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September 30, 2013

via RESS e-filing – signed original to follow by courier

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
PO Box 2319
2300 Yonge Street, 27th floor
Toronto, ON M4P 1E4

Dear Ms. Walli:

Re: Toronto Hydro-Electric System Limited ("THESL")
OEB File No. EB-2010-0215
2012 Annual CDM Report

THESL writes to the Ontario Energy Board ("OEB") in respect of the above-noted matter.

In accordance with the Conservation and Demand Management Code for Electricity Distributors, please find attached THESL's 2012 CDM Annual Report. The report has been filed in the manner set out in Appendix C.

Please do not hesitate to contact me if you have any questions.

Yours truly,

[original signed by]

Rob Barrass
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Toronto Hydro-Electric System Limited
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:RB

cc: Chris Tyrrell, Vice-President, Customer Care by electronic mail only

Toronto Hydro-Electric System Limited

Conservation and Demand Management

2012 Annual Report

Submitted to:

Ontario Energy Board

Submitted on September 30, 2013

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Background

On March 31, 2010, the Minister of Energy and Infrastructure of Ontario, under the guidance of sections 27.1 and 27.2 of the *Ontario Energy Board Act, 1998*, directed the Ontario Energy Board ("OEB" or "Board") to establish Conservation and Demand Management ("CDM") targets to be met by local electricity distributors ("LDCs"). Accordingly, on November 12, 2010, the OEB amended the distribution licence of Toronto Hydro-Electric System Limited ("THESL") requiring THESL, as a condition of its licence, to achieve 286 MW of net annual peak demand savings and 1,304 GWh of net cumulative electricity energy savings, over the period beginning January 1, 2011 and ending December 31, 2014.

In accordance with the same Minister's directive, on September 16, 2010 the OEB issued the Conservation and Demand Management Code for Electricity Distributors (the "CDM Code"). The CDM Code sets out the obligations and requirements with which LDCs must comply in relation to the CDM targets set out in their licences.

The Code also requires a distributor to file Annual Reports with the Board. This is the second Annual Report filed by THESL covering the period from January 1, 2012 to December 31, 2012.

THESL's previously submitted 2011 Annual Report summarized the results, successes, and challenges of its CDM activities for the January 1, 2011 to December 31, 2011 period. The OEB's 2011 CDM Results Report[1] recognized that Distributors had concerns with a delay in the full suite of CDM Programs being made available by the Ontario Power Authority ("OPA"), and that the absence of some programs negatively impacted the final 2011 results. This message was also highlighted in Volumes I & II of the Environmental Commissioner's Report[2] on Ontario's Annual Energy Conservation Progress.

On December 21, 2012, the Minister of Energy directed the OPA to fund CDM programs which meet the definition and criteria for OPA-Contracted Province-Wide CDM Programs (the "OPA Programs") for an additional one-year period from January 1, 2015 to December 31, 2015. To date, no further direction has been provided in terms of program initiative rules or funding.

The Ministerial Directive did not amend the timelines for LDCs to achieve their energy savings and demand savings targets. As a result, THESL continues to assume an unchanged CDM target deadline of December 31, 2014, and is maintaining a strategy consistent with that timeline.

[1] Conservation and Demand Management Report – 2011 Results (EB-2010-0215), OEB December 20, 2012

[2] http://www.ecoissues.ca/index.php/CDM12v2_The_2014_LDC_Electricity_Conservation_Targets,_Year_One

Executive Summary

This 2012 Annual Report details THESL's CDM savings progress to date, the achievements and highlights of programs implemented in 2012, the challenges and mitigation measures considered during the course of program implementation, and discusses modifications to its CDM Strategy in order to attempt to meet its mandated targets by the end of 2014.

2012 CDM Results – As noted in table 1 below (provided by the OPA in the 2012 final verified results) in 2012 THESL achieved 61.1 MW of net annual peak demand savings and 112.2 GWh of net energy savings. Combined with the final verified results for 2011, this translates into 33.4% of the demand savings target achieved and 78.2% of the energy savings target achieved, assuming that demand response resources remain until 2014 (OPA Scenario 2). Under OPA Scenario 1 (assuming demand response resources have a persistence of only 1 year) the demand savings target achieved is 20.2%. Further details on savings results are listed in Section 3.1.

Table 1: Summary of 2012 Savings Results for THESL

FINAL 2012 Progress to Targets	2012 Incremental	Program-to-Date Progress to Target (Scenario 1)	Scenario 1: % of Target Achieved	Scenario 2: % of Target Achieved
Net Annual Peak Demand Savings (MW)	61.1	57.9	**20.2%**	**33.4%**
Net Energy Savings (GWh)	112.2	1019.2	**78.2%**	**78.2%**

Scenario 1 = Assumes that demand response resources have a persistence of 1 year

Scenario 2 = Assumes that demand response resources remain in your territory until 2014

THESL's 2012 Activities - In 2012, THESL undertook the following activities to further implement OPA-Contracted Province-Wide programs:

- Designed and launched the Applicant Representative Initiative ("ARI") to expand channel partners. Since program launch, application volume has increased by 30% over the previous year's monthly average.
- Processed over 1,100 applications (an average of 26 kW per application) for incentive payments and approved over 1,600 applications (an average of 23 kW per application).
- Launched the ***peaksaver* PLUS®** demand response initiative which provides participants with an in-home display ('IHD") and load control device.
- Launched the Home Assistance Program that targets income qualified homeowners, tenants and social housing providers to assist in improving energy efficiency in their homes and apartments.
- Deployed 13 Embedded Energy Managers and 4 Roving Energy Managers in large customers' facilities to help them identify and execute CDM project opportunities.
- Continued to participate in a lead role in the CDM-related Working Groups.
- Completed a study using an independent 3rd party, under contract to the OPA, to study the impact of Time-of-Use ("TOU") rates on electricity use in THESL's service territory. The purpose of this study was to develop a preliminary indication of the contribution that TOU rates will make towards achieving THESL's CDM targets. These results and those of the OPA TOU study in 2013, which involved THESL and several other LDCs, were positive. THESL is looking forward to attributing the savings results in 2013 to help better develop THESL's strategy for 2014.
- Continued to assist the OPA in the development of four new CDM programs previously not approved as OEB-funded CDM programs (which are expected to launch in 2013). Of the four

programs, Monitoring and Targeting ("M&T") and Hydronic System Balancing Program ("HSBP") were adopted by the OPA as amendments to existing programs. The remaining two pilot programs – Multi-Unit Residential Demand Response ("MURB DR") and Commercial Energy Management Load Control ("CEMLC") were launched as pilots in August 2013. Based on results to be available in late 2013, pilots may be adopted as Province-Wide programs in 2014.

2013 - 2014 Outlook - The savings projections from THESL's CDM Strategy have been revised to include THESL's experience with the OPA Programs after they have been in market for two years, as well as the Ministry's announcement of the program extension into 2015. Section 4.2 provides a summary of THESL's latest forecast; THESL expects to be 62 MW below the demand target and 142 GWh above the electricity savings target. Given the expected shortfall for demand, THESL intends to continue to work actively on participant engagement. In addition, THESL is working together with other LDCs, and has been working with the OPA and the Electrical Distribution Association ("EDA") to improve program effectiveness. However, THESL believes that these activities will not fully overcome the forecasted peak demand savings shortfall without an extension to the target date such that it is aligned with the extension of program funding.

Strategy Modifications - THESL has further modified its strategy for 2013 – 2014, and continues to rely entirely on OPA Programs and the Board-Approved TOU pricing. The commercial, institutional and industrial sectors remain the key markets with the potential to deliver the greatest share of conservation gains. THESL intends to implement a number of market tactics to extend the successful market activities to date. Section 4.3 provides further details on the market strategy and OPA Program delivery enhancements. THESL plans to continue to collaborate with the OPA, the EDA and other LDCs to enhance existing OPA Program initiatives and develop new initiatives to improve the outcome. THESL has developed two new programs (MURB DR and CEMLC) which are expected to be in market as OPA province-wide programs in 2014. These programs, which were initially submitted in an application for Board-Approval in 2011, have been approved by the OPA for pilot testing and have been launched in a pilot phase since mid-2013.

These modified strategies require an increasingly more intense market transformation approach, which demands an increase in human resources to research, monitor and manage channel partners in an effort to deliver increased market results in a condensed time period.

1 Board-Approved CDM Programs

1.1 Introduction

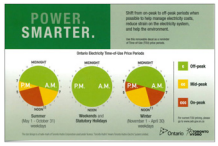
THESL did not apply for any Board-Approved CDM Programs during 2012; however, as noted in the CDM guidelines, released April 26, 2012, the OEB has deemed TOU pricing a Province-wide Board-Approved CDM Program. The OPA is to provide measurement and verification on TOU. At the time of this report the OPA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

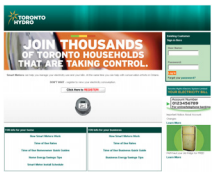
1.2 TOU Implementation

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

Objectives: TOU pricing is designed to encourage conservation and demand shifting of energy usage from "on-peak" periods when electricity demand is high to "off-peak" periods when electricity demand is low.

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.





