



September 27, 2012

BY EMAIL/RESS

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, 27th Floor
Toronto, ON
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Dear Ms. Walli,

**RE: Whitby Hydro Electric Corporation
Conservation and Demand Management (CDM) – 2011 Annual Report**

As per Section 2.2.1 of the Conservation and Demand Management Code for Electricity Distributors, please find enclosed Whitby Hydro Electric Corporation's 2011 Annual Report. The report will be made available for public review at our office as well as on our company website.

An electronic version of this report has been submitted through the Board's RESS system and a copy emailed to the Board Secretary.

Respectfully submitted,

Original signed by

John Sanderson
President & C.E.O.

Whitby Hydro Electric Corporation

Conservation and Demand Management 2011 Annual Report

**Submitted to:
Ontario Energy Board**

Submitted on September 27, 2012

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Executive Summary

By focusing on high quality customer service, diverse conservation program offerings, and creative marketing strategies, Whitby Hydro Electric Corporation (Whitby Hydro) is committed to fostering a 'culture of Conservation' in its distribution territory.

This summary includes a concise, but complete, description of Whitby Hydro's 2011 CDM activity in relation to the OPA-contracted Province-wide CDM Programs.

Whitby Hydro's 2011 savings results:

OPA-Contracted Province-Wide CDM Programs FINAL 2011 Results			
Whitby Hydro Electric Corporation			
FINAL 2011 Progress to Targets	Incremental 2011	Scenario 1: % of Target Achieved	Scenario 2: % of Target Achieved
Net Annual Peak Demand Savings (MW)	1.0	6.4%	9.6%
Net Cumulative Energy Savings (GWh)	3.0	31.0%	31.1%
Scenario 1 = Assumes that demand response resources have a persistence of 1 year			
Scenario 2 = Assumes that demand response resources remain in Whitby Hydro territory until 2014			

Source: OPA Final 2011 Results Report

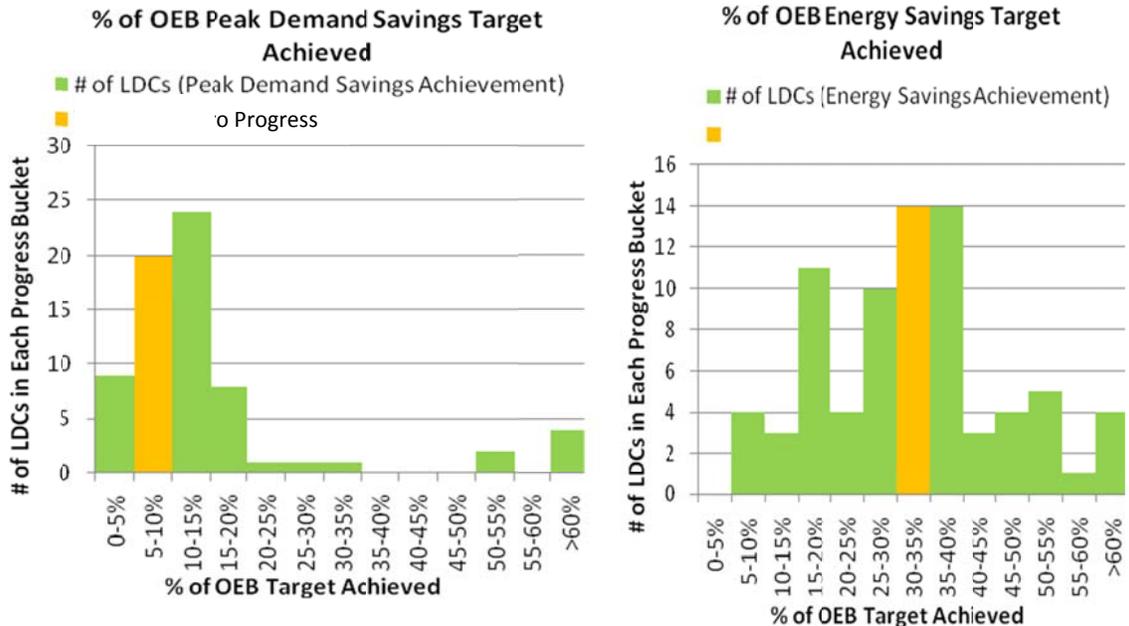
Net Annual Peak Demand Savings (MW) = 6.4% of Target Achieved

Net Cumulative Energy Savings (GWh) = 31.0% of Target Achieved

Whitby Hydro's 2011 targets as set out in its CDM Strategy are 2.31 MW of peak demand savings and 4,043 MWh of energy savings.

Comparison: Whitby Hydro Achievement vs. LDC Community Achievement

The following graphs assume that demand response resources will remain in Whitby Hydro's territory until 2014 (aligns with Scenario 2)

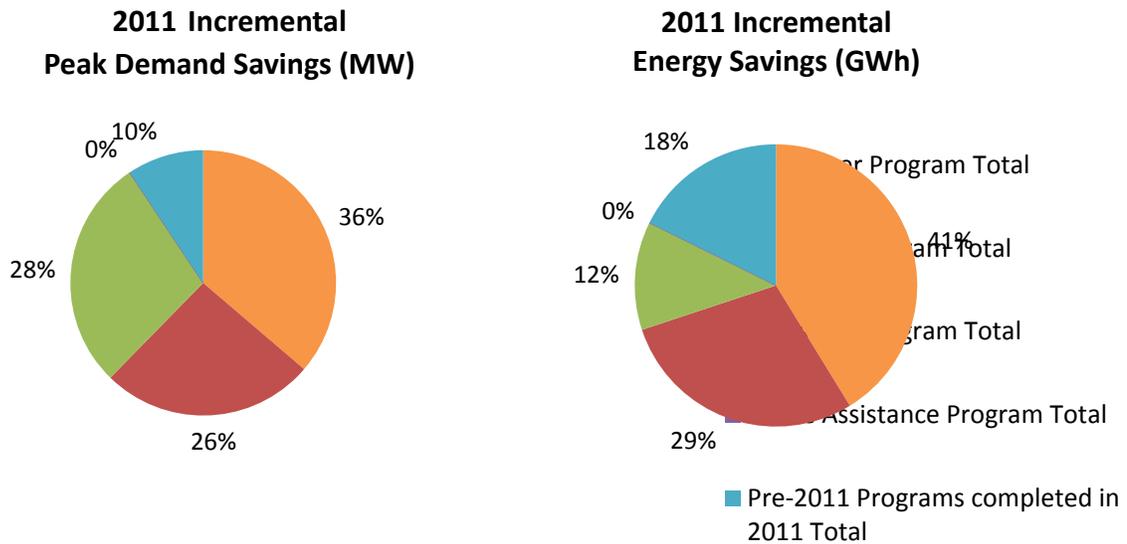


Whitby Hydro began its CDM initiative in 2005 upon receiving approval by the OEB for its third tranche CDM plan. The initial plan incorporated eleven different programs. The plan was revised in March 2007 to allow for a concentrated effort on the implementation and development of effective conservation programs.

In addition to the OPA and third tranche programs, Whitby Hydro introduced community based programs that promoted conservation throughout the community and allowed an opportunity for higher need customer segments to benefit from implementing conservation measures.

In planning the launch of the 2011-2014 suite of OPA-contracted CDM Programs, Whitby Hydro developed a program delivery plan that would reinforce the relationships with political, institutional and organizational partners (regional municipality, municipality, school boards, Chamber of Commerce, etc.) in its service territory and utilize various channel partners (industry, service vendors, etc.) to successfully and efficiently achieve its targets.

Whitby Hydro Achievement by Sector



Through a transparent procurement process, beginning in April 2011, and involving neighbouring LDCs to capture efficiencies and promote economies of scale, Whitby Hydro has contracted the following service providers for initiative delivery:

Burman Energy - Equipment Replacement Incentive Initiative (ERII)

Nedco - Direct Installed Lighting Initiative (DIL)

In addition, during 2011, Whitby Hydro contracted Enbridge for delivery of the New Construction and Major Renovation Initiative (HPNC). This contract was sole sourced to Enbridge as they had already established a strong business case to deliver a similar program for gas. By partnering with Enbridge Whitby Hydro was able to jointly promote the HPNC program with them.

Key aspects of program delivery for Whitby Hydro include the development and adherence to a dynamic marketing plan whereby various marketing efforts – print media; visual media; seminars and workshops – effectively promote the portfolio of initiatives and focus on target customers. Whitby Hydro also coordinated various marketing efforts, including print and visual media, to gain leverage from the OPA’s provincial marketing campaign.

Towards the end of 2011, Whitby Hydro helped develop and is a founding partner in a regional organization named “Durham Partners in Project Green” (DPPG). DPPG is a growing community of businesses working together to 'green' their bottom line by

building a stronger, more sustainable and more productive regional economy. This project will continue to work with businesses to offer the ERII initiative by conducting audits and retrofits throughout the Regional Municipality. The DPPG project also includes other neighbouring LDCs and municipalities. DPPG will coordinate a concentrated marketing effort for the ERII initiative that will complement existing outreach and marketing campaigns to boost participant interest and facilitate program applications.

