
Peterborough Distribution Inc.



Your Partner in Energy Conservation

Conservation and Demand Management

2012 Annual Report

Submitted to:

Ontario Energy Board

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Executive Summary

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

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

In 2011, PDI contracted with the Ontario Power Authority (OPA) to deliver a portfolio of OPA-Contracted Province-Wide CDM Programs to all customer segments including residential, commercial and institutional, industrial and low income. Availability of these programs for LDC implementation was staged over the year commencing June 2011. First year activities were centered on building a foundation for full program execution over the next three years of the program term, including staffing, procurement, and program delivery.

After a slow start in 2011 due to program transition and refinement, momentum started to build in 2012. The OPA 2012 results indicate that PDI has achieved 1.5 MW of net incremental peak demand savings and 22.1 GWh of net incremental energy saving. A summary of the recognized achievements towards the CDM targets is shown below:

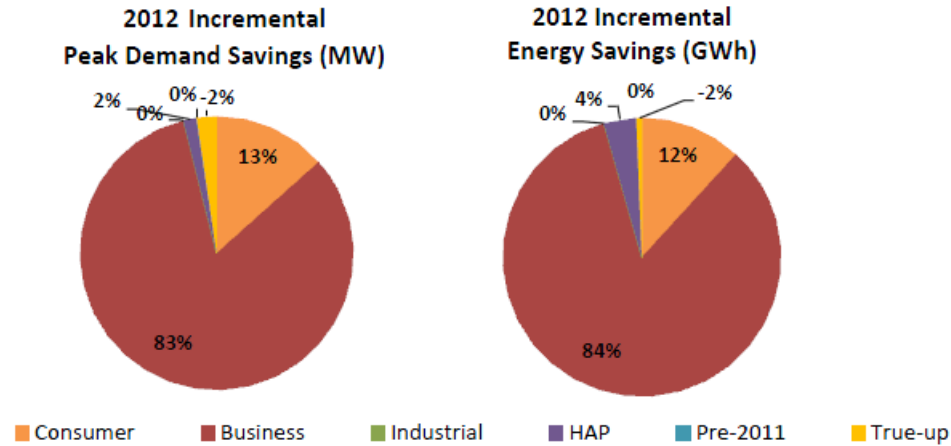
OPA-Contracted Province-Wide CDM Programs FINAL 2012 Results

LDC: Peterborough Distribution Incorporated

FINAL 2012 Progress to Targets	2012 Incremental	Program-to-Date Progress to Target (Scenario 1)	Scenario 1: % of Target Achieved	Scenario 2: % of Target Achieved
Net Annual Peak Demand Savings (MW)	1.0	1.5	16.8%	16.9%
Net Energy Savings (GWh)	4.1	22.1	57.6%	57.6%

Scenario 1 = Assumes that demand resource resources have a persistence of 1 year
 Scenario 2 = Assumes that demand response resources remain in your territory until 2014

Achievement by Sector



The results prepared for this report show that there is currently a shortfall of approximately 7.2 MW versus PDI’s 8.72 peak demand reduction target as mandated for 2014. Although, the peak demand savings are currently below target, PDI expects to achieve the total peak demand reduction target when all results are captured and recognized by the OPA. Although a significant demand reduction has been realized in 2012, due to discrepancies with the OPA over participant enrollment in *peaksaver* PLUS, the results have not been recognized in the 2012 annual report. We have requested an updated 2012 annual results report while we reconcile the previously agreed upon enrollment procedure. This adjustment will affect both summertime peak demand and the GWh savings. PDI anticipates meeting the 38.45 GWh savings target for 2014. ¹

PDI continues to work actively on participant engagement. In addition PDI has partnered with other LDCs, and has been working with the Ontario Power Authority (“OPA”) and the Electrical Distribution Association (“EDA”) to improve program effectiveness.

Due to the success of PDI’s conservation efforts in past years (2007-2010), customers have realized significant energy and cost savings from their kW and kWh reduction. However, it has been detrimental to PDI achieving their targets as planned. Much more creativity and ingenuity is required by PDI, as a

result of past performance, to come up with ways to engage consumers for further energy reductions. There is a clear indication that we are reaching market saturation in many program areas. PDI continues to achieve reasonable results considering these challenges.

Since many LDCs were not in market with programs in 2007-2010, we believe the OEB should have set targets based on an overall conservation results realized from 2007 to 2014. This would have been a far more equitable solution to achieving overall target results for LDCs that flourished with 2007-2010 program delivery.

Our partnership with another LDC and Large Use Customer within our distribution area was expected to result in a significant demand reduction. Due to unforeseen negative impacts to the customer resulting in reclassification to a Class B Global Adjustment rate if projected demand reduction was achieved, planned initiatives were put on hold. Through discussion with the Minister of Energy Chris Bentley, and assistance from local politicians, we helped facilitate amendments to the Global Adjustment classification regulations, thereby removing risk of penalty to all Large Use Customers in Ontario who participate in conservation activities. Since these changes have been made, the customer projects can proceed and savings are anticipated in 2013-2014.

In July of 2012, PDI was one of the first LDCs in market with the Home Assistance Program. From inception, PDI partnered with Enbridge Gas to deliver this program as the agent delivering the Low Income Program for Enbridge Gas was one of PDI's existing Channel Partners. We have realized the benefits of partnering with Enbridge in eliminating program duplication while increasing customer benefit and satisfaction. Through this model the delivery agent is able to service all customers regardless of their heating source with a single customer audit and reduction in related Participant Based Funding charges. Early challenges in securing a supply chain for required measures under prescribed guidelines and price caps were overcome and by the fourth quarter of 2012, the program was and continues to run successfully and efficiently.

In 2011 PDI replaced the majority of the faulty Comverge thermostats with Energate two-way communicating demand response devices. A select group of customers chose to remain on a pager based control system and for these customers, we deployed Honeywell Utility Pro devices. As stated in the 2011 Annual Report to the OEB, PDI proceeded with the re-enrollment of their water heater customers under the **peaksaver** PLUS™ program. As negotiated and approved by the Ontario Power Authority, an alternative participation process was undertaken based on our 2007 **peaksaver** enrolment process. As part of this enrollment process, a letter was sent to past participants in June of 2012 providing details of the new program, indicating they were entitled to an Energy Display as part of their enrollment, and detailed information on what to do if they chose not to participate. PDI deactivated devices for those customers who chose not to participate in the program. This was the process that was agreed upon with the OPA.

The letter indicated that delivery of the Energy Display would take place within the following 10 weeks. The delivery of these devices was delayed as a result of a product upgrade which became available and would provide the consumer with greater functionality and allow PDI to provision the device in the field without a truck roll. This upgraded Energy Display enables time and date synchronization with the AMI system ensuring the device is displaying, to the customer, the most current time of use rates.

Affirmation of these **peaksaver** PLUS contracts for water heater controlled customers, were made in 2012, however, the Ontario Power Authority (OPA) placed a hold on the enrollment file as all departments of the OPA were not informed of our agreement and agreed process. As a result of placing this file on hold, it prevented any additional file uploads to proceed for any 2012 **peaksaver** PLUS enrollments.

The OPA is well aware of the situation but after 4 months of investigation by PDI to resolve this issue, the OPA was unable to provide a response and therefore, none of our 2012 *peaksaver* PLUS participants are reflected in the 2012 results as expected.

This represents a significant portion of summertime peak demand reduction for PDI and therefore, our overall 2012 peak demand reductions are misrepresented.

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 PDI to require PDI, as a condition of its license, to achieve 38.45 GWh of energy savings and 8.72 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, PDI submitted its CDM Strategy on November 1, 2010 which provided a high level description of how PDI intended to achieve its CDM targets. An addendum to our 2011-2014 Conservation and Demand Management Strategy was submitted on June 10, 2011.

The Code also requires a distributor to file annual reports with the Board. This is the second Annual Report by PDI and has been prepared in accordance with the Code requirement covering the period from January 1, 2012 to December 31, 2012.

PDI submitted its 2011 Annual Report on September 28, 2012 which summarized the CDM activities, successes and challenges experienced by PDI for the January 1, 2011 to December 31, 2011 period. The OEB's 2011 CDM Results report identified that the delay in the full suite of CDM Programs being made available by the OPA, and the absence of some programs negatively impacted the final 2011 results for LDCs. This issue was also highlighted in Volumes I & II of the Environmental Commissioner's Report on Ontario's Annual Energy Conservation Progress.

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

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

1 Conservation Framework

1.1 Current Framework

Ontario's current CDM framework is a key step towards creating a culture of conservation in the Province. The Government's Directive to the OEB to establish CDM targets that would be met by electricity distributors recognizes the importance of CDM for both electricity customers and the electricity system. CDM helps customers manage rising energy costs, support the provincial integrated supply plan, as well as address local distribution and transmission supply constraints. The current framework was intended to enable customers to benefit from a suite of both Board-Approved and OPA Province-Wide programs and be a portfolio that would meet both broad and specific customer needs.

The state of Board-Approved programs and the current suite of Province-Wide OPA programs have limited CDM offerings to customers. This has produced limited savings and has restricted the associated opportunity for LDCs to meet their targets. The process to introduce changes to current program Initiatives or to pilot new Initiatives has been challenging, taking considerable cost and effort. This has resulted in limited benefit to customers and CDM savings.

