains unchanged, ETPL does not expect much, if any, uptake in the initiative.

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

Initiative Activities/Progress:

Although ETPL achieved no savings in this initiative in 2013, it did initiate a project with the largest industrial business in its service territory in 2012 but did not see any results. There is typically a long and complicated application process and development cycle for these types of projects, so ETPL's results are similar to the rest of the province.

Additional Comments

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

3.2.2.5 • 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.Energy Audit Initiative

Initiative Activities/Progress:

ETPL completed 1 audit in 2014, which is not accounted for in our 2014 final reporting.

- 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 saving 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 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 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.

ETPL realized significant results in the Industrial Program in 2014 over 2013, as ETPL's largest industrial partner took advantage of energy savings opportunities through utilization of the Embedded Energy Manager. Furthermore, progress was made in the Process and Systems Upgrades Initiative.

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 current target for projects that go into service after 2014.

Extensive legal documents, complex program structure and lengthy change management have restricted the change and growth of this portfolio. While the expedited change management has benefited the commercial portfolio, the industrial portfolio has not seen the same results due to the narrow scope of the process. For 2013 the change to the threshold for small capital projects and the new small capital project agreement 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:

ETPL had significant success within this initiative in 2014. These exceptional results came from one project from a large customer within our service territory.

Province-wide, approximately 100 engineering study applications have been submitted to the OPA to-date which is a strong indication that there is the potential for large projects with corresponding energy savings. Most of these studies have been initiated through the Energy Manager and KAM resources. Of the 100 applications, three have come from within ETPL's service territory. The first was submitted in early 2012 (one of the first submitted province-wide) for a combined 4 megawatt gas-fired project. ETPL and the applicant decided to split the 2012 application into two separate applications and resubmit it to the OPA in late 2012 when it became clear that, due to political issues beyond ETPL's control, all gas-fired generation project applications were being held from approval.

In mid-2013, one of the applications, for a 1.0 megawatt steam generation project, received approval to move ahead. The project completed by the end of 2014, in time to be counted towards ETPL's demand savings target.

The other application for a 3 megawatt gas-fired project was not approved due to its size, reflecting a decision within the Ministry of Energy. The applicants are currently considering resubmitting the application for a smaller project size or whether to go ahead and not seek funding under this initiative. Regardless, as a result of the application's denial and the long delay by the OPA/Ministry of Energy in reaching a decision, ETPL will likely not meet its demand target despite having been one of the earliest applicants to the program.

The same applicant has had their application for a Detailed Engineering Study (DES) approved. This study will review cooling tower operation. The main purpose of carrying out a Detailed Engineering Study is to evaluate the current chiller, cooling tower and associated pumps and fans (the "Cooling System") through a preliminary scoping and data analysis and provide in-depth technical and financial information required to develop an Energy Efficiency Project that will incorporate operational, replacement, and retrofit opportunities that will provide energy and cost savings for the facility. Savings from this project will likely not be felt until 2015 or beyond.

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

Initiative Activities/Progress:

ETPL had no results for this initiative in 2014. The Monitoring and Targeting initiative is targeted at larger customers with the capacity to baseline and then set targets and monitor their energy usage. This review requires the customer facility to employ an Energy Manager, or a person with equivalent qualifications, which has been a barrier for some customers. As such, a limited number of applications have been received to date. ETPL's largest industrial customer does employ an EEM and is currently the only business to qualify for this initiative in ETPL's service territory. 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:

The Energy Manager Initiative has proven to be popular and useful program for larger customers, including the largest customer in ETPL's service territory. ETPL has one EEM but is not currently using a REM. Some LDCs that are too small to qualify for their own REM are teaming up with other utilities to hire a REM to be shared by the group of utilities. ETPL is doing something similar with other LDCs in sharing the use of a Key Account Manager (KAM) who is acting somewhat as an REM.

At the beginning of the initiative launch, it took longer than expected to set up the energy manager application process. Unclear communication resulted in marketing and implementation challenges for many LDCs. The EEM in ETPL's service territory started in March 2012 but time was required to train both the EEM on his role and the facility and staff on his role and eligible projects.

The EEMs in the province have faced challenges in that they have been provided little direction from the IESO in terms of eligible incented and non-incented projects and reporting requirements. Despite these challenges, there have been a number of studies identified by EEMs, including ETPL's EEM, and they have been able to build capacity and deliver energy saving projects within their respective facilities. Therefore ETPL was very pleased to have the funding for the EEM renewed for 2014. ETPL did not see the same savings as the previous year, which can be directly attributed to the personnel changes within the EEM position.