Whitby Hydro has chosen to utilize its CDM Program Manager as the main point of contact with both business and residential customers. This singular approach maintains a personal contact whereby the program manager works with business customers on applications for various initiatives and helps determine savings.

This approach has been supplemented by Whitby Hydro during the summer months by the summer student conservation team (comprised of 2-3 students) who conduct events throughout the community and visit with both residential and business customers promoting programs and gathering customer information. The conservation team is educated and trained on the various programs and initiatives to help promote conservation in the community and increase the uptake of programs.

Key highlights of Whitby Hydro's delivery of the Province-wide, OPA-contracted programs include early success gained through the residential program's coupon booklet, bi-annual retailer events, HVAC incentives, and appliance retirement initiatives.

Whitby Hydro would like to build upon the delivery of the Province-wide, OPA-contracted programs, and various internal community conservation programs specific to its service territory. Whitby Hydro is interested in joining efforts with its neighbouring LDCs and/or provincial LDC associations (i.e., Electricity Distributors Association – EDA) on developing and implementing Tier 2 and 3 programs to generate the savings necessary to reach provincial and distributor specific targets.

Whitby Hydro has met a number of challenges through the promotion of the tier 1 OPA prescribed programs. During 2008 and 2009, the Direct Install Lighting initiative (previously the “Power Savings Blitz” program) proved to be very successful in Whitby Hydro's service territory, reaching a high market saturation rate of 80%. As a result of this early success, and in spite of aggressive marketing, it has been increasingly difficult to build further participation in this program throughout 2011. In 2011, only 17 retrofits have been completed.

Whitby Hydro has also experienced early success with the previous ERIP program which has created a level of market saturation which can act as a setback to future program uptake. An aggressive marketing campaign between 2007 and 2010 resulted in 36 completed retrofits (approximately 10% of the medium to large-sized business base). As only a small percentage of Whitby Hydro's customer base is industrial/commercial, recent marketing efforts have resulted in an additional 19 (approximately 5.3% of the

medium to large-sized business base) applying as new customers taking advantage of the program and completing retrofits in 2011. The lower than expected levels of participation in 2011, is indicative of businesses hesitant to put out the initial capital outlay for retrofit projects.

Residential demand response programs such as Peaksaver PLUS hold promise for Whitby Hydro as this is an untapped market for its service territory and customers have expressed interest in the initiative during conversations and various community events throughout 2011.

As previously mentioned, Whitby Hydro has been successful with previous conservation programs, such as ERIP and Power Savings Blitz, and in 2011 made slow, but steady progress towards meeting its CDM targets. However, there are various challenges facing Whitby Hydro. These challenges include the overwhelming downturn in the economy which has had an adverse effect on businesses in Whitby Hydro's service area; the fact that market saturation and early success rates have been achieved for certain programs; and the concern surrounding the delay of certain programs (Home Assistance Program) and initiative (Peaksaver PLUS) schedules in 2011. Such challenges are a cause for concern for Whitby Hydro in meeting its targets.

Background

On March 31, 2010, the Minister of Energy and Infrastructure of Ontario, under the guidance of sections 27.1 and 27.2 of the *Ontario Energy Board Act, 1998*, directed the Ontario Energy Board (OEB) to establish Conservation and Demand Management (CDM) targets to be met by electricity distributors. Accordingly, on November 12, 2010, the OEB amended the distribution license of Whitby Hydro to require Whitby Hydro, as a condition of its license, to achieve 39.07 GWh of energy savings and 10.90 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, Whitby Hydro submitted its CDM Strategy on November 1, 2010, which provided a high level of description of how Whitby Hydro intended to achieve its CDM targets.

The Code also requires a distributor to file an annual report with the Board. This Annual Report is therefore prepared accordingly and covers the period from January 1, 2011 to December 31, 2011.

1 Board-Approved CDM Programs

Introduction

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

At this time, the implementation of Time-of-Use (“TOU”) Pricing is the only Board-Approved Conservation and Demand Management (“CDM”) program that is being offered in Whitby Hydro’s service area.

1.1 TOU Pricing

1.1.1 Background

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

In accordance with a Directive dated March 31, 2010 by the Minister of Energy and Infrastructure, the OEB is of the view that any evaluations of savings from TOU pricing should be conducted by the OPA for the province, and then allocated to distributors. Whitby Hydro will report these results upon receipt from the OPA. As of September 30, 2012, the OPA has not released its preliminary results of TOU savings to distributors. Therefore, Whitby Hydro is not able to provide any verified savings related to its TOU program at this time.

1.1.2 TOU Program Description

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

Initiative Frequency: Year-Round

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

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

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

RPP TOU		Rates (cents/kWh)	
Effective Date	On Peak	Mid Peak	Off Peak
November 1, 2010	9.9	8.1	5.1
May 1, 2011	10.7	8.9	5.9
November 1, 2011	10.8	9.2	6.2
May 1, 2012	11.7	10.0	6.5

Delivery: OEB set rates; Whitby Hydro installation and maintenance of the meter; Whitby Hydro converts customers to TOU billing.

Initiative Activities/Progress: Whitby Hydro began transitioning its RPP customers to TOU billing on Dec. 23, 2011. On December 31st, 2011, 5,110 RPP customers were on TOU billing. Whitby Hydro believes that the TOU pricing program can be complimented by the Peaksaver Plus initiative and vice versa. Whitby Hydro has been collecting information from customers interested in registering for Peaksaver and Peaksaver Plus since February 2011. Once in market (September 2012), Whitby Hydro plans to successfully leverage the TOU pricing program with the Residential Demand Response initiative, thereby offering customers additional tools to monitor, understand and modify their consumption during the TOU time-periods.

1.2 Whitby Hydro Electric Corporation’s Application with the OEB

During 2011, Whitby Hydro Electric Corporation did not submit an application for Board-approved programs (Tier 2 and Tier 3) with the OEB. However, Whitby Hydro is interested and willing to work collaboratively with other LDCs and the Electricity Distributors Association (EDA) on developing and implementing Tier 2 and Tier 3 Board-approved programs in its service territory.

2 OPA-Contracted Province-Wide CDM Programs

2.1 Introduction

Effective March 2, 2011, Whitby Hydro entered into an agreement with the OPA to deliver CDM programs extending from January 1, 2011 to December 31, 2014, which are listed below. In addition, results will be reported from projects started pre 2011 which were completed in 2011:

Initiative	Schedule	Date schedule posted	Customer Class
Residential Program			
Appliance Retirement	Schedule B-1, Exhibit D	Jan 26 2011	All residential rate classes
Appliance Exchange	Schedule B-1, Exhibit E	Jan 26 2011	All residential rate classes
HVAC Incentives	Schedule B-1, Exhibit B	Jan 26 2011	All residential rate classes
Conservation Instant Coupon Booklet	Schedule B-1, Exhibit A	Jan 26 2011	All residential rate classes
Bi-Annual Retailer Event	Schedule B-1, Exhibit C	Jan 26 2011	All residential rate classes
Retailer Co-op ¹		Jan 26 2011	All residential rate classes
Residential Demand Response	Schedule B-3	Aug 22 2011	All general service classes
New Construction Program	Schedule B-2	Jan 26 2011	All residential rate classes
Commercial & Institutional Program			
Efficiency: Equipment Replacement	Schedule C-2	Jan 26 2011	All general service classes
Direct Install Lighting	Schedule C-3	Jan 26 2011	General Service < 50 kW
Existing Building Commissioning Incentive	Schedule C-6	Feb 2011	All general service classes
New Construction and Major Renovation Initiative	Schedule C-4	Feb 2011	All general service classes
Energy Audit	Schedule C-1	Jan 26, 2011	All general service classes

¹ Whitby Hydro was unable to register for the Retailer Co-op initiative under the Residential Program since there were no retailers in Whitby Hydro's service territory who expressed an interest in participating.