Moving forward, the future CDM framework should address the challenges of the current framework and build on its strengths. Currently overbuilt governance and excessive legal requirements result in a slow, bureaucratic process, with a burdensome administrative process. There is a misalignment of control and risk as LDCs have the accountability to achieve their respective CDM targets as a condition of distribution license, but the authority for design and funding are controlled substantially by the OPA.

The Ministerial Directive provides continuity of the conservation programs and associated compensation for the participants; however the subsequent savings would not be attributed to any LDC target and in effect would be 'lost' due to misalignment of the current CDM framework and LDC Targets. In addition, the establishment of defined administrative funding for 2015 is required to avoid a "stop and start" process.

1.2 Future Framework

LDCs are supportive of the governments renewed commitment for conservation and demand management in Ontario. LDCs are committed to working with the government and other stakeholders to develop the next framework for CDM in the Province.

Long-term commitment for CDM funding and a confirmation of the role of the LDC are needed. This will allow LDCs to maintain current program infrastructure including LDC staff and third party contracts through 2015.

Providing clarity and continuity into the next framework is critical for all customers. To ensure a seamless and smooth transition that maintains and builds upon CDM momentum beyond 2014, a new CDM framework should be in place well before the expiry of the current one. Work involving key parties including LDCs, government, customer groups and OEB should start in 2013 to allow for a new framework to be in place by early 2014. The remainder of 2014 could be utilized for program development and design, economic analysis, procurement and launching of new CDM program initiatives.

2 Board-Approved CDM Programs

2.1 Introduction

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

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

2.2 TOU Pricing

2.2.1 BACKGROUND

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

In accordance with 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. PDI will report these results upon receipt from the OPA.

The OPA has retained the Brattle Group as evaluation contractors and will be working with an expert panel convened to provide advice on methodology, data collection, models, etc. The initial evaluations are being conducted with 5 LDCs – Hydro One, THESL, Ottawa Hydro, Thunder Bay and Newmarket. Preliminary saving results range from 1.3% and 4.5% of peak demand but no report will be provided until further analysis is done and the most accurate method of capturing savings is confirmed. The OPA will be providing all LDCs with verified TOU Impact in 2015, as part of the 2014 Final Report.

1.2.2. TOU PROGRAM DESCRIPTION

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

Initiative Frequency: Year-Round

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

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

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

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

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

Initiative Activities/Progress:

PDI began billing Time-of-Use rates in October 2005 as part of a pilot program to promote load-control. Roughly 200 customers participated in the pilot program. In July 2012, PDI implemented TOU billing of residential and general service under 50 kW accounts as required by the Ontario Energy Board. At December 31st, 2012, 99.8% of RPP customers were on TOU billing.

2.3 Peterborough Distribution Inc. Application with the OEB

As 2012 was the first full year where the majority of programs were in market, PDI did not feel they were able to commit resources to fully examine additional new concepts. Knowing that larger LDCs with far greater resources were unsuccessful in obtaining approval for their applications had an impact on this decision.

3 OPA-Contracted Province-Wide Programs

3.1 Introduction

Effective February 3, 2011, PDI entered into an agreement with the OPA to deliver CDM programs extending from January 1, 2011 to December 31, 2014, which are listed below. Program details are included in Appendix A. In addition, results include projects started pre 2011 which were completed in 2011:

Initiative	Schedule	Date schedule posted	Customer Class	LDC In-Market Date
Residential Program				
Appliance Retirement	Schedule B-1, Exhibit D	Jan 26, 2011	All residential rate classes	June, 2011
Appliance Exchange	Schedule B-1, Exhibit E	Jan 26, 2011	All residential rate classes	June, 2011
HVAC Incentives	Schedule B-1, Exhibit B	Jan 26, 2011	All residential rate classes	June, 2011
Conservation Instant Coupon Booklet	Schedule B-1, Exhibit A	Jan 26, 2011	All residential rate classes	June, 2011
Bi-Annual Retailer Event	Schedule B-1, Exhibit C	Jan 26, 2011	All residential rate classes	August, 2012
Retailer Co-op	n/a	n/a	All residential rate classes	Not in Market
Residential Demand Response	Schedule B-3	Aug 22, 2011	All general service classes	June, 2012
New Construction Program	Schedule B-2	Jan 26, 2011	All residential rate classes	September, 2011

Commercial & Institutional Program				
Efficiency: Equipment Replacement	Schedule C-2	Jan 26, 2011	All general service classes	June, 2011
Direct Install Lighting	Schedule C-3	Jan 26, 2011	General Service < 50 kW	June, 2011
Existing Building Commissioning Incentive	Schedule C-6	Feb 2011	All general service classes	June, 2011
New Construction and Major Renovation Initiative	Schedule C-4	Feb 2011	All general service classes	June, 2011
Energy Audit	Schedule C-1	Jan 26, 2011	All general service classes	
Commercial Demand Response (part of the Residential program schedule)	Schedule B-3	Jan 26, 2011	All general service classes	June, 2012
Demand Response 3 (part of the Industrial program schedule)	Schedule D-6	May 31, 2011	General Service 50 kW & above	June, 2011
Industrial Program				
Process & System Upgrades	Schedule D-1	May 31, 2011	General Service 50 kW & above	June, 2011
Monitoring & Targeting	Schedule D-2	May 31, 2011	General Service 50 kW & above	June, 2011
Energy Manager	Schedule D-3	May 31, 2011	General Service 50 kW & above	May, 2012
Key Account Manager ("KAM")	Schedule D-4	May 31, 2011	General Service 50 kW & above	Not in Market
Efficiency: Equipment Replacement Incentive (part of the C&I	Schedule C-2	May 31, 2011	General Service 50 kW & above	June, 2012

program schedule)				
Demand Response 3	Schedule D-6	May 31, 2011	General Service 50 kW & above	June, 2012
Home Assistance Program				
Home Assistance Program	Schedule E-1	May 9, 2011	All residential rate classes	June, 2012

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

Pre-2011 Programs			
Electricity Retrofit Incentive Program	n/a	n/a	All general service classes
High Performance New Construction	n/a	n/a	All general service classes

As per the table below, several program initiatives are no longer available to customer or had not been launched in 2012.

Initiative Not in Market in 2012	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.	Never launched and removed from Schedule in Q2, 2013.
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.	Never launched and removed from Schedule in Q2, 2013.
Aboriginal Conservation Program	First Nations programs are delivered by the OPA and results are attributed to LDCs for reporting.	Launched in 2013 by OPA.
Home Energy Audit Tool	This is a provincial online audit tool to engage customers in conservation and help drive customer participation to CDM programs.	Never launched and removed from Schedule in Q2, 2013.
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 2011/2012. As per the OPA there no plans to launch this Initiative in 2013.
Demand Response 1 (“DR1”)	This initiative allows distribution customers to voluntarily reduce electricity demand during certain periods of the year pursuant to the DR 1 contract. The initiative provides DR payment for service for the actual electricity reduction provided during a demand response event.	No customer uptake for this initiative. As a result this Initiative was removed from the Schedule in Q4, 2012.
Industrial Program		
DR1	As above	No customer uptake for this initiative. Removed in Q4, 2012.

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

3.2 Program Descriptions

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

Additionally, PDI has developed a microsite to promote all CDM programs. PDI has found this to be valuable in allowing us to control, customize and update information to better serve our individual consumers needs.

3.2.1 RESIDENTIAL PROGRAMS

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

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

Discussion: The inclusion of LED technology into the Bi-annual Retailers events in 2012 and the annual coupons in 2013, as well as some LDC custom coded coupons, has had a positive effect on consumer engagement. The revamped *peaksaver* PLUS program is the main Residential Initiative which drives savings for LDCs and has been well received by consumers eager to utilize an Energy Display to help manage their energy consumption.

The Residential Program Portfolio is predominately a carryover of Initiatives from previous programs. It is mostly driven by retailers and contractors who may not have fully delivered what was anticipated. Three expected new initiatives were never launched and subsequently removed from schedule in 2013 with no new additions. Delays in communication with regards to Initiative offerings and results reporting have hampered LDCs abilities to engage customers and promote participation. Provincial wide advertising has provided limited value due to inconsistency and non-specific messaging.

Work to revitalize and increase the effectiveness and breadth of the Initiatives through the Residential Program needs to be a high priority. There are opportunities within the Residential marketplace that need to be identified, developed and offered to customers. A revised home audit and other Initiatives which could engage an average residential customer could be considered. Increased control by the LDCs such as 100% attributable coupons for LDCs and/or LDC hosted exchange events may present an opportunity for improved saving.

3.2.1.1 Appliance Retirement Initiative (Exhibit D)

Initiative Activities/Progress: PDI continues to market this initiative in hopes of obtaining the last remaining eligible appliances. The initiative has been promoted in our quarterly 'Connections' newsletter circulated to all customers, as well as on our saveONenergy microsite.