ETPL, along with other LDCs who have EEMs employed in their territories, were pleased with the decision from the IESO on extending funding for EEMs beyond 2014. The requirement that 30% of targets musts come from non-incented projects is identified as an issue for most EEMs/REMs. The EDA Industrial Working Group has 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 (Schedule D-4)

Initiative Activities/Progress:

The KAM has been an invaluable addition to ETPL, even though it is sharing the resource among other LDCs and only has the equivalent of 1/10th of his available time. The technical knowledge and business experience the KAM brought to the role has been very helpful to ETPL and the other LDCs he is working with, as well as to other KAMs in the province because he is assisting in transferring his knowledge and skills to them. Also, customers appreciate dealing with a single contact to interface with an LDC, especially one who can communicate easily with both parties. Finding a KAM with this mix of skills was not easy and therefore took some time, particularly with the addition of short term contract terms and associated energy target requirements.

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

Initiative Activities/Progress:

ETPL customers are in a discounted zone in southwestern Ontario, therefore the incentives provided are less than other areas which makes it difficult to get customers to participate. Despite this challenge, there are now two customers participating in the DR-3 initiative in ETPL's service territory. One signed up in late 2012 and the other in 2013, so ETPL expects to see the associated demand and energy savings moving forward. Weather may be a contributing factor to the decrease in the amount of savings for 2014.

There are still some issues with the program that may cause barriers to participation. The most impactful challenge is that compensation amounts for new contracts and renewals have been reduced from the initial launch of this initiative which has reduced the revenue received by participants and may deter renewals and new participants. Metering and settlement requirements are expensive and complicated, which can reduce customer compensation amounts and deter participation from smaller customers.

Additional Comments:

- 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 IESO 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:

ETPL partnered with other LDCs whose service territories share the same counties to market the Home Assistance Program to municipalities and social agencies. ETPL focused on the municipalities and social agencies operating in the County of Oxford in 2013 and targeted those in other counties within its service territory using a similar approach in 2014.

ETPL also hired a third party to assist in managing the program, in part due to the financial scope, complexity and customer privacy requirements. Greensaver has expertise in the delivery of these types of programs to Ontario residents, and ETPL is confident that participants will benefit as a result. Greensaver is also assisting in Home Assistance Program delivery for over 30 other LDCs in the province.

ETPL's results for 2014 were much improved over 2013 with 97 homes participating compared to 64 homes in 2013. While the participation rates are low compared to the rest of the province, it is important to note that there are very few designated social housing units within ETPL's service territory. Therefore, unless there are a large number of eligible participants to the program that own their homes, this places a restriction on the number of eligible participants/units in ETPL's service territory because certain incentives are only available for rental units that are dedicated to low-income tenants.

ETPL expects to see similar or slightly better results in 2015 as it expands its marketing outreach.

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 ETPL CDM Results

4.1 Participation and Savings

Table 1: Erie Thames Powerlines Corporation Initiative and Program Level Net Savings by Year