Initiative	Schedule	Date schedule posted	Customer Class
Commercial Demand Response (part of the Residential program schedule)	Schedule B-3	Jan 26, 2011	All general service classes
Demand Response 3 (part of the Industrial program schedule)	Schedule D-6	May 31, 2011	General Service 50 kW & above
Industrial Program			
Process & System Upgrades	Schedule D-1	May 31, 2011	General Service 50 kW & above
Monitoring & Targeting	Schedule D-2	May 31, 2011	General Service 50 kW & above
Energy Manager	Schedule D-3	May 31, 2011	General Service 50 kW & above
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	Schedule C-2	May 31, 2011	General Service 50 kW & above
Demand Response 3	Schedule D-6	May 31, 2011	General Service 50 kW & above
Home Assistance Program			
Home Assistance Program	Schedule E-1	May 9, 2011	All residential rate classes
Pre-2011 Programs completed in 2011			
Electricity Retrofit Incentive Program	n/a	n/a	All general service classes
High Performance New Construction	n/a	n/a	All general service classes
Multifamily Energy Efficiency Rebates (MEER)	n/a	n/a	All general service classes

Initiative Not in Market in 2011	Objective	Status
Residential Program		
Midstream Electronics	The objective of this initiative is to encourage retailers to promote and sell high efficiency televisions, and for distributors to distribute high efficiency set top boxes.	Not launched to market
Midstream Pool Equipment	The objective of this initiative is to encourage pool installers to sell and install efficient pool pump equipment in residential in-ground pools.	Not launched to market
First Nations Program	First Nations programs are delivered by OPA and results are attributed to LDCs for reporting.	Not launched to market
Home Energy Audit Tool	This is a provincial online audit tool to engage customers in conservation and help drive customer participation to CDM programs.	Not launched to market
Commercial & Institutional Program		
Direct Service Space Cooling	The objective of this initiative is to offer free servicing of air conditioning systems and refrigeration units for the purpose of achieving energy savings and demand reduction.	Not launched to market in 2011. The OPA has no plans to launch this initiative in 2012.

Initiative Not in Market in 2011	Objective	Status
Demand Response 1	This initiative allows distribution customers to voluntarily reduce electricity demand during certain periods of the year pursuant to the DR 1 contract. The initiative provides DR payment for service for the actual electricity reduction provided during a demand response event.	No customer uptake for this initiative
Industrial Program		
Demand Response 1	As above	No customer uptake for this initiative

In reference to the table listing 'Initiatives Not in Market in 2011', Whitby Hydro registered for the Midstream Electronics, Midstream Pool Equipment and Home Energy Tool initiatives, as these three initiatives were part of Schedule B-1 (the Residential Program Schedule). Whitby Hydro did not register for the First Nations Program initiative since its service territory does not reflect a First Nations customer base.

Whitby Hydro also registered for the Demand Response 1 initiative and the Direct Service Space Cooling Initiative. The Direct Service Space Cooling initiative and the Direct Install initiative were both part of Schedule C-3.

The procurement process for the Direct Install Lighting and Direct Service Space Cooling Initiative resulted in Whitby Hydro contracting with a service provider that was able to deliver both aspects of the program. A delivery model was developed and strong uptake was forecasted, however, the Direct Service Space Cooling portion of the program was not launched in 2011 and the status remains unchanged as of the date this report was prepared.

The Master CDM Program Agreement includes a program change management provision in Article 3. Collaboration between the OPA and the Local Distribution Companies (LDCs) commenced in 2011 as the change management process was implemented to enhance the saveONenergy program suite. The change management process allows for modifications to the Master Service Agreement and initiative schedules. The program enhancements introduced later in 2011, 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. Whitby Hydro has particularly found the changes to the Residential Demand Response schedule to be helpful in deciding on technology to implement for program delivery in its service territory.

2.2 Program Descriptions

2.2.1 Residential Program

2.2.1.1 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 located in Ontario.

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

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

Delivery: OPA centrally contracts for province-wide marketing, call centre, appliance pick-up and decommissioning process. Whitby Hydro provides local marketing and coordination with municipal pick-up where available.

Additional detail is available:

- Schedule B-1, Exhibit D
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholder_s/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf

and

- Saveonenergy website
<https://saveonenergy.ca/Consumer/Programs/Appliance-Retirement.aspx>

Initiative Activities/Progress: Whitby Hydro provided local marketing and customer support for this initiative. Marketing items include closed-circuit television ads (2) and motion display boards (2) at the local Civic sports complex. Print media was also utilized and ranged from bill inserts (40,000 pieces) and bill messaging to posters strategically placed in libraries and recreation centres. Website promotion occurred throughout the

year. This initiative was also actively promoted at ten community and nine retailer events during 2011.

In Market Date: March 3, 2011

Lessons Learned:

- The Appliance Retirement Initiative (previously The Great Refrigerator Round-Up) has been offered successfully by Whitby Hydro since 2007. Currently, this initiative is approaching market saturation in Whitby Hydro's service area. However, Whitby Hydro continues to promote the program through various marketing efforts.
- The most effective marketing message for this initiative is the dollar value savings for customers (up to \$125 per year), since many customers were unaware of the inefficiency of running an old secondary fridge.
- While the OPA and the LDCs have reviewed this initiative to assess whether to include other products, appliances have a natural life cycle and the initiative cannot be expected to continually deliver the high level of results in perpetuity. These lower expectations have been taken into account when developing conservation portfolios.
- This initiative now faces some competition from independent retailers and municipalities.
- Results have been very responsive to province wide advertising.

2.2.1.2 Appliance Exchange Initiative (Exhibit E)

Target Customer Type(s): Residential Customers

Initiative Frequency: Spring and Fall

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

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

Targeted End Uses: Window air conditioners and portable dehumidifiers

Delivery: OPA contracts with participating retailers for collection of eligible units.

Additional detail is available:

- Schedule B-1, Exhibit C
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf
- and
- Saveonenergy website
<https://saveonenergy.ca/Consumer.aspx>
- **Initiative Activities/Progress:** Whitby Hydro provided local marketing and customer support for this initiative. Once event dates were announced, Whitby Hydro immediately scheduled in-store visits with Canadian Tire, Home Depot and Rona to promote this initiative. The Whitby Hydro SaveONenergy Team was successful in reaching out to customers at the events with helpful energy efficiency tips and product knowledge. The spring event had the participation of 3 local retailers (Canadian Tire, Home Depot, and Rona). However, the Fall 2011 event had no retailer participation, therefore savings budgeted by Whitby Hydro did not materialize.

In Market Date: May 2, 2011

Lessons Learned:

- It is imperative that Conservation staff attending the events possess an understanding regarding the efficiency of the products. This proved to be important to customers, since some customers were persuaded by Whitby Hydro Conservation staff to bring in in-efficient products for decommissioning and take advantage of the electricity and cost savings.
- Evaluation, Measurement, and Verification (EMV) results indicated that the value of savings for retired room AC has dropped.
- The initiative may be achieving market saturation.
- The type of unit turned in is very dependent upon what is promoted by the retailers.

2.2.1.3 HVAC Incentives Initiative (Exhibit B)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

Targeted End Uses: Central air conditioners and furnaces

Delivery: OPA contracts centrally for delivery of the program and Whitby Hydro encourages and convinces local contractors to participate in the Initiative.

Additional detail is available:

- Schedule B-1, Exhibit B
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholder_s/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf

and

- Saveonenergy website
<https://saveonenergy.ca/Consumer.aspx>

Initiative Activities/Progress: Whitby Hydro provided local marketing and customer support for this initiative. Primary marketing for the initiative included bill inserts and web site promotion/education as to the features of program. Initiative materials (Residential Programs brochure) were distributed at various community events (10). Customer Service Representatives (CSRs) made customers aware that there are different incentives for different levels of efficient products.

In Market Date: March 3, 2011

Lessons Learned:

- There was some customer confusion around the initial incentive amount of \$650, which is a cumulative amount.
- Whitby Hydro encountered some instances of customer scenarios where contractors failed to fully explain the program and its processes, i.e., application for incentive amount. This reduced the participation level since certain customers did not originally have rebate applications submitted by contractors and customer satisfaction levels were adversely affected.
- Channel engagement is a highly effective method of connecting with customers; however channel partners require timeliness of the rebate process to maintain a positive relationship between consumers, contractors, the OPA, and the participating LDC.
- There appears to be spillover from non-HRAI contractors who are ineligible for this initiative. There are cases where smaller independent contractors are offering their own incentives (by discounting their installations to match value of the OPA incentive) to make the sale. As this occurs outside of the initiative, these installations are not being attributed to Whitby Hydro.

2.2.1.4 Conservation Instant Coupon Booklet 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.whitbyhydro.saveONenergy.ca.

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

Delivery: OPA contracts centrally for the distribution of the coupon booklets across Ontario. Whitby Hydro distributes coupons at local events. The OPA enters into agreements with retailers to honour the coupons.

Additional detail is available:

- Schedule B-1, Exhibit A
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf

and

- Saveonenergy website
<https://saveonenergy.ca/Consumer.aspx>

Initiative Activities/Progress: Whitby Hydro provided local marketing and customer support for this initiative. Coupon booklets (800 pieces) were distributed to customers at various community events and were made available online and at our head office. After the Fall Coupon Event, the remainder of coupon booklets (approximately 700) were distributed to local retailers (Canadian Tire, Home Depot, Lowe's, and Wal-Mart) to be redeemed at their respective locations. The retailers were very supportive of this arrangement.