As the OPA has announced the conclusion of this initiative at the end of 2014, they too have realized that this program has reached saturation. We are still finding reasonable numbers under the circumstances

Additional Comments:

- With the increase in appliance age to 20 years in 2013, many LDCs increased marketing and outreach throughout 2012 in an effort to increase uptake and achieve savings.
- Due to the duration of the program, and the revised eligibility requirements to a minimum of 20 years old, this Initiative appears to have reached market saturation and has been under consideration for removal from the Portfolio.
- Rather than strictly remove this Initiative from the schedules, the OPA and LDCs could review what opportunities there are to include other measures such as stoves, dishwashers, washers and dryers. The framework of this Initiative may be a suitable foundation for a more holistic residential appliance retirement program. As such, the Residential portfolio could be straightened through program evolution rather than weakened through diminished program offerings.

- As results are very responsive to province wide advertising OPA provincial marketing should continue to play a key role.
- The OPA and LDCs can continue working to establish partnerships with Independent retailers and municipalities.

3.2.1.2 *Appliance Exchange Initiative (Exhibit E)*

Initiative Activities/Progress: Due to limited opportunities presented by retailers, PDI has not directly participated in appliance exchange events other than in its promotion through social media.

Additional Comments:

- This Initiative, eligible measures and incentive amounts are influenced by the retail partner with no direct involvement from the LDCs. The restrictive, limited and sometimes non-participation of local stores can diminish the savings potential for this Initiative. The promotion by the retailers of these events has been limited and low key (small, one time ad buried in regular store flyer). Perhaps not lucrative enough for retailer or not enough support from retailer head office. ie. Province wide radio advertising.
- To date there has only been one retailer participant in the Appliance Exchange Initiative. The Fall events have not had retailer participation, therefore savings budgeted by the LDCs have not materialized.
- Evaluation, Measurement, and Verification (EMV) results indicated that the value of savings for retired room AC has dropped resulting in the retail participant not accepting window a/c's during the Spring 2013 event.
- Notification regarding retailer participation and eligible measures continues to be delayed. Improved communications will aid in appropriate resource allocation and marketing of the Initiative.
- This Initiative may benefit from the disengagement of the retailer and allowing LDCs to conduct these events, possibly as part of a larger community engagement effort, with the backing of ARCA for appliance removal.
- The initiative appears to require more promotion from retailers and LDCs.

3.2.1.3 *HVAC Incentives Initiative (Exhibit B)*

Initiative Activities/Progress: PDI continues to market this program and benefits from continued participation outside the challenges that surround this initiative as mentioned below. This program was represented during our in store events and has been promoted in our quarterly 'Connections' newsletter circulated to all customers, as well as on our saveONenergy microsite. We have anecdotal information based on results and customer feedback that local HVAC contractors are promoting this program. However, we also do feel that some contractors are providing incentive discounts directly to customers and not through via the OPA.

Additional Comments:

- Incentive levels appear to be insufficient to prompt Participants to upgrade HVAC equipment prior to end of useful life. It is hoped that the introduction of an Air Miles incentive in 2013 may help with this.
- This Initiative is contractor driven with LDCs responsible for marketing efforts to customers. More engagement with the HVAC contractor channel should be undertaken to drive a higher proportion of furnace and CAC sales to eligible units.
- Channel partners require timeliness of the Rebate process to maintain a positive relationship between consumers, contractors, the OPA, and the participating LDC. Due to a contracting delay no applications were processed from approximately the end of October 2012 to February 2013.
- LDC HVAC reports have been delayed and are not as complete and accurate as are required by LDCs to make adjustments to their marketing strategies.
- In an effort to build capacity, mandatory training has been instituted for all participating HVAC contractors. This could present too much of a barrier for participation for some contractors as the application process already presents a restriction to contractor sales. It has been noted that there are approximately 4500-5000 HVAC contractors in the Province, however only 1500 are participating in program.
- There are cases where non-participating 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 should be attributed to the appropriate LDC.

3.2.1.4 Conservation Instant Coupon Initiative (Exhibit A)

Initiative Activities/Progress: PDI continues to market this initiative through Newspaper advertising, in our quarterly 'Connections' newsletter circulated to all customers, as well as on our saveONenergy microsite and social media. Plans for 2013 include emailing coupons directly to consumers.

Additional Comments:

- This Initiative was ineffective for most of 2012 as the Instant coupons (annual) were not available to consumers until September 2012. As such, savings budgeted by LDCs did not materialize.
- The timeframe for retailer submission of redeemed coupons vary from retailer to retailer and in some cases has been lengthy. The delays and incomplete results reporting limits the ability to react and respond to Initiative performance or changes in consumer behavior. This also resulted in the delayed launch of the Initiative in 2012.
- Coupon booklets were not printed and mailed out in 2012. As such, Coupons were not widely available to consumers without the ability to download and print them.
- Without Provincial coupon distribution, and delay in Initiative launch, consumers may not have been aware of the online coupons. This Initiative could benefit from provincial marketing as a substitute to distribution.
- LDCs should be able to custom code all coupons to provide 100% allocation and funding be reallocated from Provincial coupon distribution to push specific coupons based on localized needs.
- The product list could be distinctive from the Bi-Annual Retailer Event Initiative in order to gain more consumer interest and uptake.
- Program evolution, including new products and review of incentive pricing for the coupon Initiatives, should be a regular activity to ensure continued consumer interest.

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

Initiative Activities/Progress: PDI attended most retailer events in our area for 2012 but found customer engagement to be limited and some retailer enthusiasm equally discouraging. There clearly appeared to be a lack of communication from management to staff regarding event details, product knowledge and LDC participation. PDI staff attending events, in most cases, were treated as a barrier rather than a benefit to consumer participation by retailers. This initiative has been promoted in our quarterly 'Connections' newsletter circulated to all customers, as well as on our saveONenergy microsite and through social media.

Additional Comments:

- This Initiative is strongly influenced by the retail participants and has no direct involvement from the LDCs.
- The Product list has changed very little over the past four years.

- Limited engagement of local retailers can restrict the savings potential for this Initiative. Additionally, interest from retailers in supporting LDC in store partnership has been less than positive. LDC experience would indicate that retailers are not enthusiastic about having LDC in their stores and do so as an accommodation rather than a deemed benefit.
- Program evolution, including new products and review of incentive pricing for the coupon Initiatives, must be a regular activity to ensure continued consumer interest.
- The Product list could be distinctive from the Conservation Instant Coupon Initiative in order to gain more consumer interest and uptake.
- A review conducted by the Residential Working Group in Q4 2011 identified three areas of need for Initiative evolution: 1) introduction of product focused marketing; 2) enhanced product selection 3) improved training for retailers as retail staff tend not to be knowledgeable regarding the products or promotion. and 4) Stress the need for retailer management communication to their staff regarding the value of the events.
- LDCs should be able to custom code all coupons to provide 100% allocation and push specific coupons based on localized needs.
- Communications regarding retailer participation continues to be delayed. Improved communications will aid in appropriate resource allocation and marketing of the Initiative.
- This Initiative may benefit from a more exclusive relationship with a retailer appropriate to the program. There should be a value proposition for both the retailer and LDC.

3.2.1.6 *Retailer Co-op*

Initiative Activities/Progress: PDI did not engage in this initiative.

Additional Comments:

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

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

Initiative Activities/Progress: PDI initially had full intentions of participating and promoting this initiative however, with the delay of, and ongoing changes, found a continued lack of interest from builders due to the meager incentives. This initiative has proven not to be financially attractive for the effort required by the builder. This initiative has been promoted on our saveONenergy microsite as well as represented at a local prosperity trade show through one of our channel partners, and Chamber of Commerce events. We have plans to speak at an upcoming Home Builders Association event.

Additional Comments:

- This Initiative provides incentives to home builders for incorporating energy efficiency into their buildings. To support this, LDCs need to provide education to the consumers regarding the importance of choosing the energy efficient builder upgrade options without an immediate benefit to the consumer.
- Following limited participation in 2011, the application process was revisited in 2012 to streamline administration in response to builder feedback. Participation levels are expected to grow but there will be a lag to when results materialize as homes pre-approved could take a year or more to be completed.
- Administrative requirements, in particular individual home modeling, must align with perceived stakeholder payback. As per the Electricity Distributors Association (“EDA”) Working Groups, changes were being processed through change management in 2012 and not released until December of 2012. As a result of the lengthy change management process and changes introduced not being adequate to engage builders, non-participation by home builders has continued into 2013.

3.2.1.8 Residential Demand Response Program (Schedule B-3)

Initiative Activities/Progress: We have successfully replaced approximately 450 faulty Converge thermostats, replacing them with the new Energate two-way technology. This replacement continues in 2013 to reach approximately 900 prior *peaksaver* participants. We have re-enrolled approximately 8,800 prior participants with water heater controls through the process originally agreed upon by the OPA. New customers continue to enroll their electric water heaters. Re-enrolling prior participants was our primary focus in 2012 before marketing to net new customers. We did enroll approximately 90 new participants in 2012. As indicated in our Executive Summary, the attributed savings have not yet been reflected in our 2012 results.

Marketing initiatives have included local Newspaper and Digital Advertising, promotional handouts at local events and parades, regular inclusion in our quarterly ‘Connections’ newsletter circulated to all customers, as well as on our saveONenergy microsite. Direct Mail to past participants and information

updates about online portal opportunities to engage customers in 2 way opportunities including messages sent directly to customer thermostats with conservation messaging.