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

THESL implemented TOU rates starting in June 2009 which was substantially complete by the end of the same year. A great deal of consumer communication and education promoting TOU has been undertaken including:

- Event outreach at community events
- On bill messaging / 'Guide to first TOU' bill inserts
- Statement messaging website promoting use of TOU portal
- Social Media – Facebook, Twitter, OMNI ethnic television vignettes
- Public Relations – media releases (prior to statutory holidays for off-peak); Councillor outreach
- Developed a TOU portal – 125,000 registered (as of end of 2012)
- Launched Energy Calculator, an online tool, to allow users to understand their residential electricity use and plan for measures to reduce use
- Brochures to explain the rate changes and provide electricity savings tips prior to rate changes

Participation: 662,355 TOU-enabled meters as of the end of 2012

Spending: Delivery and implementation of TOU was not OPA funded - it is subject to OEB funding approval.

Results & Evaluation: THESL has been supporting the OPA in its evaluation study by providing customer data, but final results are not available for this reporting period. Preliminary results indicate that there will likely be positive savings and THESL is looking forward to receiving and attributing results in 2013. However, the OPA has indicated that the savings results for TOU will not be available until 2015, which is too late for potential conservation planning purposes.

2 OPA-Contracted Province-Wide CDM Programs

In 2012, THESL continued to deliver the following OPA Programs in its service area:

- **Consumer Program**
- **Business Program**
- **Industrial Program, and**
- **Home Assistance Program**

The funding for the above programs is provided by the OPA as detailed in Section 3.3 by type of expense and by initiative. Summary results at the program initiative level are shown in Section 3.

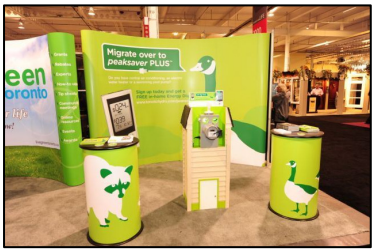
The following sections provide a detailed description of each of the OPA Program initiatives that were offered in THESL's service area in 2012. Full OPA-Contracted Province-Wide CDM Program descriptions are available on the OPA's website at http://www.powerauthority.on.ca/ldc-province-wide-program-documents and additional information can be found on the saveONenergy℠ website at https://saveonenergy.ca as well as THESL's website at www.torontohydro.com.

The details for each program are presented in accordance with the templates provided in the appendices to the CDM Code. THESL further provides additional OPA Program context common to many of the individual initiatives, highlights of achievements including operational challenges, and current and possible risk mitigation activities.

2.1 Consumer Program – Residential Market

The Consumer Program includes initiatives that are designed specifically to meet the requirements of the residential sector and encourage uptake of energy efficient devices and generally promote a culture of conservation. THESL continued to promote the following initiatives to residential customers in 2012:

- Appliance Retirement
- Appliance Exchange
- HVAC Incentives
- Conservation Instant Coupon Booklet
- Bi-Annual Retailer Event
- Residential and Small Commercial Demand Response
- Residential New Construction



To-Market Strategy: THESL's "to-market" strategy for the Consumer Program continued to be a mass marketing and communications plan. The diversity and size of Toronto's population requires a comprehensive integrated marketing plan including social media channels, events, sponsorships and advertising with relevant and qualified messaging that resonate with particular target groups coordinated with OPA's media timetable. In 2012, THESL leveraged its brand strength and recognition to promote these programs instead of utilizing the standard templates developed by the OPA.

Beginning in January 2012, THESL reached out to its consumer sector to promote OPA's saveONenergy℠ programs as follows:

- Advertisements using local print media, digital and radio
- Direct mail (spring and fall) to targeted customers promoting key programs
- Outdoor billboard and street banners

- Bill inserts and on-bill messages
- Powerwise and Econnect newsletters
- Events – local community events and festivals
- Sponsorship through Maple Leaf Sports and Entertainment
- Company website pages and social media – Facebook, YouTube and Twitter
- Outbound calling campaign to re-enrol customers to ***peaksaver* PLUS®**
- Public relation events and new releases

Consumer Program Highlights and Observations:

THESL promoted the ***peaksaver* PLUS®** program heavily during 2012:

- Introduced new THESL brand campaign theme 'urban animals' to leverage strength of the THESL brand to promote various key residential programs. The theme was popular and garnered attention for the programs at community and store events.
- THESL launched an intense one month media campaign which incorporated radio ads, city and neighbourhood newspapers, ethnic advertising, digital/online and out-of-home? (total 6 million impressions)
- Community outreach is important in educating customers. In 2012 events included 17 festivals and shopping centre visits which generated more than 6,300 interactions and 433 program enrolments.
- To encourage and drive online enrolment, THESL developed an easy to use micro-site for registration.
- THESL sent five e-mail blasts that included ***peaksaver* PLUS®** promotions. This included e-newsletters to approximately 200,000 customers and e- blasts utilizing Air Miles™ lists.
- THESL provided the installation contractor with customized materials including logo wear for Installers; the homeowner received a customized ***peaksaver* PLUS®** branded kit with instructions and IHD.
- THESL ran in-store events in conjunction with the OPA bi-annual coupon event in the spring and fall of 2012. This included 16 stores (Home Depot and Lowes). The stores generated 5,784 interactions and 531 ***peaksaver* PLUS®** enrolments.
- A social media campaign was also deployed which included a Facebook advertisement campaign, a Twitter campaign, as well as posting THESL's "Introduction to ***peaksaver* PLUS®**" video on YouTube. A second "how to" video was developed to demonstrate how to program the IHD with new rates along with step-by-step instructions.
- THESL utilized "Air Miles™" on applicable collateral during its time in market.
- Engaged in outbound (live agent) calling with positive customer feedback. Approximately 12,000 customers registered from October to December.

2.1.1 Appliance Retirement

Objectives:	To permanently decommission older, inefficient refrigeration appliances.
Description:	Offers consumers free pick-up and decommissioning of old inefficient refrigerators and freezers that are 15 years and older.
Delivery:	The OPA centrally contracted for province-wide marketing, call centre, appliance pick-up and decommissioning. LDC provided local marketing and coordination with municipal pick-up where available.
Participation:	2,802 appliances
Spending:	$516,590

Results & Evaluation: Net Peak Demand Savings =161 kW

Net Energy Savings =1,091,609 kWh

Additional Comments:

This program has reached market saturation. The OPA changed the appliance age requirement to 20 years and older at the end of 2012, so promotions were tagged as a 'last chance offer' for those at the 15 year mark.

2.1.2 Appliance Exchange

Objective: To remove and permanently decommission inefficient Room Air Conditioners ("RACs") and dehumidifiers.

Description: Appliance exchange events were held at local retail locations and customers were encouraged to bring in their old inefficient RACs and dehumidifiers in exchange for coupons/discounts towards the purchase of new energy efficient equipment.

Delivery: The OPA contracted with participating retailers for the collection of eligible units. THESL promoted the initiative as part of the integrated marketing plan but did not have an in-store presence.

Participation: 580 appliances

Spending: $68,119

Results & Evaluation: Net Peak Demand Savings =83 kW

Net Energy Savings =143,607 kWh

Additional Comments:

Savings, compared to previous years, did not materialize due to a change to the program where the retailer did not want to promote collection of RACs. In the past, collection of RACs in Toronto was more popular than dehumidifiers therefore THESL promoted this program less. Mitigation - THESL intends to seek to gain greater autonomy to design marketing campaigns that suit its specific market conditions and maximize the effectiveness of this program.

2.1.3 HVAC Incentives

Objective: To encourage the replacement of existing heating, ventilation and air conditioning ("HVAC") systems with high efficiency ENERGY STAR® systems and products.

Description: The initiative offers rebates for the replacement of inefficient heating and cooling systems with high efficiency ENERGY STAR® systems and products installed by approved Heating, Refrigeration, and Air Conditioning Institute ("HRAI") qualified contractors.

Delivery: The OPA contracted centrally for delivery of the initiative and THESL marketed this initiative as part of the integrated marketing plan.

Participation: 13,047 HVAC units

Spending: $530,695

Results & Evaluation: Net Peak Demand Savings =2,821 kW

Net Energy Savings =4,781,806 kWh

Additional Comments:

The OPA centrally managed, tracked, and reported results. THESL did not have visibility to actively manage the effectiveness of this initiative. Mitigation – the OPA has agreed to work with LDCs to provide more timely reports throughout the OPA Program term to actively manage the initiative. THESL is also working with an OPA contractor to help market the initiative.

2.1.4 Conservation Instant Coupon Booklet

Objective: To encourage households to purchase energy efficient products by offering coupon discounts.

Description: This initiative offers customers coupons towards the purchase of a variety of low cost, easy to install ENERGY STAR® energy efficient products. Booklets are available at point-of-purchase or as downloadable coupons at www.saveonenergy.ca and on the THESL web site.

Delivery: The OPA contracted centrally for the distribution of the coupon booklets across Ontario. LDCs marketed and distributed coupons at local events. The OPA entered into agreements with retailers to honour the coupons.

Participation: 3,953 products

Spending: Nil

Results & Evaluation: Net Peak Demand Savings =29 kW

Net Energy Savings =178,941 kWh

Additional Comments:

This initiative launched in early Fall despite it being known as an annual offering. The program launched less than a few weeks from the Bi-Annual Retailer Events so promotion of the program was difficult as coupons were similar and have not changed much since 2008. Mitigation – Expand the list of products, including new products (e.g. LED lighting and review incentive levels for the coupon initiatives to increase participation). Also work with the OPA to launch earlier in the year.

2.1.5 Bi-Annual Retailer Events

Objectives: To offer customers instant point of purchase discounts at participating retailers for a variety of energy efficient products.