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)				Program-to-Date Verified Progress to Target (excludes DR)	
														2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
		2011*	2012*	2013*	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014	2014
Consumer Program															
Appliance Retirement	Appliances	282	293	200	163	17	17	13	11	119,727	115,287	86,185	71,153	58	1,067,787
Appliance Exchange	Appliances	39	69	13	36	4	10	3	7	4,458	17,409	4,803	13,300	21	90,561
HVAC Incentives	Equipment	299	278	388	478	104	66	82	107	196,514	118,578	148,404	200,758	359	1,639,354
Conservation Instant Coupon Booklet	Items	2,007	109	1,230	3,683	5	1	2	8	74,929	4,943	27,247	100,435	15	469,474
Bi-Annual Retailer Event	Items	3,366	3,750	3,340	17,056	6	5	4	28	103,886	94,675	60,732	434,469	44	1,255,503
Retailer Co-op	Items	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Residential Demand Response	Devices	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Residential Demand Response (IHD)	Devices	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Residential New Construction	Homes	0	2	0	0	0	0	0	0	0	540	0	0	0	1,620
Consumer Program Total						136	99	104	161	499,515	351,431	327,370	820,115	498	4,524,300
Business Program															
Retrofit	Projects	8	34	44	50	17	302	220	250	106,770	2,366,501	2,205,842	1,320,812	769	13,148,412
Direct Install Lighting	Projects	59	85	65	134	75	72	66	132	202,377	269,533	234,744	522,792	325	2,549,588
Building Commissioning	Buildings	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Construction	Buildings	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Energy Audit	Audits	0	0	1	0	0	0	9	0	0	0	48,451	0	9	96,902
Small Commercial Demand Response	Devices	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Commercial Demand Response (IHD)	Devices	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Demand Response 3	Facilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Business Program Total						92	375	295	382	309,147	2,636,034	2,489,037	1,843,604	1,103	15,794,902
Industrial Program															
Process & System Upgrades	Projects	0	0	0	1	0	0	0	593	0	0	0	5,195,250	593	5,195,250
Monitoring & Targeting	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Energy Manager	Projects	0	16	10	4	0	0	280	182	0	0	2,990,081	876,960	394	6,189,453
Retrofit	Projects	5	0	0	0	11	0	0	0	61,631	0	0	0	11	246,522
Demand Response 3	Facilities	0	1	2	1	0	87	387	81	0	2,104	8,802	0	81	10,906
Industrial Program Total						11	87	667	856	61,631	2,104	2,998,883	6,072,210	1,079	11,642,131
Home Assistance Program															
Home Assistance Program	Homes	0	16	64	97	0	1	7	4	0	11,757	50,224	55,233	12	188,560
Home Assistance Program Total						0	1	7	4	0	11,757	50,224	55,233	12	188,560
Aboriginal Program															
Home Assistance Program	Homes	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct Install Lighting	Projects	0	0	0	0	0	0	0	0	0	0	0	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	8	0	0	0	61	0	0	0	228,469	0	0	0	61	913,876
High Performance New Construction	Projects	1	0	0	0	0	0	0	0	1,452	387	0	0	1	6,970
Toronto Comprehensive	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multifamily Energy Efficiency Rebates	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDC Custom Programs	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pre-2011 Programs completed in 2011 Total						61	0	0	0	229,921	387	0	0	62	920,846
Program Enabled Savings	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time-of-Use Savings	Homes	0	0	0	n/a	0	0	0	215	0	0	0	0	215	0
LDC Pilots	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Total						0	0	0	215	0	0	0	0	215	0
Adjustments to 2011 Verified Results							24	0	0		176,172	0	0	24	704,688
Adjustments to 2012 Verified Results								9	99			35,972	1,151,261	107	3,584,041
Adjustments to 2013 Verified Results									95				1,041,676	95	1,416,019
Energy Efficiency Total						301	476	686	1,537	1,100,214	2,999,610	5,856,712	8,791,161	2,887	33,059,833
Demand Response Total (Scenario 1)						0	87	387	81	0	2,104	8,802	0	81	10,906
Adjustments to Previous Years' Verified Results Total						0	24	9	194	0	176,172	35,972	2,192,938	226	5,704,748
OPA-Contracted LDC Portfolio Total (inc. Adjustments)						301	587	1,081	1,812	1,100,214	3,177,886	5,901,486	10,984,099	3,195	38,775,487
													Full OEB Target:	5,220	22,970,000
													% of Full OEB Target Achieved to Date (Scenario 1):	61.2%	168.8%

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

Results presented using scenario 1 which assumes that demand response resources have a persistence of 1 year

Table 4: Summarized Program Results

#	Initiative	Activity Unit	Uptake/ Participation Units			
Consumer Programs			**2011**	**2012**	**2013**	**2014**
1	Appliance Retirement	Appliances	282	293	200	163
2	Appliance Exchange	Appliances	39	69	13	36
3	HVAC Incentives	Equipment	299	278	388	478
4	Conservation Instant Coupon Booklet		2007	109	1230	3683
5	Bi-Annual Retailer Event	Coupons	3366	3750	3340	17056
6	Retailer Co-op	Items	0	0	0	0
7	Residential Demand Response (switch / Programmable Thermostat)	Devices	0	0	0	0
8	Residential Demand Response (IHD)	Devices	0	0	0	0
9	New Construction Program	Houses	0	2	0	0
Business Programs						
10	Efficiency: Equipment Replacement – Retrofit	Projects	8	34	44	50
11	Direct Installed Lighting	Projects	59	85	65	134
12	Existing Building Commissioning Incentive	Buildings	0	0	0	0
13	New Construction and Major Renovation Incentive	Buildings	0	0	0	0
14	Energy Audit	Audits	0	0	1	0
15	Commercial Demand Response (part of the Residential program schedule)	Devices	0	0	0	0
16	Demand Response 3 (part of the Industrial program schedule)	Facilities	0	0	0	0
Industrial Programs						
17	Process & System Upgrades	Projects	0	0	0	1
18	Monitoring & Targeting	Projects	0	0	0	0
19	Energy Manager	Managers	0	16	10	4
20	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	Projects	5	0	0	0
21	Demand Response 3	Facilities	0	1	2	1
Home Assistance Program						