Additional Comments:

- The schedule for *peaksaver* Plus was posted in August 2011, but this did not provide adequate time for product procurement for 2011, and part of 2012. Where some LDCs discovered that Energy Displays would not communicate with certain installed smart meter technologies, PDI found multiple solutions for Energy Displays to cover customer scenario's and therefore were fully in market by June, 2012. However, PDI could have been in market sooner had the OPA approved the Energate two-way technology soon after the *peaksaver* PLUS schedule was released. It should be noted that due to the persistence of PDI and Energate to have the technology introduced into the *peaksaver* PLUS program, two-way HAN's are now available to all LDCs. PDI was the only LDC to deploy this advanced technology in 2012.
- Smart Meters installed by many LDCs do not have the capability to communicate directly to an Energy Display as the Smart Meter Entity (SME) base requirements for meter installations did not allow for advanced communication capabilities even though they were available at the time. These base requirements have still not been advanced to enable technology readily available in the market.
- PDI was able to deploy new technology as part of the *peaksaver* PLUS program. Introduction of new technology requires incentives for its development and implementation. Lead times to position new technology can be longer however, it has not been insurmountable.
- The variable funding associated with the *peaksaver* PLUS program is not sufficient. The funding model was developed with the intent that a lower cost one-way paging technology would be deployed. The recommendation from the Residential Demand Response working group was to deploy a more costly two-way communicating device (Home Area Network). Some technology providers (Rogers) are introducing Home Area Networks to the market which includes smart thermostats and other controls within the home. Unless the OPA provides adequate funding to deploy the most current technology, the *peaksaver* PLUS program will lose its viability and market share to other emerging and commercially available offers. Should this new technology deployed by third party vendors gain traction in the marketplace, *peaksaver* PLUS and available critical load control or DSM will disappear.
- Greater control by the LDC to procure and manage head end systems without using a provincial aggregator will allow integration of emerging technologies at a much lower cost. Having local control will allow LDC a better opportunity to explore enhanced load control opportunities and allow daily time of use load shifting.
- This is the main Initiative within the Residential portfolio that drives summer peak demand savings for LDCs.
- Given the different LDCs smart meter environments, and willingness to evolve the program utilizing new technology, each LDC offering can vary. As such, greater program flexibility is required to address unique LDC needs.
- Province wide marketing needs to be sensitive to the variations of each LDCs unique delivery model and provide solid, consistent messaging.

- There is currently no avenue for participants to obtain an IHD unless they have eligible demand response devices within their home. These customers will not gain energy saving benefits that IHD's provide to *peaksaver* PLUS participants, nor will the LDC reap the resulting savings.

3.2.2 COMMERCIAL AND INSTITUTIONAL PROGRAM

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

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

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

Discussion:

Throughout 2011 and 2012 the Commercial and Institutional (C&I) Working Group strived to enhance the existing C&I programs and rectify identified program and system deficiencies. This has proven to be a challenging undertaking, normally taking months to complete sometimes relatively minor changes due to the current CDM framework. Overbuilt governance, numerous initiative requirements, complex program structure and lengthy change management have restricted growth without providing the anticipated improved Measurement and Verification results. In addition, Evaluation, Measurement and Verification (EM&V) has not yet achieved transparency. LDCs are held accountable for these results yet are mostly completely removed from the process.

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

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

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

PDI will consider a tailored expansion of Commercial and Institutional programs to benefit our local consumers.

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

Initiative Activities/Progress: We are encouraged by the number of projects that have been submitted to date. Although the project numbers are high, the resulting demand and energy savings attributed remain weak as the majority of projects are small and focus mainly on lighting retrofits. PDI continues to explore alternative ways to engage participation in order to obtain deeper savings measures. To date, we have promoted ERII through a participant showcase and seminar along with numerous case studies and promotional ads in newspapers, magazines, press releases and direct mail. We showcased a local retirement home in a conservation segment of our local television news program. Also, in addition to our saveONenergy microsite and through social media, online advertising through local newspaper web banners.

Additional Comments:

- It appears that the marketplace largely understands the programs now and a large proportion of LDC savings are attributed to ERII.
- The centralized process review used for 2012 project payment has been streamlined by the OPA and payments for projects were greatly improved, faster and more consistent compared to 2011.
- This Initiative is limited by the state of the economy and the ability of commercial/institutional facility to complete capital upgrades.
- A number of customer facing issues in CRM (the OPA centralized application system) have been resolved; however key LDC administrative back office processing issues continue to be a challenge.
- Applicants and Applicant Representatives continue to express dissatisfaction and difficulty with the online application system. This issue has been addressed by LDCs through application training workshops, Key Account Managers, channel partner/contractor training and LDC staff acting as customer Application Representatives. Although this has been an effective method of overcoming these issues and encouraging submissions, it also reflects on the complexity and time consuming nature of the application process. As such, Applicant Representatives continue to influence the majority of applications submitted. Continued development of Channel Partners is essential to program success.
- Lighting is still the most popular measure. Other market sectors are not as engaged yet, specifically the mechanical world. There continues to be significant barriers to program participation from HVAC (Unitary AC) and compressed air channel partners
- Prescriptive and Engineered worksheets provide a much needed simplified application process for customers. However, the eligible measures need to be updated and expanded in both technology and incentive amounts to address changing product costs and evolution of the marketplace.

- Expanding the capacity of the engineered applications can offer customers an opportunity to maximize savings and incentives. Recognizing this, Toronto Hydro and London Hydro worked together to develop and provide the OPA with compressed air engineered worksheets for inclusion in the Initiative in Q3, 2012. To date, these have not been accepted and provided to LDCs for use.
- An identified deficiency in the various renditions of the equipment replacement is the “hard stop” of the program as of a specific date. Without a streamlined transition into a new program, many customers become frustrated and refused to participate. LDCs struggle to repair customer and channel partner relationships and gain momentum in the market place once again.
- While the Ministerial Directive provides continuity of the conservation programs for the participant, unclear direction on LDC administrative funding could result in many LDCs ‘ramping down’ programs in 2015. The establishment of defined administrative funding for 2015 is required to avoid a “stop and start” process.

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

Initiative Activities/Progress: PDI continues to directly contact and follow up with those qualifying customers who have not yet participated in DIL. Advertising and circulation of case studies confirming the no cost benefits of this initiative seem not to entice those not yet convinced. The announcement of the increase in incentives has not resulted in the increase in participation as expected. There have been some prior participants disgruntled after being informed that they were not eligible for the additional \$500 incentive.

To date, we have promoted DIL through a participant showcase and seminar, a speaking engagement at a local family business association, and a television interview, along with numerous case studies and promotional ads in newspapers, magazines, press releases and direct mail. It has been promoted through a conservation segment of our local television news program. Also, in addition to our saveONenergy microsite and through social media, online advertising through local newspaper web banners and a direct mailing to local contractors was conducted.

Additional Comments:

- Successful execution of the previous rendition of this Initiative has resulted in diminished potential for the 2011-2014 Initiative in some LDCs territories. PDI is an example of such LDC.
- The inclusion of a standard incentive for additional measures increased project size and drove higher energy and demand savings results in some situations.
- Electrical contractor’s margins have been reduced due to no labour rate increase, increase cost of materials, greater distances between retrofits, more door knocking required before a successful sale and no funding for scissor lifts needed for ‘high bay’ lighting retrofits. This has led to a reduction in vendor channel participation in some regions.

- Ambiguity with regard to eligibility resulted in large lists of customers rejected following installation due to perceived ineligibility. Due to this, some LDCs were forced to carry considerable financial burden while this was worked through.
- The eligibility requirements have now been revamped and expanded however there has been limited communication and documentation of this to the marketplace.
- Currently LDCs are unable to offer these standard incentives to prior participants. The ability to return to prior participants and offer a standard incentive on the remaining measures has potential to provide additional energy and demand savings.

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

Initiative Activities/Progress: This program was promoted as a package with other C&I programs to Commercial Customers but targeted market was difficult to discern and interest was lacking. We have promoted this program through a participant showcase and seminar in addition to our saveONenergy microsite.

Additional Comments:

- Initiative name does not properly describe the Initiative.
- There was minimal participation for this Initiative. It is suspected that the lack of participation in the program is a result of the Initiative being limited to space cooling and a limited window of opportunity (cooling season) for participation.
- Participation is mainly channel partner driven, however the particulars of the Initiative have presented a barrier too significant for many channel partners to consider participating.
- The customer expectation is that the program be expanded to include a broader range of measures for a more holistic approach to building recommissioning and chilled water systems used for other purposes should be made eligible and considered through Change Management.
- This initiative should be reviewed for incentive alignment with ERII, as currently a participant will not receive an incentive if the overall payback is less than 2 years.

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

Initiative Activities/Progress: In 2012, PDI partnered with Enbridge Gas who were running a concurrent program in our distribution area. We benefited from their expertise and potential leads however, participation requires very long timelines and that contact be made well in advance of design and construction. PDI and Enbridge are working with several potential prospects currently in their pipeline.

In addition to Enbridge promotional activities and lead funnel system, this program was promoted by PDI as a package with other C&I programs to Commercial Customers and through a participant showcase and seminar in addition to our saveONenergy microsite.