Description: Twice a year (spring and fall), participating retailers host month-long rebate events. 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.

Delivery: The OPA enters into arrangements with participating retailers to promote the discounted products. LDCs also refer retailers to the OPA.

Participation: 135,773 products

Spending: $618,238

Results & Evaluation: Net Peak Demand Savings =189 kW

Net Energy Savings =3,427,499 kWh

Additional Comments:

New in 2012, LED coupons were introduced so THESL promoted this new offering as the lead message for this campaign. In addition, new stores were

added to the roster (THESL had a presence at three Lowes stores in addition to other retail stores).

2.1.6 Retailer Co-op

Objectives: To hold promotional events to encourage customers to purchase energy efficiency measures.

Description: The initiative provides LDCs with the opportunity to work with retailers in their distribution 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).

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

Participation: N/A

Spending: N/A

Results & Evaluation: N/A

Additional Comments: THESL did not participate in 2012

2.1.7 Residential and Small Commercial Demand Response ("DR")

Objectives: Control residential and small commercial electrical end use loads, including air conditioners, pool pumps and electric water heaters, to make available for dispatch during IESO demand response events.

Description: Customers enrol in ***peaksaver* PLUS® (**previously, ***peaksaver***), which includes the installation of a Load Control Device ("LCD") on one or more of the end use loads noted above and/or a free IHD that allows customers to view their energy use and associated price on a real time basis.

THESL launched the new ***peaksaver* PLUS®** initiative in late summer 2012 and had considerable success in converting customers to the new program.

Delivery: THESL procures LCDs and IHDs directly and contracts the installation of the devices via a third party. THESL actively markets within its service territory using targeted market tactics (bill inserts, direct mail, outbound calling, and radio and newspaper ads) to promote the initiative.

Participation: 43,149 switches for residential (including 1,328 switches installed in 2011)

132 switches for small commercial (including 36 switches installed in 2011)

23,824 IHDs for residential

Spending: $4,752,482

Results & Evaluation: Net Peak Demand Savings for Residential =22,940 kW (743 kW in 2011)

Net Energy Savings for Residential =168,943 kWh

Net Peak Demand Savings for Commercial =84 kW (23 kW in 2011)

Net Energy Savings for Commercial =478 kWh

Additional Comments: The program has been well received and take-up rates have exceeded expectations in the residential sector. However, the number of customers that

can be converted to the new program is rapidly diminishing. Small commercial take-up of the program has been negligible as there is generally no viable IHD technology or any incentive for business owners to participate: Mitigation: A task force of LDCs and the OPA worked to implement changes to improve participation in the small commercial sector. This work had not been completed at end of 2012.

The savings associated with the IHD for ***peaksaver* PLUS®** have not been determined. This is as a result of insufficient data to make a statistically significant determination of savings for 2012. Evaluation of the IHDs is planned to continue with 2013 data and it is hoped that savings will be verified in 2013, and then applied to 2012 as an adjustment in the 2013 annual report.

2.1.8 Residential New Construction

Objectives: To promote the construction of energy efficient residential homes in the new home construction market.

Description: This initiative offers incentives to homebuilders who construct new energy efficient homes. Incentives are offered for two categories: 1) incentives for the installation of electricity efficiency measures as determined by a prescriptive list or via a custom option; and 2) incentives for homes that meet or exceed aggressive efficiency standards using the EnerGuide performance rating system.

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

Participation: At the end of 2012 two applications were received for completion in 2013 and 2014

Spending: $285,796

Results & Evaluation: Net Peak Demand Savings =0 kW

Net Energy Savings =0 kWh

Additional Comments:

Due to the lengthy and burdensome application process, this program is being redesigned by the Residential Work Group to simplify the process. Improvements are planned for 2013.

2.2 Business Program – Commercial and Institutional Markets

By end of 2012, many active sectors of the marketplace were demonstrating familiarity, comfort and experience with the CDM Programs. However, market research continues to uncover sectors still with generally poor penetration despite the significant marketing and outreach efforts of both the OPA and THESL.

THESL faces a challenge in Toronto. The conservation marketplace has matured since 2005 and saturation of certain conservation measures remains a limiting factor for some key segments. Development of new initiatives to satisfy next generation projects and opportunities unique to Toronto is crucial to help THESL achieve its mandated savings targets.

Analysis in 2012 continues to support the previous observation of an increasing number of smaller project applications with decreasing kW per application accompanied by longer sales cycle. This has resulted in greater sales and administrative efforts. This supports THESL's Applicant Representative Initiative ("ARI") in seeking to engage the supply chain as channel partners working with THESL to help increase volume and spread the effort in helping to submit applications.

Furthermore, some markets such as planned and unplanned (emergency) rooftop unit replacement are almost entirely unutilized by a disinterested distributor network and require greater motivation to engage along with customers.

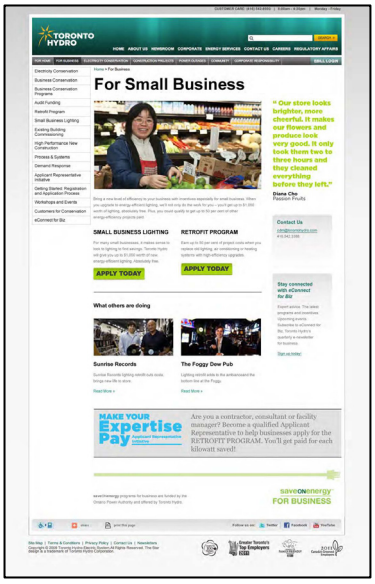
The following initiatives were promoted in 2012 through intense sales and marketing efforts:

- Efficiency: Equipment Replacement Incentive Initiative ("ERII")
- Direct Install Lighting
- Existing Building Commissioning Incentive
- New Construction and Major Renovation Incentive
- Energy Audit

To-Market Strategy: The business marketing strategy included the use of media, customer outreach and specific marketing tactics with cross-program messaging. A key component of the plan relied heavily on building a strong channel and ally partner network to help supplement THESL's sales activities. Tactics included:

- Multimedia mass marketing, including radio and newspaper inserts, to build awareness in all sectors
- Hosting technology focused conferences
- Trade/vertical publications
- Online ad units on consumer business publications sites and commercial trade sites
- E-newsletters to targeted lists
- Direct mail letter
- Press releases
- Sponsorship of major association events and initiatives including Race to Reduce, BOMA, etc.
- Hosted an Energy Into Action conference in partnership with four other CLD members - over 200 participated in attendance

- Outreach activities at top industry events
- Ally/channel information sessions
- Technical training for customers
- Marketing materials to support sales and partners/channel/allies (includes sale sheets, press releases, presentations, website)



Business Program Highlights and Observations:

- THESL continued to invest considerable effort in providing training workshops, seminars, and activities in 2012 to highlight and promote OPA Programs while engaging third party channel partners with local experience to accelerate uptake of available programs
- Launched an incentive based supply channel initiative titled Applicant Representative Incentive (ARI) to assist in the outreach and delivery of program solutions while sharing the administrative burden in managing a larger number of smaller projects
- Actively participated in OPA Program Work Groups to address operational issues and program enhancements

2.2.1 Equipment Replacement Incentive Initiative ("ERII")

Objectives: To offer incentives to business customers to encourage investment in more energy efficient equipment including lighting, space cooling, ventilation, controls and various other measures.

Description: Incentives are offered for projects where equipment and systems will be replaced with more efficient alternatives. Typical target segments for this initiative include commercial, retail, hospitality and entertainment, municipal, academic, health care, other institutional and multi-residential facilities. Applications can be submitted using one of three possible incentive streams (i.e. prescriptive, engineered, and custom).

Delivery: THESL developed a comprehensive front, middle and back office system to support this initiative. Technical energy consultants were hired to target all market sectors promoting ERII and assisting customers to identify energy savings opportunities and submit applications. THESL also contracted with the City of Toronto Better Buildings Partnership as its channel partner in the municipal, academic, social, and health care sectors to leverage long-standing relationships in those markets.

Participation: 1,168 completed projects

Spending: $11,158,089

Results & Evaluation: Net Peak Demand Savings =15,972 kW

Net Energy Savings =80,294,445 kWh

Additional Comments:

i) iCon stability improved in 2012 but progress towards new functional enhancements to improve back office application processing was limited. Mitigation –THESL continues to work with the OPA Program Work Groups to increase priority of revisions; ii) The "Change Management" process was improved with the adoption of the Expedited Change Management process to accelerate "straightforward" changes. THESL and other LDCs continue to collaborate with the OPA to improve the Change Management process. iii) Although the "Head Office" model imposes a heavy administrative burden on to

the lead LDC without any offsetting benefit or advantage. Mitigation – Worked closely through the OPA Program Work Groups and Change Management to improve the effectiveness of the Head Office model. (iv) Project sizes are smaller while the number of applications has risen relative to prior years and earlier generation programs. This creates a more challenging sales and back office processing environment. Mitigation – Promoted THESL's Applicant Representative Initiative to encourage supply chain engagement in sales cycle and improved efficiency of back office processes to handle greater throughput. (v) ERII approval processes are not well-aligned with replacement sales cycle, which discourage participation in the Rooftop unit replacement program. Mitigation – Working with the OPA Program Work Groups to redesign an accelerated participation strategy for contractors and participants.

2.2.2 Direct Install Lighting

Objectives: Offer up to $1,500 for the installation of eligible lighting and water heating measures in commercial, institutional, agricultural and multi-family buildings.