22	Home Assistance Program	Homes	0	16	64	97
Pre-2011 Programs						
23	Electricity Retrofit Incentive Program	Projects	8	0	0	0
24	High Performance New Construction	Projects	1	0	0	0
25	Toronto Comprehensive	Projects	0	0	0	0
26	Multifamily Energy Efficiency Rebates	Projects	0	0	0	0
27	Data Centre Incentive Program	Projects	0	0	0	0
28	EnWin Green Suites	Projects	0	0	0	0

Table 5: Verified Results

#	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	100%	100%	24	151,190	42%	44%	11	71,153	58	1,067,787
2	Appliance Exchange	100%	100%	14	25,269	53%	53%	7	13,300	21	905,61
3	HVAC Incentives	100%	100%	224	422,963	51%	51%	107	200,758	359	1,639,354
4	Conservation Instant Coupon Booklet	100%	100%	4	58,173	171%	173%	8	100,435	15	469,474
5	Bi-Annual Retailer Event	100%	100%	16	248,354	174%	175%	28	434,469	44	1,255,503
6	Retailer Co-op	0%	0%	0	0	0%	0%	0	0	0	0
7	Residential Demand Response*	-	-	0	0	-	-	0	0	0	0
8	Residential New Construction	-	-	0	0	-	-	0	0	0	1,620
Business Programs											
9	Efficiency: Equipment Replacement	91%	105%	356	1,781,856	70%	70%	250	1,320,812	769	13,148,412
10	Direct Install Lighting	69%	84%	140	553,881	94%	94%	132	522,792	325	2,549,588
11	Existing Building Commissioning Incentive	-	-	0	0	-	-	0	0	0	0
12	New Construction and Major Renovation Incentive	100%	100%	0	0		-	0	0	0	0
13	Energy Audit	-	97%	0	0	-	-	0	0	9	96,902
14	Commercial Demand Response (part of the Residential program schedule)	-	-	0	0	-	-	0	0	0	0
15	Demand Response 3* (part of the Industrial program schedule)	-	-	0	0	-	-	0	0	0	0

#	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	-	-	791	6,927,000	75%	75%	593	5,195,250	593	5,195,250
17	Monitoring & Targeting	-	-	0	0	-	-	0	0	0	0
18	Energy Manager	-	-90%	202	974,400	90%	90%	182	876,960	394	6,189,453
19	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	-	-	0	0	-	-	0	0	11	246,522
20	Demand Response 3*	-	-	81	0	-	-	81	0	81	10,906
Home Assistance Program											
21	Home Assistance Program	12%	90%	4	55,233	100%	100%	4	55,233	12	188,560
22	Electricity Retrofit Incentive Program	-	-	0	0	-	-	0	0	61	913,876
23	High Performance New Construction	100%	100%	0	0	50%	50%	0	0	1	6,970
24	Toronto Comprehensive	-	-	0	0	-	-	0	0	0	0
25	Multifamily Energy Efficiency Rebates	-	-	0	0	-	-	0	0	0	0
26	Data Centre Incentive Program	-	-	0	0	-	-	0	0	0	0
	Adjustments to previous year's verified results			108	1,170,069			194	2,192,938	226	5,704,748

Table 6: Summarized 2014 Program Results

Program	Gross Savings		Net Savings		Contribution to Targets	
	Incremental Peak Demand Savings (MW)	Incremental Energy Savings (GWh)	Incremental Peak Demand Savings (MW)	Incremental Energy Savings (GWh)	Program-to-Date: Net Annual Peak Demand Savings (MW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (GWh)
Consumer Program Total			0.161	0.820115	0.498	4.5243
Business Program Total			0.382	1.843604	1.103	15.794902
Industrial Program Total			0.856	6.07221	1.079	11.642131
Home Assistance Program Total			0.004	0.055233	0.012	0.188560
Pre-2011 Programs completed in 2011 Total			0	0	0.062	0.920846
Other Adjustments to Previous Year's Verified Results			0.194	2.192938	0.226	5.704748
Total IESO Contracted Province-Wide CDM Programs			**1.812**	**10.984099**	**3.195**	**38.775487**

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 and issued by the IESO.