In Market Date: February 21, 2011

Lessons Learned:

- Whitby Hydro found that it is worthwhile to work with retailers on coupon booklet distribution. OPA Initiative data should reflect usage of types of coupons.
- The downloadable coupons proved to be more successful than the mailed out booklets. However, Whitby Hydro had great success distributing coupon booklets at community events and other initiative retailer events (approx. 800 coupon booklets).
- This initiative may benefit from an enabler such as a Conservation Card / Loyalty Card to increase customer participation.
- The timeframe for retailer submission of redeemed coupons vary from retailer to retailer. This delays the results reporting, which in turn limits the OPA and LDC abilities to react and respond to initiative performance or changes in consumer behaviour.

2.2.1.5 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: Same as the conservation instant coupon booklet initiative

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

Additional detail is available:

- Schedule B-1, Exhibit C
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf

and

- Saveonenergy website
<https://saveonenergy.ca/Consumer.aspx>

Initiative Activities/Progress: Whitby Hydro provided local marketing and customer support for this initiative. Whitby Hydro informed staff of product specifics so as to effectively engage customers and to answer product questions, if retail staff were unable to, as well as to up sell other program initiatives. Four event sessions were attended at Wal-Mart in April. One Canadian Tire and one Rona event were held in May. For the Fall offering, one event at Lowe's and one event at Home Depot were held.

In Market Date: April 1, 2011

Lessons Learned:

- Whitby Hydro found that these types of retailer events are excellent opportunities to engage its customer base and to gauge acceptance or resistance to various initiatives and receive feedback.
- Whitby Hydro found that some retailers were not as effective at promoting the bi-annual retailer events. Development of a feedback process as well as improved training of retail staff would be beneficial.
- The Product list has changed very little over the past four years.
- Program evolution, including new products (for example, LED lighting) and review of incentive pricing for the coupon initiatives, must be a regular activity to ensure continued consumer interest.
- A review conducted by the Residential Working Group in Q4 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. Whitby Hydro is in agreement with these three points.

2.2.1.6 Retailer Co-Op Initiative

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: Dependent on Retailer Co-op application.

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

Initiative Activities/Progress: Initiative not offered in Whitby Hydro's service territory. No local retailer applied to the OPA for specified funding.

In Market Date: Not Applicable.

2.2.1.7 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 was the responsibility of Whitby Hydro and was supported by OPA air coverage directing builders to Whitby Hydro for additional information.

Additional detail is available:

- Schedule B-1, Exhibit C
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-2%20New%20Construction%20Program.pdf

and

- Saveonenergy website
<https://saveonenergy.ca/Consumer.aspx>

Initiative Activities/Progress: Whitby Hydro provided local marketing and customer support for this initiative. Marketing included connecting with developers/builders and working with them on application submission and issues. Whitby Hydro has actively marketed and promoted this initiative, however, uptake has been slow, with only one application in 2011.

In Market Date: March 15, 2011

Lessons Learned:

- Since the online application system is a one to one relationship, this program was only practical for custom builders who were building one home at a time. Tract builders who might build 250 homes in a single phase would have to submit 250 applications to qualify for incentives. This administrative challenge has deterred all tract builders from participating in the program to date. Whitby Hydro began to work closely with the OPA in Q2 2011 on overcoming these obstacles and providing guidance to applicants. It is imperative that the application process be streamlined to encourage participation.
- Administrative requirements must align with perceived stakeholder payback.

2.2.1.8 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).LDCs were given the choice to continue to offer the standard load control program (programmable thermostat or switch with a \$25 bill credit) for the first 8 months of 2011 (referred to as *peaksaver*@Extension). After August 2011, the Extension ended and the program (including marketing) ceased until new IHD products were available.

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

Delivery: LDC's recruit customers and procure technology

Additional detail is available:

- Schedule B-1, Exhibit C
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/SCHED_2011_ResDR_B_3_110727%28MJB%29v15_redacted.pdf

and

- Saveonenergy website
<https://saveonenergy.ca/Consumer.aspx>

Initiative Activities/Progress: Whitby Hydro did not offer the Peaksaver program in previous years, and therefore could not offer the Peaksaver Extension program in 2011. As Whitby Hydro decided to wait for a meter-based solution to gain entry on the market, activities during 2011 were limited to planning efforts and attending various workshops to gain an in-depth understanding of the technology available (IHDs, thermostats, switches, meter interface/relay). This allowed Whitby Hydro to arrive at the best program delivery solution to offer customers as the program rolls out in 2012.

In Market Date: Whitby Hydro was not in market with this initiative in 2011, however, as mentioned above, was actively surveying possible technologies and approaches and collecting contact data from potential customers interested in enrolling in the initiative.

Lessons Learned:

- The schedule for Peaksaver Plus was posted in August 2011, but this did not provide adequate time for product procurement in 2011, and early 2012. Whitby Hydro was aware that the product procurement process of other LDCs uncovered that the In Home Display units that communicate with installed smart meter technology were still in development and not ready for market deployment. Consequently, Whitby Hydro, and many other LDCs could not be in market with the Peaksaver Plus program until late 2012.
- 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.

2.2.2 Commercial and Institutional Program

2.2.2.1 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
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20C-2%20ERII%20Initiative.pdf
- and
- Saveonenergy website
<https://saveonenergy.ca/Business/Program-Overviews/Retrofit-for-Commercial.aspx>

Initiative Activities/Progress: Whitby Hydro provided local marketing and customer support for this initiative. Whitby Hydro has enjoyed substantial success with the previous ERIP initiative, and was in a position to effectively transition to the ERII initiative. Continuing on the success of ERIP, ERII was aggressively promoted as the 'flagship' conservation program through various marketing outlets. Retrofit Workshops have been offered to contractors in Whitby's service territory to promote a knowledgeable contractor network and increased initiative participants. During 2011 Whitby Hydro was involved in the formation of an organization - Durham Partners in

Project Green (DPPG) - along with other utility partners and municipal and regional governments that would serve as a marketing vehicle for the initiative. The majority of the retrofit applications submitted dealt with lighting, however, some have also included power-conditioning devices and HVAC systems. Uptake in this initiative in 2011 was very closely split between the commercial and institutional sector and industrial sectors.

In Market Date: March 3, 2011

Lessons Learned:

- This initiative is designed as a high performing, cost-effective program, and there were many pre-2011 projects completed in 2011 (via ERIP). As a result of the previous ERIP program and even some multiple applications, many currently targeted customers have not participated in the new ERII initiative and do not plan to in the future. A certain level of market saturation has resulted. This will have an adverse effect on achieving Whitby Hydro's targets. Due largely to economic factors, businesses are hesitant to provide the capital outlay for these retrofit projects and this is a barrier to successful uptake.
- A major challenge for the ERII program in 2011 was payment delays. The centralized electronic processes were not ready as required by the Master Agreement. The lack of having these automated processes, exasperated by a greater than expected volume of pre-2011 projects completing in 2011, caused considerable payment delays. Based on the lessons learned in the 2011 process, the centralized process review used for 2012 project payment has been streamlined.
- In March 2011, the revised iCON system was launched by the OPA. This is the major online application system implemented to aid the 2011-2014 ERII application process. With system applications of this size and functionality, it was expected that there would be various issues identified at the time of the release, and on-going, to prove that the system was "ready for market." Unfortunately, the resolution of these issues, with the corresponding time lags and workarounds, was seen to be a barrier to some customer participation in the 2011 program year. In addition, there were also on-going issues and limitations with the back-end Customer Resource Management (CRM) system that affected Whitby Hydro's ability to effectively review and approve applications. Some LDCs (and their third party service providers) have developed parallel systems to monitor their applications.

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

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

Initiative Frequency: Year round

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

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

Target End Uses:

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
<http://www.powerauthority.on.ca/sites/default/files/page/Schedule%20C-3%20Direct%20Install%20Initiative%20-%20redacted.pdf>
- and
- Saveonenergy website
<https://saveonenergy.ca/Business.aspx>

Initiative Activities/Progress: Whitby Hydro provided local marketing and customer support for this initiative. Whitby Hydro found great success with the previously-named “Power Savings Blitz” program. However, due to a high saturation rate (80%), the current offering of the initiative has lost much of its momentum. There have been a few early successes in 2011 and uptake has been steadily dropping irrespective of aggressive marketing campaigns with the Whitby Chamber of Commerce and other community organizations.

In Market Date: March 3, 2011

Lessons Learned:

- The Direct Installed Lighting Initiative is a continuation of the Power Saving Blitz Initiative offered by Whitby Hydro from 2008-2010. Successful execution of the previous rendition of this Initiative has resulted in diminished potential for the 2011-2014 Initiative for Whitby Hydro.
- The inclusion of a standard incentive for additional measures increased project size and drove higher energy and demand savings results.
- The cost of materials has experienced price volatility, reducing the margins of the electrical contractors and therefore their commitment to the initiative.
- Due to backlogs in the payment system, participant incentive payment from the OPA to the LDC, and therefore to the customer, was commonly delayed.
- To address these issues, the LDCs have been working with the OPA through the Change Management process to address:
 - extending the target initiative population to include small agricultural customers;
 - increasing the incentive envelope of \$1,000 to \$1,500 to ensure ongoing marketability of the program; and
 - reviewing the eligible measure price list to support contractor participation.