Additional Comments

- There is typically a long sales cycle for these projects, and then a long project development cycle. As the program did not launch until mid-2011 and had limited participation, results did not appear in 2011. Minimum results are expected to appear in 2012. The majority of the results are expected in 2013-2014, with a reduced benefit to cumulative energy savings targets.
- With the Ministerial Directive facilities with a completion date near the end of 2014 currently have some security that they will be compensated for choosing efficient measures.
- Participants estimated completion dates tend to be inaccurate and are usually 6 months longer. This could result in diminished savings towards target when facilities are not substantially completed by December 31, 2014.
- The custom application process requires considerable customer support and skilled LDC staff. As there has been no defined administrative funding beyond 2014, many LDCs are unsure how these project applications will be finalized.
- The effort required to participate through the custom stream exceeds the value of the incentive for many customers.
- This Initiative has a very low Net-to-Gross ratio, which results in half the proposed target savings being 'lost'.

3.2.2.5 Energy Audit Initiative

Initiative Activities/Progress: PDI has partnered with Cambridge North Dumfries to share an EEM who is undertaking a significant sized project with one of our Large Users. The EEM is being utilized by the same customer in the Cambridge Distribution area. Savings may have been realized in 2012, however due to Class A Global Adjustment issue, progress slowed on the project until the customer and EEM were assured they would not be financially harmed by reducing their peak demand and losing their Class A designation. Savings resulting from Energy Audits conducted will be reflected in 2013.

This program was promoted as a package with other C&I programs to Commercial Customers. We have promoted this program through a participant showcase and seminar in addition to our saveONenergy microsite. Qualified participants are limited in our distribution area.

Additional Comments

- Customer uptake was limited in 2011, however improved throughout 2012 especially with the new audit component for one system (i.e. compressed air).
- The energy audit Initiative is considered an ‘enabling’ Initiative and ‘feeds into’ other saveONenergy Initiatives. There are no savings attributed to LDC targets from an audit.
- Audit reports from consultants vary considerably and in some cases, while they adhere to the Initiative requirements, do not provide value for the Participant. A standard template with specific energy saving calculation requirements should be considered.
- Customers look to the LDCs to recommend audit companies. A centralized prequalified list provided by the OPA may be beneficial.
- Participants are limited to one energy audit which restricts enabling and direction to the other Initiatives. This Initiative should be evaluated for additional customer participation when presented with a new scope of work.

3.2.3 INDUSTRIAL PROGRAM

Description: Large facilities are discovering the benefits of energy efficiency through the Industrial Programs which are designed to help identify and promote energy saving opportunities. It includes financial incentives and technical expertise to help organizations modernize systems for enhanced productivity and product quality. This allows facilities to take control of their energy usage and facilitate their long-term competitive energy advantage.

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

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

Discussion:

The Industrial Program Portfolio has been able to provide valuable resources to large facilities such as Energy Managers and enabling Engineering Studies. The Engineering Studies in particular provide a unique opportunity for a customer to complete a comprehensive analysis of an energy intensive process that they would not otherwise be able to undertake. Energy Managers provide customers with a skilled individual whose only role is to assist them with conservation initiatives. To date these Energy Managers have played a key role in customer participation.

Due to the size, scope and long lead time of these Initiatives and associated projects, the Ministerial Directive provides some security for the continuation of the conservation programs and associated compensation for the participant; however the subsequent savings would not be attributed to any LDC target.

Extensive legal documents, complex program structure and lengthy change management have restricted the change and growth of this Portfolio. While the expedited change management has benefited the Commercial Portfolio, the Industrial Portfolio has not seen the same results due to the narrow scope of the process. For 2013, a change to the threshold for small capital projects and a new small capital project agreement are expected to improve the number of projects and savings achieved within PSUI. Likewise, a decision to proceed with natural gas load displacement generation projects will also increase uptake although results may not be counted towards LDC targets due to in-service dates beyond 2014. Looking ahead there is minimal opportunity to make additional valuable changes to the current program suite and have these changes reflected in LDC 2014 results.

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

Initiative Activities/Progress: PDI has partnered with Cambridge North Dumfries to share an EEM who is undertaking a significant sized project with one of our Large Users. The EEM is being utilized by the same customer in the Cambridge Distribution area. Savings may have been realized in 2012, however due to Class A Global Adjustment issue, progress slowed on the project until the customer and EEM were assured they would not be financially harmed by reducing their peak demand and losing their Class A designation. Savings resulting from PSUI will be reflected in 2013.

This program was promoted at the participant showcase and seminar in addition to our saveONenergy microsite. Qualified participants are limited in our distribution area.

Additional Comments:

- Approximately 100 engineering study applications have been submitted. This is a strong indication that there is the potential for large projects with corresponding energy savings. Most of these studies have been initiated through the Energy Manager and KAM resources.
- This Initiative is limited by the state of the economy and the ability of a facility to complete large capital upgrades.
- There is typically a long sales cycle for these projects, and then a long project development cycle. As such, limited results are expected to be generated in 2012. The majority of the results are expected in 2013-2014, with a much reduced benefit to cumulative energy savings targets.
- Delays with processing funding payments have caused delayed payments to Participants beyond contract requirements. In some cases, LDCs have developed a separate side agreement between the LDC and Participant acknowledging that the Participant cannot be paid until the funds are received.

- The contract required for PSUI is a lengthy and complicated document. A key to making PSUI successful is a new agreement for ‘small’ projects which is a simplified with less onerous conditions for the customer.
- To partially address this, changes were made to the ERII Initiative which allowed smaller projects to be directed to the Commercial stream. . Most industrial projects to-date have been submitted as ERII projects due to less onerous contract and M&V requirements.
- A business case was submitted by the Industrial Working Group in July 2012 which would change the upper limit for a small project from 700 MWh to 1 million dollars in incentives. This would allow more projects to be eligible for the new small capital project agreement and increase participant uptake, while still protecting the ratepayer.
- While there is considerable customer interest in on-site Load Displacement (Co-Generation) projects, in 2012 the OPA was accepting waste heat/waste fuel projects only. Natural gas generation projects were on hold awaiting a decision on whether PSUI will fund these types of projects. In June 2013, a decision was made to allow natural gas load displacement generation projects to proceed under PSUI. It is expected that a number of projects will proceed although results may not be counted towards LDC targets due to in-service dates beyond 2014.

3.2.3.2 Monitoring & Targeting Initiative (Schedule D-2)

Initiative Activities/Progress: PDI has not received any applications for 2012 although the Embedded Energy Manager for a large facility has done significant preparation in plans to proceed with a project for 2013/2014.

This program was promoted at the participant showcase and seminar in addition to our saveONenergy microsite. Qualified participants are limited in our distribution area.

Additional Comments:

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

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

Initiative Activities/Progress: PDI has partnered with Cambridge North Dumfries to share an EEM who is undertaking a significant sized project with one of our Large User facilities. The EEM is being utilized by the same customer in the Cambridge Distribution area. Although some savings have been realized for 2012, progress slowed on new project implementation due to the Class A Global Adjustment issue. With the June, 2013 issuance of Ontario Regulation 203/13 amending O.Reg 429/04 under the Electricity Act, the customer and EEM were assured they would not be financially harmed by reducing their peak demand and losing their Class A designation. The EEM contract has been renewed for 2013 and we anticipate additional savings will be realized in 2013 and beyond based on the preliminary work completed in 2012.

Additional Comments:

- The Energy Managers have proven to be a popular and useful resource for larger customers. There are approximately 70 Embedded Energy Managers (EEMs) and 25 Roving Energy Managers (REMs) being utilized by customers across the province.
- LDCs that are too small to qualify for their own REM are teaming up with other utilities to hire a REM to be shared by the group of utilities.
- At the beginning, it took longer than expected to set up the energy manager application process and unclear communication resulted in marketing and implementation challenges for many LDCs.
- Some LDCs and Customers are reporting difficulties in hiring capable Roving and Embedded Energy Managers (REM/EEM), in some instances taking up to 7 months to have a resource in place.
- New energy managers require training, time to familiarize with facilities and staff and require time to establish “credibility”. Energy Managers started filling their pipeline with projects but few projects were implemented in 2012.
- Delays with processing EEM payments causing LDCs to delay payments to Participants beyond contract requirements.
- There have been a number of studies identified by Energy Managers and they have been able to build capacity and deliver energy saving projects within their respective large commercial/industrial facilities.
- Requirement that 30% of target must come from Non-incented projects is identified as an issue for most REMs, although final targets not due to 2013. The Industrial working group has proposed removal of this requirement for REM’s as they are not at a customer facility on a full time basis and are unable to discover the non-incented savings.
- A decision on extending funding for EM’s is required in 2013 for this important Initiative to continue beyond 2014. Failing this, these expert resources will be lost to full-time employment elsewhere unless they are hired as full time employees by the LDC which in most cases is not economically viable.

3.2.3.4 Key Account Manager (KAM) (Schedule D-4)

Initiative Activities/Progress: The timelines presented to acquire a KAM and with limited large industrial potential within our distribution area (EEM already in place with one of our two large users), PDI could not find the resources or potential to share a KAM with another LDC. As of the date of this submission, and with the changes to funding model pending, the remaining time available to 2014, does not allow PDI to explore this avenue.