Table 7: 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 compared to 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%

#	Initiative	IESO Province-Wide Key Evaluation Findings
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 than in 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.
5	Bi-Annual Retailer Event	• Over 2.5 million 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.

#	Initiative	IESO Province-Wide Key Evaluation Findings
7	Residential Demand Response	• There were an additional 55,000 CAC 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 were called. • Load impact estimates for the average small and medium business and for electric water heaters among residential customers remain consistent with 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 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 kW savings and 4% of kWh savings.

#	Initiative	IESO Province-Wide Key Evaluation Findings
Business Programs		
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 lower track level realization rate and 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.

#	Initiative	IESO Province-Wide Key Evaluation Findings
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 rather than urban projects (63.8% compared to 83.5%) across the 2011 – 2014 sample o Sampled rural projects have even lower demand realization rather 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.
12	New Construction and Major Renovation Incentive	• Savings have increased every year of the initiative with an increased participation of 50% from 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 kW savings and 5% of kWh 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: initial project cost, followed by electricity costs and expected energy savings are the key drivers to participation.

#	Initiative	IESO Province-Wide Key Evaluation Findings
Industrial Programs		
16	Process & System Upgrades	• 10 PSUI Capital Incentive projects implemented in 2014, compared to 5 in2013. o 4 projects are Behind the Meter Generation (BMG) projects. o 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%. • 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 Mangers initiative has contributed to 35% of energy savings for Industrial Programs • Process and Systems Monitoring and Targeting Initiative – Non- incented savings - 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).
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 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.

#	Initiative	IESO Province-Wide Key Evaluation Findings
Home Assistance Program		
21	Home Assistance Program	• Participation decreased by 5 % to 25,424 participants compared with 2013 (26,756). 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.

4.3 Evaluation

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

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Consumer Program			
Appliance Retirement	Includes both retail and home pickup stream. Retail stream allocated based on average of 2008 & 2009 residential throughput; Home pickup stream directly attributed by postal code or customer selection.	Savings are considered to begin in the year the appliance is picked up.	Peak demand and energy savings are determined using the verified measure level per unit assumption multiplied by the uptake in the market (gross) taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.
Appliance Exchange	When postal code information is provided by customer, results are directly attributed to the LDC. When postal code is not available, results allocated based on average of 2008 & 2009 residential throughput.	Savings are considered to begin in the year that the exchange event occurred.	
HVAC Incentives	Results directly attributed to LDC based on customer postal code.	Savings are considered to begin in the year that the installation occurred.	

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

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Residential New Construction	Results are directly attributed to LDC based on LDC identified in application in the iCon system. Initiative was not evaluated in 2011, reported results are presented with forecast assumptions as per the business case.	Savings are considered to begin in the year of the project completion date.	Peak demand and energy savings are determined using the verified measure level per unit assumption multiplied by the uptake in the market (gross) taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.