2.2.2.3 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
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholder_s/current_electricity_contracts/pdfs/Schedule%20C-6%20Commissioning%20Initiative.pdf
- and
- Saveonenergy website
<https://saveonenergy.ca/Business/Program-Overviews/Existing-Building-Commissioning.aspx>

Initiative Activities/Progress: Whitby Hydro provided local marketing and customer support for this initiative. Whitby Hydro marketed this program specifically to the municipal and institutional sector. There is an underlying interest in this initiative as customer liaising efforts have shown, however, no applications were submitted in 2011.

In Market Date: March 3, 2011

Lessons Learned:

- There was no customer uptake for this Initiative. It is suspected that the scope of the Initiative being limited to space cooling contributed to the lack of participation. Accordingly chilled water systems used for other purposes should be made eligible and considered through Change Management.
- Whitby Hydro has found that the customer expectation is that the program be expanded to include broader building improvements for a more holistic approach to building recommissioning.

2.2.2.4 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 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: 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
<http://www.powerauthority.on.ca/sites/default/files/page/ScheduleC-4NewConstructionInitiativeV2.pdf>
- and
- Saveonenergy website <https://saveonenergy.ca/Business/Program-Overviews/New-Construction.aspx>

Initiative Activities/Progress: Whitby Hydro provided local marketing and customer support for this initiative. Whitby Hydro has contracted with Enbridge for the delivery of this initiative and 2011 saw the start of one substantial project application with an educational institution with promising savings.

In Market Date: August 1, 2011

Lessons Learned:

- This is a continuation of the High Performance New Construction program previously delivered by Enbridge Gas under contract with the OPA (and subcontracted to Union Gas), which ran until December 2010.
- For 2011, new industry participation was limited due to the delays in redesign of certain aspects of the Initiative such as:
 - 2011 prescriptive incentives needed to be aligned with ERII incentives
 - In the cases of delivering large projects (i.e. custom applications), 2011 participation was limited due to 1) building code changes and 2) level of documentation required.

2.2.2.5 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
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20C-1%20Energy%20Audit%20Initiative.pdf

and

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

Initiative Activities/Progress Whitby Hydro provided local marketing and customer support for this initiative. Whitby Hydro planned to initially market this initiative to medium and large size businesses that have not undertaken any efficiency upgrades. Only one application was submitted in 2011. As various sectors begin to move toward increased energy efficiency or are mandated to do so (i.e., Association of Municipalities of Ontario and municipalities), increased uptake is anticipated.

In Market Date: March 3, 2011

Lessons Learned:

- Since the Audit initiative is an enabling initiative, no direct savings results can be ascribed to Whitby Hydro from completed applications.
- Customers expect a greater connection with other CDM Initiatives as a result of completing the energy audit. The initiative should be reviewed under Change Management for the means to readily incent participants with audits in hand to implement other electricity savings Initiatives.

2.2.3 Industrial Program

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

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

Initiative Frequency: Year round

Objectives: The objectives of this Initiative are to:

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

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

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

Targeted End Uses: Process and systems

Delivery: LDC delivered

Additional detail is available:

- Schedule D-1
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20D-1%20Process%20and%20Systems%20Upgrades%20Initiative.pdf
- and
- Saveonenergy website
<https://saveonenergy.ca/Business.aspx>

Initiative Activities/Progress: Whitby Hydro provided local marketing and customer support for this initiative. An initial meeting was held in May 2011 with the largest customer in Whitby Hydro service territory regarding a detailed engineering study. Coordination of detailed engineering study application with all parties occurred throughout remainder of 2011.

In Market Date: April 8, 2011

Lessons Learned:

- Whitby Hydro understands the benefit of working with its few large customers on possible PSUI projects. The investment of time may be considerable, however, the energy saving opportunities can be significant.
- The PSUI program targets large customers that are undertaking large capital projects. There is typically a long sales cycle to sell these projects, and then a long project development cycle. As such, results from PSUI did not appear in 2011, however, Whitby Hydro is on track to see results in 2012.
- Steps are being taken in the 2012 change management process to simplify and streamline the micro-project application process and to allow smaller projects to be directed to the ERII stream. This would be very beneficial to Whitby Hydro, since a great amount of time would be saved and more work can be carried out with potential customers.
- Given the size of the projects involved, the contract required for PSUI is a lengthy and complicated document. Attempts are being made through change management in 2012 to simplify the document while still protecting the ratepayer.
- Whitby Hydro has had customer interest in on-site Load Displacement projects and would like to suggest that the Initiative should be reviewed to ensure that these projects can be considered part of the PSUI.

2.2.3.2 Monitoring & Targeting Initiative (Schedule D-2)

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

Initiative Frequency: Year round

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

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

Targeted End Uses: Systems and applications/processes. To initiate energy management and realize energy and demand savings.

Delivery: LDC delivered

Additional detail is available:

- Schedule D-2
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20D-2%20Monitoring%20and%20Targeting%20Initiative.pdf
- and
- Saveonenergy website
<https://saveonenergy.ca/Business.aspx>

Initiative Activities/Progress: Whitby Hydro provided local marketing and customer support for this initiative. Preliminary work on a Monitoring and Targeting application began in 2011 for the largest customer in Whitby Hydro's service territory.

Lessons Learned:

- The M&T initiative was originally targeted at larger customers with the capacity to review the M&T data. This review requires the customer facility to employ an Energy Manager, or a person with equivalent qualifications, which has been a barrier for some customers.

2.2.3.3 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 (REM) plus \$8,000 for expenses.

Targeted End Uses: To initiate energy management and realize energy and demand savings.

Delivery: LDC delivered

Additional detail is available:

- Schedule D-3
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholder_s/current_electricity_contracts/pdfs/Schedule%20D-3%20Energy%20Manager%20Initiative%202011-2014.pdf

and

- Saveonenergy website
<https://saveonenergy.ca/Business.aspx>

Initiative Activities/Progress: The marketing/sales campaign for this initiative was primarily aimed at the regional municipality. There was no uptake in 2011. Whitby Hydro does not possess the large accounts (> 5 MW) required for an individual application. During 2011, discussions took place with a neighbouring LDC on a joint effort to engage an energy manager for the regional municipality.

In Market Date: May 1, 2011

Lessons Learned:

- The energy managers may be a good resource, however, Whitby Hydro has found that this is not a viable program unless sufficient customer size and funding supports the potential benefits.
- Whitby Hydro has learned that this initiative will be much more effective if it pursues the opportunity to team up with neighbouring LDCs to hire a Roving Energy Manager (REM). This approach may make this initiative a more viable option for a larger number of LDCs.

2.2.3.4 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. 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.

Description: Placement of KAM in customer's business environment

Targeted End Uses: To initiate energy management and realize energy and demand savings.

Delivery: LDC

Additional detail is available:

- ScheduleD-4
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/projects_programs/pdfs/PSUI%20Initiative%20Schedule%20D-4.Key%20Account%20Manager.20110322.pdf

Initiative Activities/Progress: The marketing/sales campaign for this initiative was primarily aimed at the regional municipality. There was no uptake in 2011. Whitby Hydro does not possess the large accounts (> 5 MW) required for an individual application. During 2011, discussions took place with a neighbouring LDC on a joint effort to engage a KAM for the regional municipality.

In Market Date: May 1, 2011

Lessons Learned:

- Whitby Hydro has learned that this initiative will be much more effective if it pursues the opportunity to team up with neighbouring LDCs to hire a KAM to target regional corporations.

2.2.3.5 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) payment for service to DR3 participants to compensate them for making available electricity demand response during a demand response 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 energy payments for the actual energy 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: Contractual curtailment of load

Delivery: DR3 is delivered by Demand Response Providers, 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. OPA provides administration including settlement, measurement and verification, and dispatch. LDCs are responsible for outreach and marketing efforts.

Additional detail is available:

- Schedule D-6
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20D-6%20Demand%20Response%203%202011-2014.pdf

and

- Saveonenergy website
<https://saveonenergy.ca/Business.aspx>

Initiative Activities/Progress: In 2011, three customers continued their participation in the DR3 initiative (from the previous initiative offering). Whitby Hydro's 2011 marketing plan included a joint LDC campaign with a neighbouring utility to target the regional municipality to join the DR3 roster. No ensuing contracts have resulted.

In Market Date: April 8, 2011

Lessons Learned:

- Whitby Hydro has found that certain customers are hesitant to enroll in this program as they do not have the ability to shift production or do not possess the generation capacity to offset their loads.
- Customer data is not provided by the OPA on an individual customer basis due to contractual requirements with the aggregators. This limits LDCs' ability to effectively market to prospective participants. LDCs are now approaching the Aggregators individually and working to develop agreements in order to identify potential customers of this initiative.