Description: The Initiative offers turn-key lighting and electric hot water insulation measures with a value of up to $1,500 at no cost to qualifying small businesses. In addition, standard prescriptive incentives are available for eligible equipment beyond the $1,500 limit.

Delivery: Participants enrol directly with a THESL contracted representative who manages the audit, installations and incentive administration. This initiative is reaching market saturation as it has been in market, albeit under a different name, for four years and was well-received by the market. Because most eligible participants have already been contacted, or have participated in the initiative, the numbers are expected to decline. THESL has been working with the OPA and other LDCs to refine the legal definition of eligible participant to include those inadvertently excluded, and to increase the incentive cap to attract more participants. These changes are in progress and were not available in time to influence 2012 participation rates.

Participation: 3,498 completed projects

Spending: $4,234,427

Results & Evaluation: Net Peak Demand Savings =2,502 kW

Net Energy Savings =9,383,020 kWh

Note: the per unit kW savings have dropped over 40% on this initiative, from 1.24 kW in 2011 to 0.72 kW in 2012

Additional Comments:

i) This initiative was a continuation of Power Savings Blitz initiative ("PSB") offered by THESL from 2008 to 2010. Early adopters have been serviced so the remaining eligible participants require greater effort, which led to a corresponding reduction in new participants. Mitigation – Working with the OPA and Commercial and Institutional ("C&I") Work Group to increase incentive levels to $1,500 from the previous $1,000 limit and develop new markets for the initiative by refining the participant eligibility criteria. ii) There has been a 40% drop in unit savings for this initiative that impacts THESL;s 2012 results by 1.8MW. Mitigation – Discuss with the OPA the methodology for the savings duration and confirm if valid.

2.2.3 Existing Building Commissioning Incentive

Objective: To offer incentives for optimizing (but not for 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 phases of commissioning 1) scoping study; 2) investigation and analysis; 3) implementation; and 4) hand off/completion.

Delivery: LDC-delivered. THESL launched the initiative through THESL front-line technical energy consultants to large commercial and institutional segments, however customer response and participation were limited. THESL received three applications in 2011, and six applications in 2012. As of December 2012, one application, with 0.5 MW of savings, has completed all four phases with OPA approval pending for the remaining three.

Participation: N/A

Spending: $238,943

Results & Evaluation: Net Peak Demand Savings =0 kW (Projects Pending)

Net Energy Savings =0 kWh

Additional Comments:

i) Customer feedback indicates that the initiative is administratively complex and the rules are inflexible relative to the potential incentive available. These factors have limited potential participation. Mitigation – Issues are being reviewed by the C&I Work Group and proposals for increasing program effectiveness were being developed at year end.

2.2.4 New Construction and Major Renovation Incentive

Objectives: To encourage builders of commercial, institutional, and industrial buildings (including multi-family buildings and agricultural facilities) to design and build new buildings with more energy-efficient equipment and systems for lighting, space cooling, ventilation and other measures.

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

Delivery: LDCs deliver to customers and design decision makers. This initiative was a continuation of the High Performance New Construction initiative previously delivered by the City of Toronto under contract with the OPA, which ended in December 2010. THESL re-contracted with the City's Energy Efficiency Office/Better Buildings Partnership as its delivery channel; however, due to the market hiatus, results are not expected until 2013 and beyond considering the length of time required to apply, build and commission new buildings.

Participation: 11 buildings

Spending: $365,835

Results & Evaluation: Net Peak Demand Savings =151 kW

Net Energy Savings =269,821 kWh

Additional Comments:

(i) Development and construction cycles are very long for these types of buildings (4 to 5 years) and do not align with CDM funding periods causing developers to be reluctant to enrol and invest in CDM. The length of time required to complete a project also requires a long term project management approach, which is much more involved than most other CDM Programs, and highlights the need for program continuity. Mitigation – In September 2013, the OPA announced that the program will continue through to the end of 2015.(ii) the Program now recognizes the 2012 Ontario Building Code as base efficiency reference model for purposes of performance setting to a building. However, some modelling software recommended by the OPA does not contain Canadian reference models. Mitigation – The Work Group has recommended that the OPA revise the list of allowable modelling software.

2.2.5 Energy Audit

Objectives: Offer incentives to owners and lessees of commercial, institutional, multi-family buildings and agricultural facilities to undertake energy audit assessments to identify all possible energy saving opportunities and help reduce demand and consumption.

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

Delivery: LDC-delivered. The initiative was fully marketed through THESL front-line technical energy consultants. The primary focus was on large commercial and multi-residential customers. In 2011, 116 applications were received of which 45 were completed. In 2012 the number of applications increased considerably, to 208 applications with 140 completing. By the end of 2012, 90 of the 185 completed applications have produced ERII applications.

Participation: 76 audits

Spending: $904,526

Results & Evaluation: Net Peak Demand Savings =393 kW

Net Energy Savings =1,913,395 kWh

Additional Comments: The joint work between THESL and the OPA resulted in the introduction of the detailed analysis of non-capital intensive measures audits. These audits were offered to incorporate one of the key features of the HSBP program and allow for smaller technology specific audits. THESL is fully exploiting this initiative and it is working well to uncover opportunities.

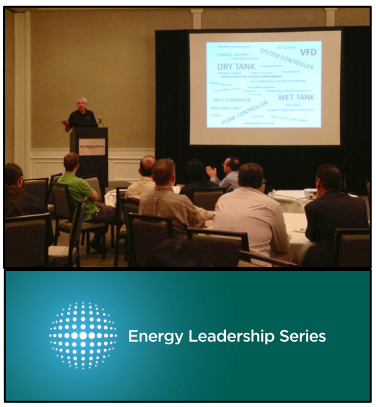
2.3 Industrial Program – Industrial Market

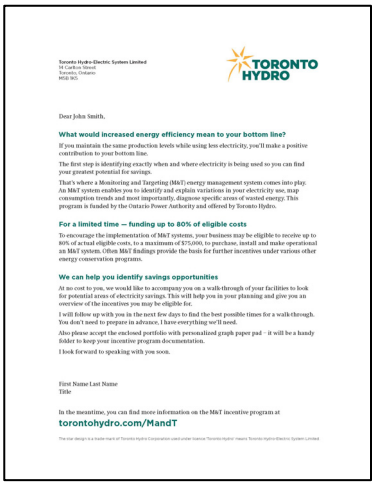
As referenced in THESL's CDM Strategy, the industrial sector represents approximately 13% of the total electricity consumption in Toronto. The key types of manufacturing in this sector (plastics/rubber, chemical, and food) together comprise 47% of the peak demand and 51% of the electricity consumption in the industrial sector. However, economic pressure on industrial customers has resulted in the total industrial load declining by almost 13% since 2008.

The Industrial Program has a number of initiatives that are designed specifically to meet the requirements of this sector including stringent investment criteria (i.e. short payback periods), lack of resources and limited understanding of energy use within industrial facilities. After extensive efforts by the OPA and participating LDCs, the program schedules were released and signed May 31, 2011. Of the initiatives offered, Demand Response 3 was in market prior to the launch of the schedules, as this program existed prior to the OPA Programs and is delivered by the OPA via existing contracts with load aggregators.

The initiatives in this sector are:

- Process & System Upgrades Initiative ("PSUI")
- Monitoring and Targeting ("M&T")
- Energy Manager
- Demand Response 1
- Demand Response 3




Toronto Hydro-Electric System Limited
14 Carlton Street
Toronto, Ontario
M5B 1K5

TORONTO HYDRO

Dear John Smith,

What would increased energy efficiency mean to your bottom line?

If you maintain the same production levels while using less electricity, you'll make a positive contribution to your bottom line.

The first step is identifying exactly when and where electricity is being used so you can find your greatest potential for savings.

That's where a Monitoring and Targeting (M&T) energy management system comes into play. An M&T system enables you to identify and explain variations in your electricity use, map consumption trends and most importantly, diagnose specific areas of wasted energy. This program is funded by the Ontario Power Authority and offered by Toronto Hydro.

For a limited time – funding up to 80% of eligible costs

To encourage the implementation of M&T systems, your business may be eligible to receive up to 80% of actual eligible costs, to a maximum of $75,000, to purchase, install and make operational an M&T system. Often M&T findings provide the basis for further incentives under various other energy conservation programs.

We can help you identify savings opportunities

At no cost to you, we would like to accompany you on a walk-through of your facilities to look for potential areas of electricity savings. This will help you in your planning and give you an overview of the incentives you may be eligible for.

I will follow up with you in the next few days to find the best possible times for a walk-through. You don't need to prepare in advance, I have everything we'll need.

Also please accept the enclosed portfolio with personalized graph paper pad – it will be a handy folder to keep your incentive program documentation.

I look forward to speaking with you soon.

First Name Last Name
Title

In the meantime, you can find more information on the M&T incentive program at
torontohydro.com/MandT

The trial design is a trade-mark of Toronto Hydro Corporation used under license Toronto Hydro Hydro Electric System Limited

To-Market Strategy

Targeted marketing was performed via email and letters to the industrial target base to address specific program information and to highlight the important capability building initiatives (Embedded Energy Managers) and key enabling initiatives like M&T. The main focus of THESL's efforts in this sector was on a key account strategy, which involves dealing directly with the industrial customer base. This strategy is appropriate for this sector because of the limited size of the customer base. To augment these strategies several targeted events were held to promote specific technologies (compressed air & DR 3).