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

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Direct Installed Lighting	Results are directly attributed to LDC based on the LDC specified on the work order.	Savings are considered to begin in the year of the actual project completion date.	Peak demand and energy savings are determined using the verified measure level per unit assumptions multiplied by the uptake of each measure accounting for the realization rate for both peak demand and energy to reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings take into account net-to-gross factors such as free-ridership and spillover for both peak demand and energy savings at the program level (net).
Existing Building Commissioning Incentive	Results are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year of the actual project completion date.	Peak demand and energy savings are determined by the total savings for a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).
New Construction and Major Renovation Incentive	Results are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year of the actual project completion date.	
Energy Audit	Projects are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year of the audit date.	Peak demand and energy savings are determined by the total savings resulting from an audit as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Commercial Demand Response (part of the Residential program schedule)	Results are directly attributed to LDC based on data provided to IESO through project completion reports and continuing participant lists	Savings are considered to begin in the year the device was installed and/or when a customer signed a peaksaver PLUS™ participant agreement.	Peak demand savings are based on an ex ante estimate assuming a 1 in 10 weather year and represents the "insurance value" of the initiative. Energy savings are based on an ex post estimate which reflects the savings that occurred as a result of activations in the year. Savings are assumed to persist for only 1 year, reflecting that savings will only occur if the resource is activated.
Demand Response 3 (part of the Industrial program schedule)	Results are attributed to LDCs based on the total contracted megawatts at the contributor level as of December 31st, applying the provincial ex ante to contracted ratio (ex ante estimate/contracted megawatts); Ex post energy savings are attributed to the LDC based on their proportion of the total contracted megawatts at the contributor level.	Savings are considered to begin in the year in which the contributor signed up to participate in demand response.	Peak demand savings are ex ante estimates based on the load reduction capability that can be expected for the purposes of planning. The ex ante estimates factor in both scheduled non-performances (i.e. maintenance) and historical performance. Energy savings are based on an ex post estimate which reflects the savings that actually occurred as a results of activations in the year. Savings are assumed to persist for 1 year, reflecting that savings will not occur if the resource is not activated and additional costs are incurred to activate the resource.

Industrial Program			
Process & System Upgrades	Results are directly attributed to LDC based on LDC identified in application.	Savings are considered to begin in the year in which the incentive project was completed.	Peak demand and energy savings are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Monitoring & Targeting	Results are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year in which the incentive project was completed.	Peak demand and energy savings are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).
Energy Manager	Results are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year in which the project was completed by the energy manager. If no date is specified the savings will begin the year of the Quarterly Report submitted by the energy manager.	Peak demand and energy savings are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	Results are directly attributed to LDC based on LDC identified at the facility level in the saveONenergy CRM; Projects in the Application Status: "Post-Stage Submission" are included (excluding "Payment denied by LDC"); Please see "Reference Tables" tab for Building type to Sector mapping.	Savings are considered to begin in the year of the actual project completion date on the iCON CRM system.	Peak demand and energy savings are determined by the total savings for a given project as reported in the iCON CRM system (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net). Both realization rate and net-to-gross ratios can differ for energy and demand savings and depend on the mix of projects within an LDC territory (i.e. lighting or non-lighting project, engineered/custom/prescriptive track).
Demand Response 3	Results are attributed to LDCs based on the total contracted megawatts at the contributor level as of December 31st, applying the provincial ex ante to contracted ratio (ex ante estimate/contracted megawatts); Ex post energy savings are attributed to the LDC based on their proportion of the total contracted megawatts at the contributor level.	Savings are considered to begin in the year in which the contributor signed up to participate in demand response.	Peak demand savings are ex ante estimates based on the load reduction capability that can be expected for the purposes of planning. The ex ante estimates factor in both scheduled non-performances (i.e. maintenance) and historical performance. Energy savings are based on an ex post estimate which reflects the savings that actually occurred as a results of activations in the year. Savings are assumed to persist for 1 year, reflecting that savings will not occur if the resource is not activated and additional costs are incurred to activate the resource.

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

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

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

4.4 Spending

Table 8 and **Error! Reference source not found.** summarize the total spending by initiative that ETPL has incurred in 2014 and cumulatively since 2011. It is detailed by the Program Administration Budget (PAB), Participant Based Funding (PBF), Participant Incentives (PI) and Capability Building Funding (CBF).