2.2.4 Low Income Initiative (Home Assistance Program) (Schedule E)

Target Customer Type(s): Income Qualified Residential Customers

Initiative Frequency: Year Round

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

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

Targeted End Uses: End uses based on results of audit

Delivery: LDC delivered.

Additional detail is available:

- Schedule E
<http://www.powerauthority.on.ca/sites/default/files/page/Low%20Income%20Schedule%20-%20redacted%20version.pdf>

Initiative Activities/Progress: As a result of the late release of this initiative schedule, only preliminary planning of the program occurred in 2011. Discussions included joint procurement efforts between neighbouring LDCs.

In Market Date: Whitby Hydro was not in market with this initiative in 2011.

Lessons Learned:

- This Initiative Schedule was finalized later (May 2011) than the rest of the OPA Initiatives and in 2011 Whitby Hydro was not in market.
- Centralized payment processes were not developed in 2011, but were in place mid-2012. This resulted in Whitby Hydro delaying its launch to market.
- The financial scope, complexity, and customer privacy requirements of this Initiative resulted in a lengthy procurement process. Some LDCs must adhere to very transparent procurement processes, which meant that delivery of the program did not start in 2011.

2.2.5 Pre-2011 Programs Completed in 2011

2.2.5.1 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: Refer to section 2.2.2.1

Targeted End Uses: Lighting, space cooling; ventilation and other measures.

Delivery: LDC delivered

Initiative Activities/Progress: The Electricity Retrofit Incentive Program was initiated in 2007 and targets all commercial, industrial, institutional and agricultural customers (approximately, 2,457 customers throughout Whitby). The program provides incentives to commercial customers for predefined technologies such as lighting, motors, heating, ventilation, air conditioning and overall electricity systems. Fourteen Retrofits from the ERIP initiative were completed in 2011.

In Market Date: Jan. 2007

Lessons Learned:

- This program is well received by Commercial customers with the Prescriptive List of Measures offering the simple and easiest approach.
- Program applications, guidelines and worksheets help to answer any questions customers may have about the program (program design effective).
- Most applications received were for lighting retrofits – this is likely because it is a simple measure and there were higher incentives for lighting helped to push these types of projects.
- To continue momentum and generate more program interest, higher incentives are required for other measures, such as HVAC, motors and more (where projects are cost-effective but paybacks are still too high and may not meet typical hurdle rates for commercial customers).

2.2.5.2 High Performance New Construction

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

Initiative Frequency: Year round

Objective: 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.

Description: Refer to section 2.2.2.5

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

Delivery: Enbridge

Initiative Activities/Progress: Enbridge delivered and managed the initiative. One application was submitted and completed in 2011.

In Market Date: N/A - Initiative delivered and managed by Enbridge

Lesson Learned:

- Program can be drawn out due to lengthy periods of time between various stages of data collection during the process.

2.2.5.3 Multifamily Energy Efficiency Rebates

Target Customer Type(s): Multifamily residential

Initiative Frequency: Year round

Objective: The objective of this program is to provide financial incentives for prescriptive and custom measures and also fund resident education.

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

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

Targeted End Uses: Energy efficient measures/retrofits

Delivery: GreenSaver

Initiative Activities/Progress: No program uptake in 2011.

In Market Date: October 15, 2010

Lesson Learned:

- n/a

2.3 Participation

Table 1: Participation

#	Initiative	Activity Unit	Uptake/ Participation Units
Consumer Program			
1	Appliance Retirement	Appliances	547
2	Appliance Exchange	Appliances	22
3	HVAC Incentives	Equipment	1,141
4	Conservation Instant Coupon Booklet	Coupons	5,267
5	Bi-Annual Retailer Event	Coupons	7,529
6	Retailer Co-op	Items	0
7	Residential Demand Response	Devices	0
8	New Construction Program	Houses	0
Business Program			
9	Efficiency: Equipment Replacement	Projects	9
10	Direct Installed Lighting	Projects	17
11	Existing Building Commissioning Incentive	Buildings	0
12	New Construction and Major Renovation Incentive	Buildings	0
13	Energy Audit	Audits	0
14	Commercial Demand Response (part of the Residential program schedule)	Devices	0
15	Demand Response 3 (part of the Industrial program schedule)	Facilities	1
Industrial Program			
16	Process & System Upgrades*	Projects	0
	a) preliminary study		0
	b) engineering study		0
	c) project incentive		0
17	Monitoring & Targeting	Projects	0
18	Energy Manager	Managers	0
19	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	Projects	10
20	Demand Response 3	Facilities	2
Home Assistance Program			
21	Home Assistance Program	Units	0
Pre 2011 Programs Completed in 2011			
22	Electricity Retrofit Incentive Program	Projects	14
23	High Performance New Construction	Projects	1
24	Toronto Comprehensive	Projects	0
25	Multifamily Energy Efficiency Rebates	Projects	0

2.4 Spending

Table 2: Spending

#	Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
Consumer Program						
1	Appliance Retirement	\$22,652	\$0	\$0	\$0	\$22,652
2	Appliance Exchange	\$5,813	\$0	\$0	\$0	\$5,813
3	HVAC Incentives	\$20,254	\$0	\$0	\$0	\$20,254
4	Conservation Instant Coupon Booklet	\$17,230	\$0	\$0	\$0	\$17,230
5	Bi-Annual Retailer Event	\$10,646	\$0	\$0	\$0	\$10,646
6	Retailer Co-op	N/A	N/A	N/A	N/A	N/A
7	Residential Demand Response	\$10,646	\$0	\$0	\$0	\$10,646
8	New Construction Program	\$8,757	\$0	\$0	\$0	\$8,757
Business Program						
9	Efficiency: Equipment Replacement	\$30,687	\$0	\$0	\$0	\$30,687
10	Direct Installed Lighting	\$33,212	\$0	\$0	\$0	\$33,212
11	Existing Building Commissioning Incentive	\$1,807	\$0	\$0	\$0	\$1,807
12	New Construction and Major Renovation Initiative	\$5,147	\$0	\$0	\$0	\$5,147
13	Energy Audit	\$7,364	\$0	\$0	\$0	\$7,364
14	Commercial Demand Response (part of the Residential program schedule)	\$0	\$0	\$0	\$0	\$0
15	Demand Response 3 (part of the Industrial program schedule)	\$1,347	\$0	\$0	\$0	\$1,347

#	Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
Industrial Program						
16	Process & System Upgrades					
	a) preliminary study	\$3,935	\$0	\$0	\$0	\$3,935
	b) engineering study	\$46	\$0	\$0	\$0	\$46
	c) program incentive	\$0	\$0	\$0	\$0	\$0
17	Monitoring & Targeting	\$3,982	\$0	\$0	\$0	\$3,982
18	Energy Manager	\$876	\$0	\$0	\$0	\$876
19	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	\$30,687	\$0	\$0	\$0	\$30,687
20	Demand Response 3	\$1,347	\$0	\$0	\$0	\$1,347
Home Assistance Program						
21	Home Assistance Program	\$5,394	\$0	\$0	\$0	\$5,394
Pre 2011 Programs Completed in 2011						
22	Electricity Retrofit Incentive Program	\$6,111	\$13,598	\$270,564	\$0	\$290,273
23	High Performance New Construction	\$0	\$0	\$0	\$0	\$0
24	Toronto Comprehensive	\$0	\$0	\$0	\$0	\$0
25	Multifamily Energy Efficiency Rebates	\$0	\$0	\$0	\$0	\$0
TOTAL Province-wide CDM PROGRAMS		\$227,940	\$13,598	\$270,564	\$0	\$512,102

Table 2a: Allocation of PAB funding for Programs Not In Market

#	Initiative	Program Administration Budget (PAB)
Initiatives Not In Market		
8	Midstream Electronics	N/A - \$0
9	Midstream Pool Equipment	N/A - \$0
13	Demand Service Space Cooling	N/A - \$0
18	Demand Response 1 (Commercial)	\$23
19	Demand Response 1 (Industrial)	\$23
33	Home Energy Audit Tool	N/A - \$0
	TOTAL Province-wide CDM PROGRAMS Not In Market	\$46

2.5 Evaluation

EM&V was completed by the OPA. The formal findings - the OPA EM&V Report – have not been made available from the OPA at the time of this filing. The results/findings in the table below have been provided by the OPA in the Final 2011 Results.