Industrial Program Highlights and Observations:

- Capability funding for Embedded Energy Managers has met with strong customer interest
- LDCs hired Roving Energy Managers and Key Account Managers to bolster their forces that serve this sector
- All industrial energy efficiency work is being completed under the ERII program, due to the complexity of the PSUI program
- Uncertainty around the future of Demand Response-3 being renewed resulted in reduced activity and lower results

Many of the issues raised in the first year of the program remain unresolved including customer non-acceptance of the legal agreements, with feedback indicating that they are not acceptable because of onerous long term commitments for reporting and project performance. Customer feedback has also indicated that many participants would prefer a lower level of incentives to go through the ERII initiative, as an offset versus the longer term requirements. THESL, as part of the Industrial Work Group, has been working with the OPA to have the requirements streamlined for industrial projects and allow the customer flexibility to apply under the ERII initiative for specific projects.

2.3.1 Process & System Upgrades Initiative ("PSUI")

Objectives: Offer capital and enabling incentives to assist with CDM investment in large complex and capital intensive projects, as well as increase the capability of customers to implement energy management and system optimization projects.

Description: PSUI is an energy management initiative that includes a preliminary engineering study ("PES"), a detailed engineering study ("DES"), and a project incentive. The incentives are available to large customers with 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.

Delivery: LDC delivered with key account management support in some cases. This initiative was fully marketed through THESL front-line technical energy consultants.

Participation: N/A

Spending: $898,897

Results & Evaluation: Net Peak Demand Savings =0 kW

Net Energy Savings =0 kWh

Additional Comments: THESL has no results from the PSUI initiative due to the issues noted below and not resolved in 2012. For this program to have any success the LDC requested changes need to be expedited.

i) Customers generally cannot commit to contracts that require performance for up to 10 years preventing the initiative from being effective. Mitigation – THESL is working with the Industrial Work Group and OPA to simplify participant agreements and create customer choice for programs. This work was ongoing throughout 2012 but not completed to date; ii) The initiative targets large customers that are undertaking large capital projects. There is typically a lengthy internal approval process and then a lengthy project development cycle. As such, results from PSUI did not appear in 2012. Mitigation – THESL has been marketing and using available resources through the initiative to raise awareness amongst participants so they can incorporate this into the project planning process. However, with the program end date fast approaching, THESL does not have sufficient time to utilize this initiative and achieve meaningful results. iii) Cogeneration projects were placed on hold for the entire 2012 period, considerably impacting both customers and a significant source of demand reduction. Mitigation – Ongoing efforts involving the OPA and the Ministry of Energy to have cogeneration projects re-instated under the program. These projects have been reinstated as of the summer of 2013. However, this may be too late given the project execution cycles.

2.3.2 Monitoring and Targeting ("M&T")

Objectives: Offers access to funding for the installation of M&T systems in order to deliver a minimum savings target at the end of 24 months to be sustained for the term of the M&T agreement.

Description: Initially targeted at industrial processes and large commercial/institutional chilled water systems (>15 GWh), this initiative offers customers funding for the installation of M&T systems to help understand how their energy consumption might be reduced. During the course of 2012, changes were made through the OPA Change Management process to remove the 15GWh size limit. A facility

energy manager, who regularly oversees energy usage, will be able to use historical energy consumption performance to analyze and set targets.

Delivery: LDC delivered with key account management support, in some cases.

Participation: N/A

Spending: $92,284

Results & Evaluation: Net Peak Demand Savings =0 kW

Net Energy Savings =0 kWh

Additional Comments:

The initiative has not been successful due to the process of changing rules and the long term contractual commitments required.

2.3.3 Energy Manager

Objectives: To provide customers and LDCs the opportunity to access funding for the engagement of energy managers in order to help deliver a minimum annual savings target.

Description: Targeted at large industrial or commercial customers (typically > 5 MW in aggregate), this initiative provides customers the opportunity to access funding to engage an on-site, full time embedded energy manager ("EEM"), or an off-site roving energy manager ("REM") who is engaged by the LDC. The role of the EEM or REM 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 EEM's salary plus 80% of the EEM actual reasonably incurred expenses. Each EEM/REM has an annual target of 300 kW of demand reduction and a related consumption target (0.3MW x Load Factor x 8760) from one or more facilities.

Delivery: LDC delivered with key account management support, in some cases. THESL was the first LDC to apply for REM and EEM funding and worked with the OPA on the allocation methodology. THESL hired four of the allotted six REMs in 2012 and customers received approval for thirteen EEM and hired ten.

Participation: 19 energy managers were approved

Spending: $452,726

Results & Evaluation: Net Peak Demand Savings =785 kW

Net Energy Savings =5,639,289 kWh

Additional Comments: This program has been well received and is laying the foundation for sustained energy management in the industrial and commercial sectors. Resource training has been done by both the LDC and OPA to address skill gaps. i) Contractual issues around indemnity and environmental attributes have prevented some governmental/institutional clients from participating in the EEM program, Mitigation: Involving the OPA in discussions with clients and work to modify Participant Agreements to accommodate the limitations of governmental agencies. ii) The requirement for non-incented savings is proving problematic as the provision of the technical resource is ensuring that the client projects are processed through the incentive streams. Mitigation: Discuss at the Industrial Work Group potential changes to the Energy Manager obligations.

2.3.4 Demand Response ("DR") 1

Objectives: To achieve maximum costs effective peak demand reduction and energy savings, increase conservation awareness and contribute to the creation of a culture of conservation in Ontario

Description: DR 1 is a demand response initiative for commercial and industrial customers to help reduce the amount of power being used during certain periods of the year. This initiative has a schedule of 1,600 hours per year where activations of up to 100 hours may occur with no obligation on customers to participate. This initiative makes payments for actual load reduction only.

Delivery: The initiative is managed by third-party administrators and intended to be a "lead-in" to DR 3, which will allow potential DR 3 participants the opportunity to participate in demand response without the contractual obligations required under DR 3.

Participation: N/A

Spending: $52,579

Results & Evaluation: Net Peak Demand Savings =0 kW

Net Energy Savings =0 kWh

Additional Comments:

Aggregators have been unwilling to promote this initiative as it interferes with the more lucrative DR 3 initiative and customer interest has been marginal as the incentive levels are too low. This resulted in the program being cancelled in December 2012.

2.3.5 Demand Response ("DR") 3

Objectives: To build capacity and provide payment to DR 3 participants to compensate them for making electricity demand capacity available during a demand response event.

Description: The DR 3 initiative is a contractual resource that is an economic alternative to the procurement of new generation capacity. DR 3 comes with specific contractual obligations requiring participants to reduce their use of electricity relative to a baseline when called upon to do so by the OPA. This initiative makes payments for participants to be on standby and payments for the actual demand reduction provided during a demand response event. Participants are required to be on standby for approximately 1,600 hours per calendar year for possible dispatch of up to 100 hours within that year.

Major changes to the rules in 2012 included:

- Removing the option of a 200 hour annual availability
- Deletion of premium pricing zones
- Modification of baseline period rules

All of the changes will negatively impact customer participation rates.

Delivery: DR 3 is delivered by DR aggregators, under contract to the OPA. The OPA administers contracts with all DRPs and direct participants that provide in excess of 5 MW of demand response capacity. The OPA provides administration including settlement, EM&V, and dispatch. LDCs are responsible

for outreach and marketing efforts. LDC's role is to promote this initiative to customers and work with Aggregators.

Participation: 28 facilities for commercial (including 26 facilities in 2011)
20 facilities for industrial (including 17 facilities in 2011)

Spending: $217,364

Results & Evaluation: Net Peak Demand Savings for Commercial =4,413 kW (1,915 kW in 2011)

Net Energy Savings for Commercial =64,142 kWh

Net Peak Demand Savings for Industrial =10,274 kW (10,024 kW in 2011)

Net Energy Savings for Industrial =247,610 kWh

Additional Comments:

i) Recruitment of new participants was largely stagnant throughout 2012 as there was uncertainty regarding the addition/renewal of new schedules with aggregators. ii) The inclusion of significant demand response targets within the program portfolio is problematic for LDCs when they have no ability to influence participation, particularly when, LDCs do not have customer data due to contractual terms between the OPA and the aggregators. This has limited THESL's ability to effectively market to prospective participants. Mitigation – Continue to attempt to resolve this issue with the OPA and have them provide information on DR-3 loads within THESL's service territory. Actively work with aggregators on developing additional participants. iii) Allocation of DR 3 results to an individual LDC is dependent on strategies employed by aggregators in balancing load and risk. This has the potential to penalize LDCs as only a fraction of the actual DR 3 capacity within their territory is allocated to the LDC target. Mitigation – Discuss with the OPA a solution to allocate DR 3 capacity based on available capacity in a service territory.

2.4 Home Assistance Program – Income Qualified Residential Market

Objectives: 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 manage electricity costs. All eligible customers receive a "Basic and Extended Measures Audit," to determine eligible conservation measures, while customers with electric heating also receive a Weatherization Audit and are eligible for additional insulation and draft proofing. All participants receive information on energy conservation.