Table 8: 2014 Spending

Initiative	PAB	PBF	PI	CBF	TOTAL
Consumer Program					
Appliance Retirement	$ 6,450.00		$12,458.09		$18,908.09
Appliance Exchange	$ 6,450.00				$6,450.00
HVAC Incentives	$ 6,950.00		$130,050.00		$137,000.00
Conservation Instant Coupon Booklet	$12,400.00				
Bi-Annual Retailer Event	$ 6,200.00				
Retailer Co-op					
Residential Demand Response	$14,250.00				
New Construction Program	$ 9,300.00				
Business Program					
Efficiency: Equipment Replacement	$27,912.88		$261,279.02		$289,191.90
Direct Installed Lighting	$11,503.87	$36,850.00	$169,082.80		$217,436.67
Existing Building Commissioning Incentive	$ 1,222.07				$1,222.07
New Construction and Major Renovation Initiative	$ 1,222.07				$1,222.07
Energy Audit	$ 2,902.42				$2,902.42
Small Commercial Demand Response (part of the Residential program schedule)					
Demand Response 3 (part of the Industrial program schedule)	$785.49				$785.49
Industrial Program					
Process & System Upgrades					
a) preliminary engineering study	$305.73				$305.73
b) detailed engineering study	$442.53		$48,840.00		$49,282.53
c) program incentive	$357.61		$1,510,000.00		$1,510,357.61
Monitoring & Targeting	$211.87				$211.87
Energy Manager	$2,020.41		$96,000.00		$98,020.41
Key Account Manager	$1,535.56				$1,535.56
Efficiency Equipment Replacement Incentive (part of the C&I program schedule)					
Demand Response 3	$785.49				$785.49
Home Assistance Program					
Home Assistance Program	$7,000.00		$33,447.60		$40,447.60
TOTAL SPENDING	$119,422.51	$36,850.00	$2,261,157.51		$2,417,430.02

Table 4: Cumulative Spending (2011-2014)

Initiative	PAB	PBI	PI	CBF	TOTAL
Consumer Program					
Appliance Retirement	$30,203.00		$43,794.09		$73,997.09
Appliance Exchange	$30,153.00		$1,230.00		$31,383.00
HVAC Incentives	$24,676.00		$136,050.00		$160,726.00
Annual Coupons	$64,422.00		$3,788.00		$68,210.00
Bi-Annual Retailer Event	$77,602.00		$12,333.00		$89,935.00
Retailer Co-op	$9,675.00				$9,675.00
Residential Demand Response	$14,250.00				$14,250.00
New Construction Program	$29,126.00		$28.00		$29,154.00
Business Program					
Equipment Replacement	$288,282.88		$707,654.02		$995,936.90
Direct Installed Lighting	$101,736.87	$69,076.00	$396,438.80		$567,251.67
Existing Building Commissioning Incentive	$12,841.07				$12,841.07
New Construction and Major Renovation Initiative	$12,841.07				$12,841.07
Energy Audit	$23,266.42				$23,266.42
Small Commercial Demand Response					
Demand Response					
Industrial Program					
Process & System Upgrades					
a) preliminary engineering study	$305.73				$305.73
b) detailed engineering study	$442.53		$48,840.00		$49,282.53
c) program incentive	$357.61		$1,560,000.00		$1,560,357.61
Monitoring & Targeting	$2,312.87				$2,312.87
Energy Manager	$34,338.41		$264,000.00		$298,338.41
Key Account Manager ("KAM")	$1,535.56				$1,535.56
Equipment Replacement Incentive					
Demand Response 3	$785.49				$785.49
Home Assistance Program					
Home Assistance Program	$9,000		$43,224.60		$52,224.60
Pre 2011 Programs					
Electricity Retrofit Incentive Program			$206,643.00		
High Performance New Construction					
Toronto Comprehensive					
Multifamily Energy Efficiency Rebates					
Data Centre Incentive Program					
EnWin Green Suites					
Initiatives Not In Market					
Midstream Electronics					
Midstream Pool Equipment					
Demand Service Space Cooling					
Demand Response 1					
Home Energy Audit Tool					
Total CDM Program Spending	$768,153.51	$69,076.00	$3,424,023.51		$4,261,253.02

5 Combined CDM Reporting Elements

5.1 Progress Towards CDM Targets

ETPL exceeded its Net Energy Savings target in 2014. ETPL did not achieve its Net Peak Demand Savings target by the end of 2014, however, as discussed in further detail in Section 4.2.3.1, significant program approval delays and application rejections that were out of ETPL's control are the reason why ETPL did not meet its target.

Table 9: Net Peak Demand Savings at the End User Level (MW)

Implementation Period	Annual (MW)			
	2011	2012	2013	2014
2011 – Verified by IESO	0.3	0.3	0.3	0.3
2012 – Verified by IESO		0.6	0.5	0.5
2013 – Verified by IESO			1.1	0.6
2014		0.1	0.1	1.8
Verified Net Annual Peak Demand Savings in 2014:				3.2
Erie Thames Powerlines 2014 Annual CDM Capacity Target:				5.2
Verified Portion of Peak Demand Savings Target Achieved (%):				61.2%