Additional Comments

- Customers appreciate dealing with a single contact to interface with an LDC, a resource that has both the technical and business background who can communicate easily with the customer and the LDC.
- Finding this type of skill set has been difficult. In addition, the short-term contract and associated energy targets discourage some skilled applicants resulting in longer lead times to acquire the right resource.
- This resource has been found by some LDCs to be of limited value due to the part-time nature of the position and limited funding. In addition, the position role has been too narrow in scope to provide assistance to the wider variety of projects LDCs may be struggling with.
- A decision on extending funding for KAM's is required in 2013 for this important Initiative to continue beyond 2014. Failing this, expert resources will be lost to full-time employment elsewhere.

3.2.3.5 Demand Response 3 (D-6)

Initiative Activities/Progress: We've been working closely with our Channel Partner, Rodan, to look at all available leads. This program was promoted in conjunction with other Industrial and C&I initiatives at the participant showcase and seminar in addition to our saveONenergy microsite. Qualified participants are limited in our distribution area.

Additional Comments:

- Until early 2013 customer data was not provided on an individual customer basis due to contractual requirements with the aggregators. This limited LDCs' ability to effectively market to prospective participants and verify savings.

- No program improvements were made in 2012 however, it was accepted that prior participants who renew their DR3 contract within the 2011-2014 term will contribute to LDC targets.
- As of 2013, Aggregators are able to enter into contracts beyond 2014. This has allowed them to offer a more competitive contract price (5 year) than if limited to 1 or 2 year contracts.
- Metering and settlement requirements are expensive and complicated and can reduce customer compensation amounts, and present a barrier to smaller customers.
- Compensation amounts for new contracts and renewals have been reduced from the initial launch of this program (premium zones and 200 hour option have been discontinued) and subsequently there has been a corresponding decrease in renewal revenue.

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

Initiative Activities/Progress: In July of 2012, PDI was one of the first LDCs in market with the Home Assistance Program. From inception, PDI partnered with Enbridge Gas to deliver this program as the agent delivering the Low Income Program for Enbridge Gas was one of PDI's existing Channel Partners. We have realized the benefits of partnering with Enbridge in eliminating program duplication while increasing customer benefit and satisfaction. Through this model the delivery agent is able to service all customers regardless of their heating source with a single customer audit and reduction in related Participant Based Funding charges. Early challenges in securing a supply chain for required measures under prescribed guidelines and price caps were overcome and by the fourth quarter of 2012, the program was and continues to run successfully and efficiently. We continue to source new leads through social agencies and low income housing providers. Low income customers continue to be referred through LEAP, and the Housing Resource Center has attracted customers that do not qualify through normal channels. As PDI has almost exhausted Social Housing leads, we find that there should still be large market for senior citizens and other low income participants remaining. Additional marketing has taken place through television interviews, along with numerous case studies and promotional ads in newspapers, magazines, press releases and direct mail. It has been promoted through a conservation segment of our local television news program. Also, on our saveONenergy microsite and through social media.

Additional Comments:

- Awareness of the program amongst social agencies took time to develop. Benefits started to become evident in late 2012.
- Centralized payment processes were not developed in 2011. The payment process was established in 2012.
- The process for enrolling in social housing was complicated and time consuming. This was addressed in late 2012 and is showing benefits in 2013.
- The financial scope, complexity, and customer privacy requirements of this Initiative are challenging for LDCs and most have contracted this program out. This Initiative may benefit from an OPA contracted centralized delivery agent.

3.2.5 PRE-2011 PROGRAMS

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

4 2012 LDC CDM Results

4.1 Participation and Savings

¹Please see comment on *peaksaver* PLUS in executive summary for information on 2012 final. Highlighted area in summary below indicates initiative results requiring reference.

Table 1: Peterborough Distribution Incorporated Initiative and Program Level Savings by Year (Scenario 1)

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)				Program-to-Date Verified Progress to Target (excludes DR)	
		2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
		2014		2014											
Consumer Program															
Appliance Retirement	Appliances	270	207			15	12			106,597	83,226			27	675,963
Appliance Exchange	Appliances	39	22			4	3			4,184	5,724			4	31,453
HVAC Incentives	Equipment	627	502			192	115			368,523	203,798			307	2,085,486
Conservation Instant Coupon Booklet	Items	3,544	220			8	2			132,571	9,972			10	560,203
Bi-Annual Retailer Event	Items	6,208	7,567			12	11			209,601	191,016			23	1,411,453
Retailer Co-op	Items	0	0			0	0			0	0			0	0
Residential Demand Response (switch/pstat)	Devices	14	0			8	0			0	0			0	0
Residential Demand Response (IHD)	Devices	0	4			0				0				0	0
Residential New Construction	Homes	0	0			0	0			0	0			0	0
Consumer Program Total						239	143			821,476	493,736			371	4,764,558
Business Program															
Retrofit	Projects	15	40			66	716			413,045	2,966,599			701	10,112,751
Direct Install Lighting	Projects	41	164			41	157			91,318	527,343			185	1,910,151
Building Commissioning	Buildings	0	0			0	0			0	0			0	0
New Construction	Buildings	0	0			0	0			0	0			0	0
Energy Audit	Audits	0	0			0	0			0	0			0	0
Small Commercial Demand Response	Devices	0	7			0	4			0	25			0	25
Small Commercial Demand Response (IHD)	Devices	0	0			0				0				0	0
Demand Response 3	Facilities	0	0			0	0			0	0			0	0
Business Program Total						108	878			504,363	3,493,967			886	12,022,927
Industrial Program															
Process & System Upgrades	Projects	0	0			0	0			0	0			0	0
Monitoring & Targeting	Projects	0	0			0	0			0	0			0	0
Energy Manager	Projects	0	0			0	0			0	0			0	0
Retrofit	Projects	2				132				824,402				132	3,297,609
Demand Response 3	Facilities	0	1			0	0			0	0			0	0
Industrial Program Total						132	0			824,402	0			132	3,297,609
Home Assistance Program															
Home Assistance Program	Homes	0	175			0	16			0	157,580			16	472,741
Home Assistance Program Total						0	16			0	157,580			16	472,741
Pre-2011 Programs completed in 2011															
Electricity Retrofit Incentive Program	Projects	11	0			67	0			321,610	0			67	1,286,442
High Performance New Construction	Projects	1	0			21	1			105,956	781			21	426,165
Toronto Comprehensive	Projects	0	0			0	0			0	0			0	0
Multifamily Energy Efficiency Rebates	Projects	0	0			0	0			0	0			0	0
LDC Custom Programs	Projects	0	0			0	0			0	0			0	0
Pre-2011 Programs completed in 2011 Total						87	1			427,566	781			88	1,712,607
Other															
Program Enabled Savings	Projects	0	0			0	0			0	0			0	0
Time-of-Use Savings	Homes														
Other Total							0				0			0	0
Adjustments to Previous Year's Verified Results															
Energy Efficiency Total						558	1,033			2,577,808	4,146,039			1,493	22,270,416
Demand Response Total (Scenario 1)						8	4			0	25			0	25
OPA-Contracted LDC Portfolio Total (inc. Adjustments)						566	1,013			2,577,808	4,115,478			1,468	22,145,945
Activity & savings for Demand Response resources for each year and quarter represent the savings from all active facilities or devices contracted since January 1, 2011.												Due to the limited timeframe of data, which didn't include the summer months, 2012 IHD results have been deemed inconclusive. The IHD line item on the 2012 annual report will be left blank. Once a full year of data is available (2013 evaluation), and the savings are quantified, 2012 results will be updated to reflect the quantified savings.			
												Full OEB Target:			
												% of Full OEB Target Achieved to Date (Scenario 1):			
												8,720			
												16.8%			
												38,450,000			
												57.6%			

Table 1:

Table 1: Summarized Program Results

Program	Gross Savings		Net Savings		Contribution to Targets	
	Incremental Peak Demand Savings (MW)	Incremental Energy Savings (GWh)	Incremental Peak Demand Savings (MW)	Incremental Energy Savings (GWh)	Program-to-Date: Net Annual Peak Demand Savings (MW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (GWh)
Consumer Program Total	.25	.84	.36	1.28	.37	4.63
Business Program Total	1.09	4.33	.96	4.00	.90	12.03
Industrial Program Total	.00	.00	.13	.82	.13	3.29
Home Assistance Program Total	.02	.00	.02	.16	.02	.47
Pre-2011 Programs completed in 2011 Total	.00	.00	.09	.43	.09	1.71
Total OPA Contracted Province-Wide CDM Programs	1.36	5.17	1.58	6.69	1.5	22.1

4.2 Evaluation

The following provides a summary of the 2012 EM&V findings for all of the evaluation saveONenergy initiatives:

Consumer Program

Bi-Annual Coupons

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

Annual Coupons

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

HVAC

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

Appliance Retirement

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

Appliance Exchange

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

peaksaver PLUS

- Province-wide per-unit ex ante estimates for a I-in-10 August peak day were determined to be 0.50 kW for residential CACs and 0.64 kW for small commercial CACs.
- Evaluation to date has indicated savings from in-home displays (IHDs) are not statistically significant (in and around zero).
 - However, since 2012 evaluation did not include full year analysis (specifically the summer months), these results have been deemed inconclusive.
- The IHD offer had a positive influence on enrollment and re-enrollment with between 20 to 35% of new enrollees said they wouldn't have enrolled without the IHD offer.