2.5.1 Evaluation Findings

Table 3: Evaluation Findings

#	Initiative	Evaluation Findings
Consumer Program		
1	Appliance Retirement	<ul style="list-style-type: none"> Overall participation continues to decline year over year <ul style="list-style-type: none"> - Participation declined 17% from 2010 (from over 67,000 units in 2010 to over 56,000 units in 2011) 97% of net resource savings achieved through the home pick-up stream <ul style="list-style-type: none"> - Measure Breakdown: 66% refrigerators, 30% freezers, 4% Dehumidifiers and window air conditioners 3% of net resource savings achieved through the Retailer pick-up stream <ul style="list-style-type: none"> - Measure Breakdown: 90% refrigerators, 10% freezers Net-to-Gross ratio for the initiative was 50% <ul style="list-style-type: none"> - Measure-level free ridership ranges from 82% for the retailer pick-up stream to 49% for the home pick-up stream - Measure-level spillover ranges from 3.7% for the retailer pick-up stream to 1.7% for the home pick-up stream
2	Appliance Exchange	<ul style="list-style-type: none"> Overall eligible units exchanged declined by 36% from 2010 (from over 5,700 units in 2010 to over 3,600 units in 2011) <ul style="list-style-type: none"> - Measure Breakdown: 75% window air conditioners, 25% dehumidifiers Dehumidifiers and window air conditioners contributed almost equally to the net energy savings achieved <ul style="list-style-type: none"> - Dehumidifiers provide more than three times the energy savings per unit than window air conditioners Window air conditioners contributed to 64% of the net peak demand savings achieved Approximately 96% of consumers reported having replaced their exchanged units (as opposed to retiring the unit) Net-to-Gross ratio for the initiative is consistent with previous evaluations (51.5%)

#	Initiative	Evaluation Findings
3	HVAC Incentives	<ul style="list-style-type: none"> Total air conditioner and furnace installations increased by 14% (from over 95,800 units in 2010 to over 111,500 units in 2011) <ul style="list-style-type: none"> Measure Breakdown: 64% furnaces, 10% tier 1 air conditioners (SEER 14.5) and 26% tier 2 air conditioners (SEER 15) Measure breakdown did not change from 2010 to 2011 The HVAC Incentives initiative continues to deliver the majority of both the energy (45%) and demand (83%) savings in the consumer program <ul style="list-style-type: none"> Furnaces accounted for over 91% of energy savings achieved for this initiative Net-to-Gross ratio for the initiative was 17% higher than 2010 (from 43% in 2010 to 60% in 2011) <ul style="list-style-type: none"> Increase due in part to the removal of programmable thermostats from the program, and an increase in the net-to-gross ratio for both Furnaces and Tier 2 air conditioners (SEER 15)
4	Conservation Instant Coupon Booklet	<ul style="list-style-type: none"> Customers redeemed nearly 210,000 coupons, translating to nearly 560,000 products <ul style="list-style-type: none"> Majority of coupons redeemed were downloadable (~40%) or LDC-branded (~35%) Majority of coupons redeemed were for multi-packs of standard spiral CFLs (37%), followed by multi-packs of specialty CFLs (17%) Per unit savings estimates and net-to-gross ratios for 2011 are based on a weighted average of 2009 and 2010 evaluation findings Careful attention in the 2012 evaluation will be made for standard CFLs since it is believed that the market has largely been transformed
5	Bi-Annual Retailer Event	<ul style="list-style-type: none"> Customers redeemed nearly 370,000 coupons, translating to over 870,000 products <ul style="list-style-type: none"> Majority of coupons redeemed were for multi-packs of standard spiral CFLs (49%), followed by multi-packs of specialty CFLs (16%) Per unit savings estimates and net-to-gross ratios for 2011 are based on a weighted average of 2009 and 2010 evaluation findings <ul style="list-style-type: none"> Standard CFLs and heavy duty outdoor timers were reintroduced to the initiative in 2011 and contributed more than 64% of the initiative's 2011 net annual energy savings While the volume of coupons redeemed for heavy duty outdoor timers was relatively small (less than 1%), the measure accounted for 10% of net annual savings due to high per unit savings Careful attention in the 2012 evaluation will be made for standard CFLs since it is believed that the market has largely been transformed
6	Retailer Co-op	<ul style="list-style-type: none"> Initiative was not evaluated in 2011 due to low uptake. Verified Bi-Annual Retailer Event per unit assumptions and free-ridership rates were used to calculate net resource savings <ul style="list-style-type: none"> Not offered by Whitby Hydro. Low uptake throughout province.

#	Initiative	Evaluation Findings
7	Residential Demand Response	<ul style="list-style-type: none"> Approximately 20,000 new devices were installed in 2011 <ul style="list-style-type: none"> - 99% of the new devices enrolled controlled residential central AC (CAC) 2011 only saw 1 atypical event (in both weather and timing) that had limited participation across the province <ul style="list-style-type: none"> - The ex ante impact developed through the 2009/2010 evaluations was maintained for 2011; residential CAC: 0.56 kW/device, commercial CAC: 0.64 kW/device, and Electric Water Heaters: 0.30 kW/device
8	Residential New Construction	<ul style="list-style-type: none"> Initiative was not evaluated in 2011 due to limited uptake Business case assumptions were used to calculate savings
Business Program		
9	Efficiency: Equipment Replacement	<ul style="list-style-type: none"> Gross verified energy savings were boosted by lighting projects in the prescriptive and custom measure tracks Lighting projects overall were determined to have a realization rate of 112%; 116% when including interactive energy changes <ul style="list-style-type: none"> - On average, the evaluation found high realization rates as a result of both longer operating hours and larger wattage reductions than initial assumptions - Low realization rates for engineered lighting projects due to overstated operating hour assumptions Custom non-lighting projects suffered from process issues such as: the absence of required M&V plans, the use of inappropriate assumptions, and the lack of adherence to the M&V plan The final realization rate for summer peak demand was 94% <ul style="list-style-type: none"> - 84% was a result of different methodologies used to calculate peak demand savings - 10% due to the benefits from reduced air conditioning load in lighting retrofits Overall net-to-gross ratios in the low 70's represent an improvement over the 2009 and 2010 ERIP program where net-to-gross ratios were in the low 60's and low 50's, respectively. <ul style="list-style-type: none"> - Strict eligibility requirements and improvements in the pre-approval process contributed to the improvement in net-to-gross ratios
10	Direct Installed Lighting	<ul style="list-style-type: none"> Though overall performance is above expectations, participation continues to decline year over year as the initiative reaches maturity 70% of province-wide resource savings persist to 2014 <ul style="list-style-type: none"> - Over 35% of the projects for 2011 included at least one CFL measure - Resource savings from CFLs in the commercial sector only persist for the industry standard of 3 years Since 2009 the overall realization rate for this program has improved <ul style="list-style-type: none"> - 2011 evaluation recorded the highest energy realization rate to date at 89.5% - The hours of use values were held constant from the 2010 evaluation and continue to be the main driver of energy realization rate - Lights installed in "as needed" areas (e.g., bathrooms, storage areas) were determined to have very low realization rates due to the difference in actual energy saved vs. reported savings

#	Initiative	Evaluation Findings
11	Existing Building Commissioning Incentive	<ul style="list-style-type: none"> Initiative not evaluated in 2011, no completed projects in 2011
12	New Construction and Major Renovation Initiative	<ul style="list-style-type: none"> Initiative was not evaluated in 2011 due to low uptake Assumptions used are consistent with preliminary reporting based on the 2010 Evaluation findings and consultation with the C&I Work Group (100% realization rate and 50% net-to-gross ratio)
13	Energy Audit	<ul style="list-style-type: none"> The evaluation is ongoing. The sample size for 2011 was too small to draw reliable conclusions.
14	Commercial Demand Response (part of the Residential program schedule)	<ul style="list-style-type: none"> See residential demand response (#7)
15	Demand Response 3 (part of the Industrial program schedule)	<ul style="list-style-type: none"> See Demand Response 3 (#20)
Industrial Program		
16	Process & System Upgrades	<ul style="list-style-type: none"> Initiative was not evaluated in 2011, no completed projects in 2011
17	Monitoring & Targeting	<ul style="list-style-type: none"> Initiative was not evaluated in 2011, no completed projects in 2011
18	Energy Manager	<ul style="list-style-type: none"> Initiative was not evaluated in 2011, no completed projects in 2011
19	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	<ul style="list-style-type: none"> See Efficiency: Equipment Replacement (#9)
20	Demand Response 3	<ul style="list-style-type: none"> Program performance for Tier 1 customers increased with DR-3 participants providing 75% of contracted MW for both sectors <ul style="list-style-type: none"> - Industrial customers outperform commercial customers by provide 84% and 76% of contracted MW, respectively Program continues to diversify but still remains heavily concentrated with less than 5% of the contributors accounting for the majority (~60%) of the load reductions. By increasing the number of contributors in each settlement account and implementation of the new baseline methodology the performance of the program is expected to increase
Home Assistance Program		
21	Home Assistance Program	<ul style="list-style-type: none"> Initiative was not evaluated in 2011 due to low uptake Business Case assumptions were used to calculate savings
Pre-2011 Programs completed in 2011		
22	Electricity Retrofit	<ul style="list-style-type: none"> Initiative was not evaluated