Delivery: LDC-led outreach and marketing with a delivery agent under contract to provide audit, direct install and customer care services

Participation: 626 homes

Spending: $812,168

Results & Evaluation: Net Peak Demand Savings =98 kW

Net Energy Savings =790,242 kWh

Additional Comments:

i) There are challenges reaching income eligible customers because they do not self identify, privacy regulations restrict referrals and information sharing and energy conservation is a lower priority for front line case workers and social

service agencies. Mitigation - Direct mail strategy to leverage mailing lists for other low-income programs. Seniors strategy focussed on workshops for seniors, training for seniors organizations and HAP case study / personal interest articles in seniors publications. Neighbourhood strategy focussed on training for social service agency staff and leveraging existing resident engagement programs.

ii) There were errors and ambiguities in the definition of social housing, which does not adequately reflect the variety of low-income housing in larger urban areas, and the landlord-tenant relationship in social housing. Mitigation - Change Management process was initiated through the Work Group July 2012 to correct definitions, eligibility criteria, applications and consent forms to streamline social housing participation.

2.5 The Adjustments to the 2011 Verified Results

True-up analysis and reporting for the previous year's verified results (i.e. 2011) is shown for the first time in this report and will continue each year until the end of the 2011-2014 reporting period. This true-up analysis ensures that energy and demand savings are properly categorized in the year that they were achieved and that any omissions and/or errors identified after the release of the 2011 Final Results Report are properly accounted for and reported to the LDCs. The true-up process was developed by the OPA in collaboration with the LDC Reporting Work Group. The table below provides a summary of the adjustments to THESL's 2011 Final Results

Table 2 Adjustments to THESL's 2011 Verified Results due to Errors or Omissions

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)				Program-to-Date Verified Progress to Target (excludes DR)	
		2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
Consumer Program															
HVAC Incentives	Equipment	-3,165				-863				-1,573,248				-863	-6,292,990
Conservation Instant Coupon Booklet	Items	1,051				2				35,278				2	141,113
Bi-Annual Retailer Event	Items	10,471				14				279,429				14	1,117,715
Consumer Program Total						**-847**				**-1,258,541**				**-847**	**-5,034,163**
Business Program															
Retrofit	Projects	54				905				4,543,720				904	18,170,841
Direct Install Lighting	Projects	25				32				78,682				26	295,010
Energy Audit	Audits	17				88				427,996				88	1,711,985
Business Program Total						**1,025**				**5,050,398**				**1,018**	**20,177,836**
Adjustments to Previous Year's Verified Results						**178**				**3,791,858**				**170**	**15,143,673**

3 Summary of Program Results

The following sections provide the detailed OPA Program results, both annually and cumulatively, at the initiative level. The evaluation findings for the OPA Programs are provided in Appendix A.

3.1 Program Results

Table 3 below summarizes the annual results since 2011, including participation, net peak demand savings and net energy savings. It has been extracted from the 2012 final results report released by the OPA on August 30, 2013. As per the OPA reporting standards, activity and savings for Demand Response resources (i.e. ***peaksaver* PLUS®** and DR 3) for each year represent the savings from all active facilities or devices contracted since January 1, 2011.

With regard to the savings for IHDs, the OPA provided the following explanation in their final 2012 report: "*Due to the limited timeframe of data, which didn't include the summer months, 2012 IHD results have been deemed inconclusive. The IHD line item on the 2012 annual report will be left blank. Once a full year of data is available (2013 evaluation), and the savings are quantified, 2012 results will be updated to reflect the quantified savings."*

Table 3: THESL Initiative and Program Level Savings by Year (OPA Scenario 1 – Assuming One Year Persistency)

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)				Program-to-Date Verified Progress to Target (excludes DR)	
		2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
														2014	2014
Consumer Program															
Appliance Retirement	Appliances	6,088	2,802			349	161			2,343,820	1,091,609			478	12,621,331
Appliance Exchange	Appliances	549	580			52	83			57,879	143,607			95	627,107
HVAC Incentives	Equipment	19,907	13,047			5,674	2,821			10,493,166	4,781,806			8,495	56,318,083
Conservation Instant Coupon Booklet	Items	65,268	3,953			150	29			2,439,881	178,941			179	10,296,345
Bi-Annual Retailer Event	Items	111,384	135,773			215	189			3,760,986	3,427,499			405	25,326,440
Retailer Co-op	Items	13	0			0	0			230	0			0	919
Residential Demand Response (switch/pstat)	Devices	1,328	43,149			743	22,940			1,924	168,943			0	170,868
Residential Demand Response (IHD)	Devices	0	23,824			0				0					
Residential New Construction	Homes	0	0			0	0			0	0			0	0
Consumer Program Total						**7,184**	**26,223**			**19,097,886**	**9,792,405**			**9,653**	**105,361,093**
Business Program															
Retrofit	Projects	582	1,168			7,527	15,972			43,007,032	80,294,445			23,110	410,757,277
Direct Install Lighting	Projects	3,946	3,498			4,903	2,502			12,683,558	9,383,020			5,312	71,240,949
Building Commissioning	Buildings	0	0			0	0			0	0			0	0
New Construction	Buildings	0	11			0	151			0	269,821			151	809,462
Energy Audit	Audits	60	76			0	393			0	1,913,395			393	5,740,186
Small Commercial Demand Response	Devices	36	132			23	84			84	478			0	562
Small Commercial Demand Response (IHD)	Devices	0	0			0				0				0	0
Demand Response 3	Facilities	26	28			1,915	4,413			75,010	64,142			0	139,152
Business Program Total						**14,369**	**23,516**			**55,765,683**	**91,925,302**			**28,967**	**488,687,589**
Industrial Program															
Process & System Upgrades	Projects	0	0			0	0			0	0			0	0
Monitoring & Targeting	Projects	0	0			0	0			0	0			0	0
Energy Manager	Projects	0	19			0	785			0	5,639,289			785	16,917,867
Retrofit	Projects	32				522				3,017,532				522	12,070,127
Demand Response 3	Facilities	17	20			10,024	10,274			588,385	247,610			0	835,996
Industrial Program Total						**10,545**	**11,059**			**3,605,917**	**5,886,899**			**1,306**	**29,823,990**
Home Assistance Program															
Home Assistance Program	Homes	0	626			0	98			0	790,242			98	2,370,726
Home Assistance Program Total						**0**	**98**			**0**	**790,242**			**98**	**2,370,726**
Pre-2011 Programs completed in 2011															
Electricity Retrofit Incentive Program	Projects	0	0			0	0			0	0			0	0
High Performance New Construction	Projects	0	0			16	14			84,494	14,011			31	380,009
Toronto Comprehensive	Projects	577	0			15,805	0			86,964,886	0			15,805	347,859,545
Multifamily Energy Efficiency Rebates	Projects	107	0			1,906	0			7,400,835	0			1,906	29,603,338
LDC Custom Programs	Projects	0	0			0	0			0	0			0	0
Pre-2011 Programs completed in 2011 Total						**17,727**	**14**			**94,450,215**	**14,011**			**17,741**	**377,842,892**
Other															
Program Enabled Savings	Projects	0	1			0	0			0	0			0	0
Time-of-Use Savings	Homes														
Other Total							**0**				**0**			**0**	**0**
Adjustments to Previous Year's Verified Results							**178**				**3,791,694**			**170**	**15,143,673**
Energy Efficiency Total						**37,120**	**23,199**			**172,254,298**	**107,927,685**			**57,765**	**1,002,939,713**
Demand Response Total (Scenario 1)						**12,705**	**37,711**			**665,403**	**481,174**			**0**	**1,146,577**
OPA-Contracted LDC Portfolio Total (inc. Adjustments)						**49,825**	**61,088**			**172,919,701**	**112,200,552**			**57,935**	**1,019,229,963**

3.2 Realization Rate and Net-to-Gross Ratio

In the final results report for 2012, the OPA reported realization rates and net-to-gross ("NTG") ratios for both peak demand savings and energy savings for the 2012 initiatives. For comparison purposes, the realization rates and NTGs from the 2011 final report are provided in the table below. The cells highlighted in yellow indicate changes of greater than 10% compared to 2011. These changes had a substantial negative impact on the results for HVAC and Direct Install, increasing the risk for THESL to fall short of its demand savings target.

For example, as shown in the table, the demand savings realization rate for Direct Install Lighting dropped from 1.08 in 2011 to 0.69 in 2012. Compared to the 2011 realization rate this represents a reduction of 1,414 kW in demand savings in 2012.

Table 4: Realization Rate & NTG

Initiative	Peak Demand Savings				Energy Savings			
	Realization Rate		Net-to-Gross Ratio		Realization Rate		Net-to-Gross Ratio	
	2011	2012	2011	2012	2011	2012	2011	2012
Consumer Program								
Appliance Retirement	1.00	1.00	0.49	0.46	1.00	1.00	0.50	0.47
Appliance Exchange	1.00	1.00	0.52	0.52	1.00	1.00	0.52	0.52
HVAC Incentives	1.00	1.00	0.60	0.50	1.00	1.00	0.60	0.49
Conservation Instant Coupon Booklet	1.00	1.00	1.14	1.00	1.00	1.00	1.11	1.05
Bi-Annual Retailer Event	1.00	1.00	1.13	0.91	1.00	1.00	1.10	0.92
Retailer Co-op	1.00	n/a	0.68	n/a	1.00	n/a	0.68	n/a
Business Program								
Retrofit	0.98	0.92	0.69	0.72	1.02	0.98	0.72	0.74
Direct Install Lighting	1.08	0.69	0.93	0.94	0.90	0.85	0.93	0.94
Building Commissioning	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
New Construction	n/a	1.00	n/a	0.49	n/a	1.00	n/a	0.49
Demand Response 3	0.76	n/a	n/a	n/a	1.00	n/a	n/a	n/a
Industrial Program								
Energy Manager	n/a	1.13	n/a	0.90	n/a	1.13	n/a	0.90
Retrofit	0.91		0.73		1.17		0.76	
Demand Response 3	0.84	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Home Assistance Program								
Home Assistance Program	n/a	0.41	n/a	1.00	n/a	1.00	n/a	1.00

3.3 Program Spending

Table 5 and Table 6 summarize the total spending by initiative THESL has incurred in 2012 and cumulatively since 2011. It is detailed by the Program Administration Budget ("PAB"), Participant Based Funding ("PBF"), Participant Incentive ("PI") and Capability Building Funding (CBF).