Residential New Construction

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

Business Programs

Retrofit

- Reported savings for prescriptive lighting projects continue to be overstated:
 - Verified wattage reductions were 15% higher than assumed; and

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

Small Business Lighting

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

Existing Building Commissioning (EBC)

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

New Construction

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

Audit Funding Program

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

Industrial Programs

Process and Systems Upgrade Initiative

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

DR-3

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

Home Assistance Program

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

4.3 Spending

Table 3: 2012 Spending

Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
Consumer Program					
Appliance Retirement	4,877.93	-	-	-	4,877.93
Appliance Exchange	4,877.93	-	-	-	4,877.93
HVAC Incentives	5,057.93	-	-	-	5,057.93
Conservation Instant Coupon Booklet	5,358.63	-	-	-	5,358.63
Bi-Annual Retailer Event	5,452.47	-	-	-	5,452.47
Retailer Co-op	-	-	-	-	-
Residential Demand Response	65,611.74	29,1154.00	-	-	356,765.74
New Construction Program	4,877.93	-	-	-	4,877.93
Business Program					
Efficiency: Equipment Replacement	27,950.27	-	408,953.11	-	436,903.31
Direct Installed Lighting	26,079.50	37,249.99	138,523.26	-	201,852.75
Existing Building Commissioning Incentive	18,248.04	-	-	-	18,248.04

New Construction and Major Renovation Initiative	22,401.68	-	-	-	22,401.68
Energy Audit	18,485.59	-	-	-	18,485.59
Small Commercial Demand Response (part of the Residential program schedule)	-	-	-	-	-
Demand Response 3 (part of the Industrial program schedule)	-	-	-	-	-
Industrial Program					
Process & System Upgrades	-	-	-	-	-
a) preliminary engineering study	2,706.15	-	-	-	2,706.15
b) detailed engineering study	-	-	-	-	-
c) program incentive	-	-	-	-	-
Monitoring & Targeting	-	-	-	-	-
Energy Manager	-	-	-	-	-
Key Account Manager ("KAM")	-	-	-	-	-
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	-	-	-	-	-
Demand Response 3	3,604.69	-	-	-	3,604.69
Home Assistance Program					

Home Assistance Program	28,851.09	17,400.00	17,959.01	-	64,201.10
Pre 2011 Programs					
Electricity Retrofit Incentive Program	-	-	-	-	-
High Performance New Construction	-	-	-	-	-
Initiatives Not In Market					
Midstream Electronics	-				-
Midstream Pool Equipment	-				-
Demand Service Space Cooling	-				-
Demand Response 1 (Commercial)	-				-
Demand Response 1 (Industrial)	-				-
Home Energy Audit Tool	-				-
TOTAL Province-wide CDM PROGRAMS					

Table 4: Cumulative Spending (2011-2012)

Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
Consumer Program					
Appliance Retirement	6,186.67	-	-	-	6,186.697

Appliance Exchange	6,186.67	-	-	-	6,186.67
HVAC Incentives	6,366.67	-	-	-	6,366.67
Conservation Instant Coupon Booklet	6,667.37	-	-	-	6,667.37
Bi-Annual Retailer Event	6,761.21	-	-	-	6,761.21
Retailer Co-op	-	-	-	-	-
Residential Demand Response	84,179.58	291,154.00	-	-	375,333.58
New Construction Program	22,495.20	-	-	-	22,495.20
Business Program					
Efficiency: Equipment Replacement	81,784.43	-	408,983.11	-	490,767.54
Direct Installed Lighting	51,024.41	39,249.99	147,765.76	-	238,040.16
Existing Building Commissioning Incentive	22,657.95	-	-	-	22,657.95
New Construction and Major Renovation Initiative	43,275.01	-	-	-	43,275.01
Energy Audit	44,639.66	-	-	-	44,639.66
Small Commercial Demand Response (part of the Residential program schedule)	-	-	-	-	-
Demand Response 3 (part of the Industrial program schedule)	-	-	-	-	-

Industrial Program					
Process & System Upgrades	-	-	-	-	
a) preliminary engineering study	3,392.62	-	-	-	
b) detailed engineering study	686.47	-	-	-	
c) program incentive	686.47	-	-	-	
Monitoring & Targeting	686.47	-	-	-	
Energy Manager	686.47	-	-	-	
Key Account Manager ("KAM")	686.47	-	-	-	
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	-	-	-	-	
Demand Response 3	5,703.01	-	-	-	
Home Assistance Program					
Home Assistance Program	32,839.42	17,400.00	17,959.01	-	68,198.43
Pre 2011 Programs					
Electricity Retrofit Incentive Program*	167.22	8,300.00	107,728.19	-	116,195.41
High Performance New Construction	-	-	-	-	-
Initiatives Not In Market					
Midstream Electronics	-				-

Midstream Pool Equipment	-				-
Demand Service Space Cooling	-				-
Demand Response 1 (Commercial)	-				-
Demand Response 1 (Industrial)	686.47				686.47
Home Energy Audit Tool	-				-
TOTAL Province-wide CDM PROGRAMS	428,445.92	356,103.99	682,436.07		1,466,986.01

* ERIP expenses were not included in prior reporting for 2011

4.4 Additional Comments

PDI is encouraged with the progress made to date in conjunction with the working groups and OPA staff. Many improvements have been made in altering incentives, expanding eligibility and streamlining processes to better incent all potential customers to participate. These actions, however positive, may have come too late to provide adequate benefit to PDI and other LDCs in achieving their targets.

LDCs motivation to continue to apply resources, time and effort when LDC target deadlines are being assessed at the end of 2014 is counterintuitive. With so many changes to the schedules in 2013 and little time to allow these measures to take hold in time for 2014 targets, it is our hope that the OEB extends targets to coincide with the OPA 2015 extension.

5 Combined CDM Reporting Elements

5.1 Progress Towards CDM Targets

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

Implementation Period	Annual (MW)			
	2011	2012	2013	2014
2011 – Verified by OPA	0.6	0.6	0.6	0.5
2012 – Verified by OPA		1.0	1.0	0.9
2013				
2014				
Verified Net Annual Peak Demand Savings in 2014:				1.5
Peterborough Distribution Inc. 2014 Annual CDM Capacity Target:				8.7
Verified Portion of Peak Demand Savings Target Achieved (%):				16.8%

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

Implementation Period	Annual (GWh)				Cumulative (GWh)
	2011	2012	2013	2014	2011-2014
2011 – Verified by OPA	2.6	2.6	2.6	2.5	10.3
2012 – Verified by OPA		4.1	3.9	3.8	11.9
2013					
2014					

Verified Net Cumulative Energy Savings 2011-2014:	22.1
Peterborough Distribution Inc. 2011-2014 Cumulative CDM Energy Target:	38.5
Verified Portion of Cumulative Energy Target Achieved (%):	57.6%

5.2 Variance from Strategy

The largest factor attributing to the variance in our strategy is a result of the contribution of our *peaksaver* PLUS activity. It has been to, but not yet recognized by the OPA. This is due to divergence of the previously agreed to water heater control enrolment mechanism. Due the time it has taken to receive notification from the OPA indicating there was any conflict, and the subsequent delay in communication needed to address the newfound issue, submitted files have not been recognized. Additionally, due to the inefficient procedure utilized by the OPA to process enrollments, all additional remaining 2012 *peaksaver* PLUS enrollments were blocked and therefore are not being recognized in 2012 results. As of the date of this submission, the situation is still unresolved currently also affecting our 2013 enrollments and payments from the OPA.

Another factor contributing to the variance from our strategy, would be the OPA having not yet provided any LDCs with results attributed to time of use demand savings, or energy savings results from the installation of In Home Display devices.

As a result of the street lighting pilots we conducted in 2009, it was anticipated that the municipality would have commenced migration to LED street lighting in 2012. Due to the fluidity of this project and the time required for further studies necessary to make this significant decision, no replacements were completed in 2012.

With knowledge of the Embedded Energy Manager working with one of our Large Use customers, it was anticipated that at least one of the associated large-scale projects would be completed in 2012. However, due to the unforeseen negative financial impacts that any demand reduction initiatives would have on our large users by pushing them out of a Class A Global adjustment category, the customer held off on implementing the incented measures until assurances were given that they would not be financially harmed by continuing with conservation measures. These assurances were provided in June of 2013 with the issuance of Ontario Regulation 203/13 amending O.Reg 429/04 under the Electricity Act.

Although we have been running a small business lighting program since 2007, our calculations indicated there were still substantial opportunities for new participation in 2012. We continue to direct market these remaining skeptical customers in order to gain their participation. With thousands of eligible customers remaining we only managed to attract 184 for 2012.

The milestones we forecasted in the initial strategy were truly based on limited information available at the time. We understand that this is purely an estimate as one could not predict the modifications, cancelling of anticipated programs, or customer reaction and uptake at the time.

The economic conditions, specifically in Peterborough, may not have allowed as many deep measure projects in the industrial sector. Many of our industrial customers are struggling financially and although it has been proven that long term cost benefits are realized through conservation programs, these customers tend to participate mainly in lighting projects rather than engaging in complex engineered audits and projects. They lack the capital resources to partake in more extensive retrofits but the resulting savings would not qualify them for Capital incentives through the Process and Systems Initiative.