#	Initiative	Evaluation Findings
	Incentive Program	<ul style="list-style-type: none"> Net-to-Gross ratios used are consistent with the 2010 evaluation findings (multifamily buildings 99% realization rate and 62% net-to-gross ratio and C&I buildings 77% realization rate and 52% net-to-gross ratio)
23	High Performance New Construction	<ul style="list-style-type: none"> Initiative was not evaluated Net-to-Gross ratios used are consistent with the 2010 evaluation findings (realization rate of 100% and net-to-gross ratio of 50%)
24	Toronto Comprehensive	<ul style="list-style-type: none"> n/a
25	Multifamily Energy Efficiency Rebates	<ul style="list-style-type: none"> Initiative was not evaluated Net-To-Gross ratios used are consistent with the 2010 evaluation findings

Whitby Hydro would like to add that the net-to-gross ratio (NTG) for Direct Install Lighting is very favourable, and therefore greater savings can be achieved through this initiative. However, Whitby Hydro had reached saturation point for the program in 2010 and can only take advantage of this further if LDCs would be able to return to previously participating customers and offer them the extended incentive

2.5.2 Evaluation Results

Table 4: Evaluation Results

#	Initiative	NTG		Gross Savings		Net Savings		Contribution to Targets	
		Peak Demand Savings	Energy Savings	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Program-to-Date: Net Annual Peak Demand Savings (kW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh)
Consumer Program									
1	Appliance Retirement	51%	52%	62	452,530	31	226,453	30	905,508
2	Appliance Exchange	52%	52%	5	6,809	2	3,509	1	13,139
3	HVAC Incentives	61%	60%	527	968,592	319	580,361	319	2,321,442
4	Conservation Instant Coupon Booklet	113%	111%	10	174,456	12	191,285	12	765,138
5	Bi-Annual Retailer Event	113%	110%	13	232,702	15	254,227	15	1,016,909
6	Retailer Co-op	-	-	0	0	0	0	0	0
7	Residential Demand Response	-	-	0	0	0	0	0	0
8	New Construction Program	-	-	0	0	0	0	0	0
Business Program									
9	Efficiency: Equipment Replacement	73%	75%	196	1,097,043	142	824,817	142	3,299,268
10	Direct Installed Lighting	93%	93%	20	47,302	22	43,922	18	162,643
11	Existing Building Commissioning Incentive	-	-	0	0	0	0	0	0
12	New Construction and Major Renovation Incentive	-	-	0	0	0	0	0	0
13	Energy Audit	-	-	0	0	0	0	0	0
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)	n/a	n/a	143	4,235	108	4,235	0	4,235

#	Initiative	NTG		Gross Savings		Net Savings		Contribution to Targets	
		Peak Demand Savings	Energy Savings	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Program-to-Date: Net Annual Peak Demand Savings (kW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh)
Industrial Program									
16	Process & System Upgrades	-	-	0	0	0	0	0	0
17	Monitoring & Targeting	-	-	0	0	0	0	0	0
18	Energy Manager	-	-	0	0	0	0	0	0
19	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	75%	76%	78	476,617	59	364,108	59	1,456,432
20	Demand Response 3	n/a	n/a	281	13,901	237	13,901	0	13,901
Home Assistance Program									
21	Home Assistance Program	-	-	0	0	0	0	0	0
Pre-2011 Programs completed in 2011									
22	Electricity Retrofit Incentive Program	52%	52%	173	960,716	90	499,572	90	1,998,289
23	High Performance New Construction	50%	50%	15	77,441	8	38,721	8	154,882
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
27	EnWin Green Suites	-	-	0	0	0	0	0	0

Table 5: Summarized Program Results

Program	Gross Savings		Net Savings		Contribution to Targets	
	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Program-to-Date: Net Annual Peak Demand Savings (kW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh)
Residential Program Total	617	1,835,089	378	1,255,835	377	5,022,137
Commercial & Institutional Program Total	359	1,148,580	272	872,973	160	3,466,146
Industrial Program Total	359	490,518	295	378,009	59	1,470,332
Home Assistance Program Total	0	0	0	0	0	0
Pre-2011 Programs completed in 2011 Total	188	1,038,157	98	538,293	98	2,153,171
Total OPA Contracted Province-Wide CDM Programs	1,524	4,512,344	1,043	3,045,110	693	12,111,786

2.6 Additional Comments

Whitby Hydro understands that 2011 was in fact a “start-up” year for the 2011-2014 Province-Wide OPA-Contracted conservation programs. It was largely a time for LDCs to gather their bearings amidst a suite of new programs. Whitby Hydro was caught between a lengthy services procurement process and the lack of certain schedules. Many program management processes between LDCs and the OPA were not entirely developed. However, the pieces started to fall into place in the 3rd quarter of 2011.

The 4th quarter of 2011 saw an increase in marketing towards various sectors. Through these efforts, contractors became engaged with customers to calculate savings for programs and it is anticipated that some of the traction from late 2011 will result in more favourable results in 2012.

3 Combined CDM Reporting Elements

3.1 Progress Towards CDM Targets

In summation, Whitby Hydro has made slow, but steady progress towards meeting its CDM targets and finished 2011 with positive results. The inclusion of the results of pre-2011 initiatives completed in 2011, such as ERIP helped to contribute to these results. Our progress towards our demand savings target was sluggish. The delay in the residential demand response initiative contributed to this poor result. The final incremental Net Annual Peak Demand Savings totaled 1.0 MW and Net Cumulative Energy Savings of 3.0 GWh.

Table 6: Net Peak Demand Savings at the End User Level (MW)

Implementation Period	Annual (MW)			
	2011	2012	2013	2014
2011 - Verified	1.04	0.70	0.70	0.69
2012				
2013				
2014				0.00
Verified Net Annual Peak Demand Savings in 2014:				0.69
Whitby Hydro Electric Corporation 2014 Annual CDM Capacity Target:				10.9
Verified Portion of Peak Demand Savings Target Achieved (%):				6.36%
Whitby Hydro Electric Corporation Strategy, Milestone submitted for 2011				21.2%
Variance				-14.84%

Table 7: Net Energy Savings at the End-User Level (GWh)

Implementation Period	Annual (GWh)				Cumulative (GWh)
	2011	2012	2013	2014	2011-2014
2011 - Verified	3.05	3.03	3.02	3.02	12.11
2012					
2013					
2014					
Verified Net Cumulative Energy Savings 2011-2014:					12.11
Whitby Hydro Electric Corporation 2011-2014 Cumulative CDM Energy Target:					39.07
Verified Portion of Cumulative Energy Target Achieved (%):					31.00%
Whitby Hydro Electric Corporation Strategy, Milestone submitted for 2011					10.345%
Variance					20.655%

3.2 CDM Strategy Modifications

Whitby Hydro's CDM Strategy, as submitted on Nov. 1, 2010, was largely developed using the Resource Planning Tool provided by the OPA. The Tool forecasted based on a set percentage of the provincial forecast for each initiative. Whitby Hydro was provided with the total provincial forecasted estimate for Consumer participants (4,555,020) and was instructed to divide that number by the then current number of residential customers in Whitby (36,762), which created a value (0.0081) that would be inputted into each table and multiplied by the provincial forecast to determine the number of participants for each initiative. The Tool then calculated the estimated savings for each initiative based on the number of participants that had been forecasted for each initiative.

The resource planning results were not a calculation in relation to Whitby Hydro's targets, but rather provided a snapshot of a forecasted scenario. Whitby Hydro's CDM Strategy did not foresee the real delays associated with the new programs in 2011.

As per its CDM strategy, Whitby Hydro's 2011 results and the related persisting savings for the period of 2011-2014 are 9.18 MW and 43,550 MWh. The energy savings figure forecasted beyond the actual target, whereas the demand savings figure forecasted below the actual target.

The negative variance calculated in table 6, Net Peak Demand Savings, of -14.84% is largely explained by the Residential Demand Response initiative not being in market in Whitby Hydro's service territory during 2011. This would account for the reduced level of demand savings. As Whitby Hydro is currently deploying the Residential Demand Response initiative in its service territory, 2012-2014 results should improve and assist in offsetting the 2011 variance.

The positive variance calculated in table 7, Net Energy Savings, of 20.655% is largely explained by the inclusion of 18% of 2011 Incremental Energy Savings resulting from Pre-2011 Programs (ERIP) completed in 2011. This positive variance will carry through but not increase further in the following years since there will be no more further incremental savings resulting from the Pre-2011 Programs (ERIP).

No modifications to Whitby Hydro's CDM strategy are in order. Whitby Hydro will continue with its existing strategy, however, anticipates a shift as to where the demand and energy savings will be obtained throughout the programs. In 2013, Whitby Hydro may adjust its strategy once it is able to quantify and measure market penetration of the Residential Demand Response initiative and uptake in other initiatives. Whitby Hydro will pursue its annual milestones for both demand and energy savings and anticipates greater uptake in programs for 2012 and beyond.