Table 5: Summary of Spending in 2012 for OPA Programs

CDM Program Initiatives	PAB	PBF	PI	CBF	Total
Consumer Program	$ 3,296,417	$ 3,475,501	$ -	$ -	**$ 6,771,919**
Appliance Retirement	$ 516,590				**$ 516,590**
Appliance Exchange	$ 68,119				**$ 68,119**
HVAC Incentive	$ 530,695				**$ 530,695**
Conservation Instant Coupon Booklet					**$ -**
Bi-Annual Retailer Event	$ 618,238				**$ 618,238**
Residential & Small Commercial Demand Response	$ 1,276,981	$ 3,475,501			**$ 4,752,482**
Residential New Construction	$ 285,796				**$ 285,796**
Business Program	$ 4,459,082	$ 1,009,949	$ 11,432,790	$ -	**$ 16,901,820**
Equipment Replacement Incentive	$ 3,228,846		$ 7,929,243		**$ 11,158,089**
Direct Install Lighting	$ 267,971	$ 1,009,949	$ 2,956,507		**$ 4,234,427**
Existing Building Commissioning Incentive	$ 236,443		$ 2,500		**$ 238,943**
New Construction & Major Renovation Incentive	$ 365,835				**$ 365,835**
Energy Audit	$ 359,987		$ 544,539		**$ 904,526**
Industrial Program	$ 923,368	$ -	$ -	$ 790,482	**$ 1,713,850**
Process & System Upgrades	$ 506,854			$ 392,043	**$ 898,897**
Monitoring & Targeting	$ 92,284				**$ 92,284**
Energy Manager	$ 54,287			$ 398,439	**$ 452,726**
DR 1	$ 52,579				**$ 52,579**
DR 3	$ 217,364				**$ 217,364**
Home Assistance Program	$ 484,565		$ 327,603		**$ 812,168**
Total Spending	**$ 9,163,432**	**$ 4,485,450**	**$ 11,760,392**	**$ 790,482**	**$ 26,199,756**

Table 6: Summary of Cumulative Spending Since 2011 for OPA Programs

CDM Program Initiatives	PAB	PBF	PI	CBF	Total
Consumer Program	$ 6,515,492	$3,475,501	$ 22,900	$ -	**$10,013,894**
Appliance Retirement	$ 1,288,960	$ -	$ -	$ -	**$ 1,288,960**
Appliance Exchange	$ 170,329	$ -	$ -	$ -	**$ 170,329**
HVAC Incentive	$ 1,380,225	$ -	$ -	$ -	**$ 1,380,225**
Conservation Instant Coupon Booklet	$ 448,855	$ -	$ -	$ -	**$ 448,855**
Bi-Annual Retailer Event	$ 684,531	$ -	$ -	$ -	**$ 684,531**
Residential & Small Commercial Demand Response	$ 1,858,032	$3,475,501	$ 22,900	$ -	**$ 5,356,433**
Residential New Construction	$ 526,277	$ -	$ -	$ -	**$ 526,277**
Midstream Electronics	$ 47,131	$ -	$ -	$ -	**$ 47,131**
Midstream Pool Equipment	$ 47,080	$ -	$ -	$ -	**$ 47,080**
Home Energy Assessment Tool	$ 64,072	$ -	$ -	$ -	**$ 64,072**
Business Program	$ 8,212,305	$1,921,349	$15,116,968	$ -	**$25,250,622**
Equipment Replacement Incentive	$ 4,816,685	$ -	$ 8,306,527	$ -	**$13,123,211**
Direct Install Lighting	$ 908,021	$1,921,349	$ 6,263,402	$ -	**$ 9,092,772**
Existing Building Commissioning Incentive	$ 664,512	$ -	$ 2,500	$ -	**$ 667,012**
New Construction & Major Renovation Incentive	$ 817,427	$ -	$ -	$ -	**$ 817,427**
Energy Audit	$ 864,126	$ -	$ 544,539	$ -	**$ 1,408,666**
Direct Service Space Cooling	$ 141,534	$ -	$ -	$ -	**$ 141,534**
Industrial Program	$ 1,493,503	$ -	$ -	$790,482	**$ 2,283,985**
Process & System Upgrades	$ 655,013	$ -	$ -	$392,043	**$ 1,047,056**
Monitoring & Targeting	$ 132,805	$ -	$ -	$ -	**$ 132,805**
Energy Manager	$ 69,077	$ -	$ -	$398,439	**$ 467,516**
DR 1	$ 178,288	$ -	$ -	$ -	**$ 178,288**
DR 3	$ 458,320	$ -	$ -	$ -	**$ 458,320**
Home Assistance Program	$ 569,313	$ -	$ 327,603	$ -	**$ 896,915**
Pre-2011 CDM Programs	$ -	$ -	$ 1,853,496	$ -	**$ 1,853,496**
Total Spending	**$16,790,613**	**$5,396,850**	**$17,320,966**	**$790,482**	**$40,298,911**

The above cumulative spending includes the expenditures associated with the planning activities for the initiatives not launched in 2011 (i.e. Midstream Electronics, Midstream Pool Equipment, Direct Service Space Cooling and Home Assistance) and excludes participant incentives for the Consumer Program (other than Residential DR), DR 1 and DR 3, which are paid directly by the OPA to participants.

Pre-2011 CDM Program spending is for participant incentives paid by the OPA in 2011. OPA manages and controls the complete financial reporting for the province-wide programs.

4 Combined CDM Reporting Elements

4.1 Progress Towards CDM Targets

The summary of THESL's progress towards meeting its CDM targets is provided in the tables below. The data comes from the 2012 final results released by the OPA on August 30, 2013.

Table 7: Net Peak Demand Savings at the End User Level (MW)

Implementation Period	Annual			
	2011	2012	2013	2014
2011 - Verified	49.8	37.1	36.7	35.2
2012 - Verified		61.1	23.1	22.7
2013				
2014				
Verified Net Annual Peak Demand Savings Persisting in 2014:				**57.9**
Toronto Hydro-Electric System Limited 2014 Annual CDM Capacity Target				**286.3**
Verified Portion of Peak Demand Savings Target Achieved in 2014(%):				**20.2%**

The decline in demand savings noted in 2013 and 2014 in Table 7 above is due to demand savings persistence with regard to ***peaksaver*** and DR 3 contracts (OPA Scenario 1). At this point in time, however, THESL assumes that the current aggregate of contracts will persist until 2014 (as per OPA Scenario 2). Based on this assumption, the contribution from the 2011 and 2012 results to the 2014 target would be 95.6 MW or 33.4%, as reported by the OPA.

Table 8: Net Energy Savings at the End-User Level (GWh)

Implementation Period	Annual				Cumulative
	2011	2012	2013	2014	2011-2014
2011 - Verified	172.9	172.1	171.0	166.9	683.0
2012 - Verified		112.2	110.8	109.4	336.3
2013					
2014					
Verified Net Cumulative Energy Savings 2011-2014:					**1019.2**
Toronto Hydro-Electric System Limited 2011-2014 Annual CDM Energy Target					**1,304.0**
Verified Portion of Cumulative Energy Target Achieved (%):					**78.2%**

With 2011 and 2012 results alone amounting to 78.2% of its energy savings target, THESL is well on its way to meet and exceed its energy savings target by the end of 2014.

4.2 THESL's CDM Outlook (2013-2014)

As indicated in Table 9 below, the savings projections from the CDM Strategy have been modified to incorporate THESL's experience with the OPA Programs after they have been in market for two years.

Table 9: 2013-2014 Outlook

OPA Programs	2011 Actual	2012 Actual	2013-2014 Forecast		Total	Target	Variance
			2013	2014			
Net Annual MW	49.8	48.4	60.1	65.7	224.0	286.0	-62.0
Net Cumulative GWh	682.97	336.26	225.1	201.8	1446.0	1304.0	142.0

***Forecasted totals presented in the table above assume a 2015 program extension, allowing for program continuity into 2015. This forecast scenario is referred to as the "Limited Extension" in the table below.**

Given the end date of December 31, 2014 for the current OPA Programs, THESL is projecting that it will achieve 224 MW of summer peak demand savings and 1,446 GWh of electricity savings. Based on this projection, THESL expects to be 62 MW below the demand target and 142 GWh above the electricity savings target.

The projected demand shortfall is primarily a result of the delay in implementation (and in some cases the absence) of a full suite of programs in 2011, the slow process to adopt program changes and to develop new programs, as well as the delay in the release of TOU results. Other contributors to the demand shortfall include market saturation in some programs, as well as the slowing economy.

The electricity consumption savings are favourable mainly due to the number of transition projects that were counted towards THESL's results and a number of energy-savings-only projects that are expected to be implemented.