It has been realized and stated by the OPA, even with the recent changes, that the rooftop and unitary air conditioning incentives are less than adequate to entice participants to either replace or even more so to upgrade to Tier II systems. The delta between the incentives for a base unit versus a Tier II system does not come close to covering the additional associated costs. This has been clearly demonstrated in our own project application in 2013 where we found it was not financially viable to move to Tier II with the incentives currently offered. The ROI was calculated at approximately 27 years which would also be the life expectancy of the unit.

5.3 Outlook to 2014 and Strategy Modifications

The anticipated street lighting retrofit project in our municipality is slated to take place in 2014. It will result in a significant demand reduction however, the hours of operation for street lights do not fall within the constrictive summer peak demand window. Conversely, when this project takes place, it will result in a significant GWh reduction.

In regard to DIL, even with the increase in small business lighting incentives to \$1,500, we have seen little or no increase in resulting participation. With targeted and powerful province wide marketing to this sector (television, radio, newspaper), we remain hopeful that a notable portion of remaining eligible customers will be enticed to participate before 2014.

Some of the proposed changes in the Residential and C&I schedules will assist PDI in obtaining more participation if they are approved and passed through change management in a timely manner. To date, these changes and change processes have been onerous and time consuming. As direct participants in the Residential Working Group, we see the frustration and bureaucracy required in order to make necessary improvements. It is our hope that the OPA and EDA caucus heed the recommendations of the working groups in order that they may be successful through 2014 to provide LDCs with the best possible environment to meet the OEB mandated targets.

PDI plans to investigate the opportunity through the Conservation Fund to develop the yet untested prospect of controlling window air conditioning during times of critical summer peak demand. This option, if it proves to be cost effective, could be expanded to include stand alone dehumidification units as the connected load is equal or greater than a room air conditioner. Many customers that do not have central air conditioning will use dehumidifiers in the summer months to remove moisture from the air. An added prospective benefit would be in multi-unit residential complexes where a single control device could be used to initiate a DR event in several devices at one time.

PDI hopes the proposed changes from the Residential Working Group will allow the expansion of controllable devices through peaksaver PLUS. As the OPA has already deemed window air conditioning and dehumidifiers as having significant load in their inclusion in the Appliance Retirement initiative, these devices remain the last potential non-critical dispatchable load in the residential *peaksaver* PLUS portfolio. This initiative, if accepted, could be adopted by both summer and winter peaking LDCs or those that may not have an abundance of central air conditioning in their distribution area.

6.0 Conclusion

As of the end of 2012, PDI has achieved 1.5 MW in peak demand savings and 22.1 GWh in energy savings, which represents 16.8% and 57.6% of PDI 2014 target, respectively. These results are representative of a considerable effort expended by PDI, in cooperation with other LDCs, customers, channel partners and stakeholders to overcome many operational and structural issues that limited program effectiveness across all market sectors. This achievement is a success and the relationships built within the 2011-2014 CDM program term will aid results in a subsequent CDM term.

However, despite continuing improvements to existing programs, PDI faces challenges in the remaining years of the current CDM framework. With the current slate of available OPA Programs, and the current forecast of implementation and projected savings, PDI expects to meet its 38.45 GWh consumption target and remains optimistic that despite the many challenges, we can achieve our 8.72 MW demand target. This is predicated on the opportunities and recommendations of the working groups being approved by the OPA thereby allowing LDC flexibility to address local needs and mitigate the ongoing technical and process challenges.

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

If time and resources permit, PDI will contemplate a custom program through the Conservation Fund in order to bolster any potential shortfalls in reaching either of our predicted targets.

Appendix A: Initiative Descriptions

Residential Program

APPLIANCE RETIREMENT INITIATIVE (Exhibit D)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

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

Delivery: OPA centrally contracts for the province-wide marketing, call centre, appliance pick-up and decommissioning process. LDCs 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_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf and
- SaveONenergy website <https://saveonenergy.ca/Consumer/Programs/Appliance-Retirement.aspx>

In Market Date: June, 2011

APPLIANCE EXCHANGE INITIATIVE (Exhibit E)

Target Customer Type(s): Residential Customers

Initiative Frequency: Spring and Fall

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

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

Targeted End Uses: Window air conditioners and portable dehumidifiers

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

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>

In Market Date: June, 2011

HVAC INCENTIVES INITIATIVE (Exhibit B)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

Targeted End Uses: Central air conditioners and furnaces

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

Additional detail is available:

- Schedule B-1, Exhibit B
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>

In Market Date: June, 2011

CONSERVATION INSTANT COUPON INITIATIVE (Exhibit A)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

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

Delivery: The OPA develops the electronic version of the coupons and posts them online for download. Three LDC specific coupons were made available for local marketing and utilization by LDCs. The OPA enters into agreements with retailers to honour the coupons.

Additional detail 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>

In Market Date: June, 2011

BI-ANNUAL RETAILER EVENT INITIATIVE (Exhibit C)

Target Customer Type(s): Residential Customers

Initiative Frequency: Bi-annual events

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

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

Targeted End Uses: As per the Conservation Instant Coupon Initiative

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

Additional detail 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>

In Market Date: August, 2012

RETAILER CO-OP

Target Customer Type(s): Residential Customers

Initiative Frequency: Year Round

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

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

Targeted End Uses: As per the Conservation Instant Coupon Initiative

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

In Market Date: Not in Market

NEW CONSTRUCTION PROGRAM (Schedule B-2)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

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

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

Delivery: Local engagement of builders will be the responsibility of the LDC and will be supported by OPA air coverage driving builders to their LDC 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>

In Market Date: September, 2011

RESIDENTIAL DEMAND RESPONSE PROGRAM (Schedule B-3)

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

Initiative Frequency: Year round

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

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

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

Delivery: LDCs 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>

In Market Date: June, 2012

C&I Program

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

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

Initiative Frequency: Year round

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

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

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

Delivery: LDC delivered.

Additional detail is available:

- Schedule C-2
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>

In Market Date: June, 2011

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

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

Initiative Frequency: Year round

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

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

Target End Uses: Lighting and electric water heating measures

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

Additional detail is available:

- Schedule C-3
<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>

In Market Date: June, 2011

EXISTING BUILDING COMMISSIONING INCENTIVE INITIATIVE (Schedule C-6)

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

Initiative Frequency: Year round

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

Description: This Initiative offers Participants incentives for the following:

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

Targeted End Uses: Chilled water systems for space cooling

Delivery: LDC delivered.

Additional detail is available:

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

In Market Date: June, 2011

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

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

Initiative Frequency: Year round

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

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

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

Delivery: LDC delivers to customers and design decision makers.

Additional detail is available:

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

In Market Date: June, 2011

ENERGY AUDIT INITIATIVE (Schedule C-1)

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

Initiative Frequency: Year round

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

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

Targeted End Uses: Various

Delivery: LDC delivered.

Additional detail is available:

- Schedule C-1
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>

In Market Date: June, 2011

Industrial Program

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

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

Initiative Frequency: Year round

Objectives: The objectives of this Initiative are to:

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

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

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

Targeted End Uses: Process and systems

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

Additional detail 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>

In Market Date: June, 2011

MONITORING & TARGETING INITIATIVE (Schedule D-2)

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

Initiative Frequency: Year round

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

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

Targeted End Uses: Process and systems

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

Additional detail 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>

In Market Date: June, 2011

ENERGY MANAGER INITIATIVE (Schedule D-3)

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

Initiative Frequency: Year round

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

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

Targeted End Uses: Process and systems

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

Additional detail is available:

- Schedule D-3
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20D-3%20Energy%20Manager%20Initiative%202011-2014.pdf and
- SaveONenergy website <https://saveonenergy.ca/Business.aspx>

In Market Date: May, 2012

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

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

Initiative Frequency: Year round

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

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

Targeted End Uses: Process and systems

Delivery: LDC delivered

Additional detail is available:

- Scheduled-4
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

In Market Date: Not in Market

DEMAND RESPONSE 3 (Schedule D-6)

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

Initiative Frequency: Year round

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

Description: Demand Response 3 (“DR3”) is a demand response Initiative for commercial and industrial customers, of 50 kW or greater to reduce the amount of power being used during certain periods of the year. The DR3 Initiative is a contractual resource that is an economic alternative to procurement of new generation capacity. DR3 comes with specific contractual obligations requiring participants to reduce their use of electricity relative to a baseline when called upon. This Initiative makes payments for participants to be on standby and payments for the actual electricity reduction provided during a

demand response event. Participants are scheduled to be on standby approximately 1,600 hours per calendar year for possible dispatch of up to 100 hours or 200 hours within that year depending on the contract.

Targeted End Uses: Commercial and Industrial Operations

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

Additional detail 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>

In Market Date: June, 2011

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

HOME ASSISTANCE PROGRAM (Schedule E-1)

Target Customer Type(s): Income Qualified Residential Customers

Initiative Frequency: Year Round

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

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

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

Delivery: LDC delivered.

Additional detail is available:

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

In Market Date: June, 2012

Appendix B: Pre-2011 Programs

ELECTRICITY RETROFIT INCENTIVE PROGRAM

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

Initiative Frequency: Year Round

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

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

Targeted End Uses: Electricity savings measures

Delivery: LDC Delivered

HIGH PERFORMANCE NEW CONSTRUCTION

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

Initiative Frequency: Year round

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

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

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

Delivery: Through Enbridge Gas