Table 10: 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	1.1	1.1	1.1	1.0	4.3
2012 – Verified by IESO	0.2	3.2	3.1	3.1	9.6
2013 – Verified by IESO	0.0	0.0	5.9	5.2	11.2
2014	0.0	1.2	1.54	11.0	13.7
Verified Net Cumulative Energy Savings 2011-2014:					**38.8**
Erie Thames Powerlines 2011-2014 Cumulative CDM Energy Target:					**23.0**
Verified Portion of Cumulative Energy Target Achieved (%):					**168.8%**

5.2 Variance from Strategy

ETPL continued with its original strategy, continuing with a similar marketing strategy for programs that were employed in previous years. As previously discussed, ETPL took a more grass-roots approach and worked more closely with municipal leaders to develop a culture of conservation within the communities ETPL serves.

6 Conclusion

Over the course of 2014, ETPL has achieved an incremental 1.8 MW in peak demand savings and 11.0 GWh in energy savings, which represents 34.6% and 47.8% of ETPL's 2014 target, respectively.

The overall results achieved in 2011-2014 are 3.2 MW in peak demand savings and 38.8 GWh in energy savings, which represents 61.2% and 168.8% of ETPL's 2014 target, respectively. These results are representative of a considerable effort expended by Erie Thames Powerlines, 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 future CDM programs.

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: January 2011

APPLIANCE EXCHANGE INITIATIVE (Exhibit E)

Target Customer Type(s): Residential Customers

Initiative Frequency: Spring and Fall

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

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

Targeted End Uses: Window air conditioners and portable dehumidifiers

Delivery: 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 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: February 2011

CONSERVATION INSTANT COUPON INITIATIVE (Exhibit A)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

Description: This initiative provides customers with year round coupons. The coupons offer instant rebates towards the purchase of a variety of low cost, easy to install energy efficient measures and can be redeemed at

participating retailers. Booklets were directly mailed to customers and were also available at point-of-purchase. Downloadable coupons were also available at www.saveoneenergy.ca.

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

Delivery: The 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: February 2011

BI-ANNUAL RETAILER EVENT INITIATIVE (Exhibit C)

Target Customer Type(s): Residential Customers

Initiative Frequency: Bi-annual events

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

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

Targeted End Uses: As per the Conservation Instant Coupon Initiative

Delivery: The 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 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: NOT IN MARKET

NEW CONSTRUCTION PROGRAM (Schedule B-2)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

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

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

Delivery: Local engagement of builders will be the responsibility of the LDC and will be supported by 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: February 2011

RESIDENTIAL DEMAND RESPONSE PROGRAM (Schedule B-3)

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

Initiative Frequency: Year round

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

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

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

Delivery: LDC's recruit customers and procure technology

Additional detail is available:

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

In Market Date: NOT IN MARKET

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: March 2011

Lessons Learned:

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

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

Initiative Frequency: Year round

Objective: The objective of this Initiative is to offer a free installation of eligible lighting and water heating measures of up to $1,500 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: June 2011

EXISTING BUILDING COMMISSIONING INCENTIVE INITIATIVE (Schedule C-6)

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

Initiative Frequency: Year round

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

Description: This Initiative offers Participants incentives for the following:

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

Targeted End Uses: Chilled water systems for space cooling

Delivery: LDC delivered.

Additional detail is available:

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

In Market Date: February 2011

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

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

Initiative Frequency: Year round

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

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

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

Delivery: LDC delivers to customers and design decision makers.

Additional detail is available:

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

In Market Date: June 2011

ENERGY AUDIT INITIATIVE (Schedule C-1)

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

Initiative Frequency: Year round

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

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

Targeted End Uses: Various

Delivery: LDC delivered.

Additional detail is available:

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

In Market Date: February 2011

Industrial Program

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

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

Initiative Frequency: Year round

Objectives: The objectives of this initiative are to:

- Offer distribution customers capital incentives and enabling initiatives to assist with the implementation of large projects and project portfolios;

- Implement system optimization project in systems which are intrinsically complex and capital intensive; and
- Increase the capability of distribution customers to implement energy management and system optimization projects.

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

a) $200/MWh of annualized electricity savings

b) 70% of projects 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: November 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 M&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: November 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: August 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: August 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.

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

Target Customer Type(s): Income Qualified Residential Customers

Initiative Frequency: Year Round

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

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

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

Delivery: LDC delivered.

Additional detail is available:

- Schedule E. Available on IESO's extranet.

In Market Date: January 2012

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)