The projection is based on the current condition as noted below in the Limited Extension scenario. THESL offers the following alternate scenarios as a means for THESL and other LDCs to meet their targets.

Table 10: 2013-2014 Alternate Outlook Scenarios

Scenario	Total Peak Demand Savings – MW				
	2011-2014	2015	Total	Target	Variance
1. Limited Extension	224.0	--	224.0	286	-62.0
2. Carry Over	224.0	15.4	239.4	286	-46.6
3. Target Alignment	224.0	62.0	286.0	286	--
Scenario	**Total Annual Electricity Savings – GWh**				
	2011-2014	2015	Total	Target	Variance
1. Limited Extension	1,446.0	--	1,446.0	1,304.0	142.0
2. Carry Over	1,446.0	64.1	1,510.1	1,304.0	206.1
3. Target Alignment	1,446.0	153.6	1,599.6	1,304.0	295.6

The outlook noted above includes three scenarios:

1. **Limited Extension (62 MW shortfall)** – this scenario is based on the current known conditions (i.e. key programs are extended into 2015, but targets remain as of end-2014 and any results carried over into 2015 are not counted towards the assigned targets).

2. **Carry Over (46.6 MW shortfall)** – this scenario includes credit for program applications that are applied for and started in 2014, but completed in 2015.

3. **Target Alignment (meets demand savings target)** – this scenario assumes that the target and funding are aligned to an end date of Dec 31, 2015. In addition, all existing program initiatives are fully extended to 2015 and new programs resulting from successful pilots (i.e. MURB DR and CEMLC) are deployed as Province-Wide initiatives in 2014 and 2015. It is also assumed that there is a seamless transition to a new CDM framework in 2015.

4.3 CDM Strategy Modifications

After market analysis of the 2012 results, the in-market experience gained from delivering the OPA Programs for the past two years, as well as previous experience in delivering CDM programs since 2005, THESL's CDM Strategy has been revised to account for the following:

1. Need for Additional Programs

The disallowance of a large portion of THESL's application for Board-Approved programs has resulted in a potential 67 MW shortfall in its forecast as contained in its original CDM Strategy. To make up for the potential shortfall, THESL has continued to work with the OPA and the LDC Work Groups through the Change Management process to implement the initiatives previously submitted to the OEB for approval, which included Hydronic System Balancing, Monitoring and Targeting (M&T), Multi-Unit Residential Building Demand Response ("MURB DR"), and Commercial Energy Management and Load Control (CEMLC). The first two were adopted by OPA as changes to the existing OPA-Contracted Province-Wide programs in 2012. The MURB DR and CEMLC are being carried out as pilots in 2013 and are expected to roll out as Province-Wide initiatives in 2014. The design and development details of both pilots have been shared with other large LDCs in the province. These new pilots are key strategic initiatives that will contribute towards achieving the assigned targets and THESL looks to the OPA to help expedite the migration of these pilots to standard province-wide programs by the end of 2013. THESL is also working on a number of other new pilots for residential customers, such as Behavioural DR, Enhanced Energy Information (add on to ***peaksaver*** **PLUS®**), and Enhanced Residential Ventilation Control (Retrosave).

2. TOU Savings

The implementation of TOU rates was accepted by the OEB as a Board-Approved program and savings resulting from the TOU will be counted towards LDC assigned targets. THESL will continue to work with the OPA and other LDCs in the evaluation of the results. The OPA has indicated that the savings results for TOU will not be available until 2015, which would be too late to mitigate the risk of under-achieving the demand target or to effect any changes in strategy or budget. As such, THESL recommends that the OPA reconsider its decision on the timing of delivery of results in the third quarter of 2015.

3. Delayed Start of Programs and Market Saturation

The delayed launch of some of the OPA Programs impacted the take-up rates and has delayed the accumulation of savings. As a result, THESL has:

- Launched a new channel delivery strategy, called Applicant Representative Initiative ("ARI"), in the business market in 2012. THESL has enhanced the original design to improve training to further support this successful initiative.
- Increased market and promotional initiatives and targeted high potential market sectors for demand response and retrofit initiatives.
- Continued to collaborate with the community, business and industry associations to engage as wide a cross section of the market as possible.
- Enhanced and improved the marketing of residential initiatives (including the Housing Assistance Program) and accepted a leading role in developing promotional campaigns for

THESL's residential customers (including communicating with Toronto's diverse cultures in multiple languages).

- Implemented a more active market strategy to directly influence customer participation in the OPA-delivered DR 3 initiative and provided greater transparency of market achievements and program results.
- Expanded the roll out of the Key Account Manager, Roving Energy Manager and Embedded Energy Manager initiative. THESL is leveraging this initiative (with other sales, technical and program activities) to coordinate and deliver a comprehensive and planned approach to conservation in the business and industrial sectors.
- Worked with other LDCs to share delivery tactics and best practices, co-promote programs and develop ideas for program development.

4. Changing Evaluation Measurement and Verification ("EM&V") Results

- Reviewed all findings and recommendations from the OPA's 2012 program evaluation reports and adopted them where relevant to THESL's territory including new Net-to-Gross ("NTG") ratios.
- Participated in EM&V Work Groups to fully understand any upcoming changes in the savings results.

4.4 Conclusion

Many improvements have already been implemented to overcome operational and structural issues that have previously limited program effectiveness across all market sectors. These changes are contributing to a more successful delivery of the OPA Program initiatives, particularly those in the business sector. A high level of collaboration between other LDCs and the OPA continues to contribute to improvements to existing initiatives, the development of new initiatives, as well as improvements in the Change Management process which is expected to provide benefits in future years.

However, despite these improvements to existing programs and the development of new programs, THESL anticipates a shortfall of the demand savings target in the current CDM framework This is primarily due to three factors: the delay (and in some cases the absence) of a full suite of program initiatives, the length of time it has taken to overcome the slow process in adopting program changes and developing new province-wide programs, and the OPA's current plan to delay the release of the TOU program results until 2015. As such, under current circumstances, THESL expects it will need a one year full extension ending in 2015 (see Table 10, Scenario 3 on pages 30-31) to achieve its 2014 OEB demand savings target.

THESL observes that the Ministry could address this issue through policy instruments, including a directive to the OEB to extend the current CDM target date aligned with the current funding date. THESL notes that, if such policies were to be adopted, it is imperative that they be developed as soon as possible. This would help satisfy the market need for continuity of conservation programs and continue building upon the accomplishments to date. THESL further recommends that any new policy allow for a seamless transition of the current programs into 2015.

Appendix A: Evaluation Findings for the OPA Programs

The following are the findings from OPA Program evaluations conducted in 2012 by the OPA's independent third party evaluators on OPA Program initiatives delivered in 2012. The information was provided by the OPA to all LDCs on August 30, 2013 and has been reproduced below.

Consumer Program

Bi-Annual Coupons

- 15% lower net savings due to a change in the net-to-gross factors (increased free-ridership, less participant behaviour spillover, and less non-participant like spillover).
- Majority of participation, energy & demand savings are from standard CFLs.
- 15% of net savings due to ~73,000 coupons for new LED measures.

Annual Coupons

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

HVAC

- Small decrease (10%) in per unit savings assumptions for furnace with ECM due to change in 2012 customer mix and furnace fan usage.
- Small increase (10%) in free-ridership related to the furnace with ECM measure.
- Participation remains relatively steady once 2011 true-up values are included.

Appliance Retirement

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

Appliance Exchange

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

peaksaver PLUS

- Province-wide per-unit *ex ante* estimates for a 1-in-10 August peak day were determined to be 0.50 kW for residential CACs and 0.64 kW for small commercial CACs.

- Evaluation to date has indicated savings from in-home displays (IHDs) are not statistically significant (in and around zero).
    - However, since 2012 evaluation did not include full year analysis (specifically the summer months), these results have been deemed inconclusive.
- The IHD offer had a positive influence on enrolment and re-enrolment; with between 20 to 35% of new enrolees said they wouldn't have enrolled without the IHD offer.

Residential New Construction

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

Business Program

Retrofit

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

Small Business Lighting

- Reported hours of usage continue to be inaccurate[(1)] - only 12% of site visits had verified annual hours of use within +/-10% of the assumed value.
- The saturation of eligible customers and preferred business types are resulting in participation from building types that may not fully operate during the summer peak period.
    - This trend contributes to lower realization rates for demand savings in 2012.
- Due to changing regulations in lighting measures, the assumed baseline technology will eventually be phased out. This regulation impacts the persistence of savings over the lifetime of lighting measures.

Existing Building Commissioning (EBC)

- There were no applications in 2012.
- Market feedback suggests that EBC's focus on chilled-water space-cooling systems may be too narrow, and participation could be expanded by incenting a wider range of measures.

New Construction

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

Audit Funding Program

- Through Audit Funding, 280 projects were completed in 2012 based on recommendations from the auditors, resulting in 1.4 MW and 7 GWh of Program Enabled Savings.
- Office buildings represented the largest portion of applicants for 2012.

Industrial Program

Process and System Upgrade Initiative

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

DR 3

- 2012 saw improvements in the performance of DR-3 participants resulting higher *ex ante* realization rates, particularly for the industrial participants.

Home Assistance Program

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

[(1)] Note: The information provided by OPA on Small Business Lighting that “Reported hours of usage continue to be inaccurate” is unclear and has not been explained to THESL’s satisfaction as well as the significant change in the combined discounted rate for Realization Rate and NTG (35% reduction) from 2011 to 2012.

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