



Grimsby Power Incorporated

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September 30, 2013

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

**RE: Grimsby Power Incorporated (ED-2002-0554)
Conservation and Demand Management (CDM) Code for Electricity
Distributors – CDM Annual Filing (EB-2010-0215)**

Dear Ms. Walli:

In accordance with the Ontario Energy Board's (OEB) "*Conservation and Demand Management Code for Electricity Distributors*", issued on September 16, 2010, attached is Grimsby Power Inc.'s 2012 CDM Annual Report submission.

The Annual CDM Report outlines Grimsby Power Inc.'s activities in the promotion and delivery of Conservation initiatives under the provincial programs offered by the Ontario Power Authority.

If you have any questions regarding this submission, please contact myself.

Yours truly,

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Grimsby Power Inc.

Conservation and Demand Management 2012 Annual Report

Submitted to:

Ontario Energy Board

EB-2010-0215

Submitted on September 30, 2013

GRIMSBY POWER INC. 2012 CDM Annual Report

09/30/2013

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EXECUTIVE SUMMARY

This annual report is submitted by Grimsby Power Inc. ("GPI") 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 GPI's CDM Strategy. Accordingly, this report outlines GPI's CDM activities for the period of January 1, 2012 to December 31, 2012. It includes net peak demand and net energy savings achieved in 2011 and 2012, discussion of the current/future Conservation and Demand Management ("CDM") framework, CDM program activities, successes and challenges, as well as forecasted savings to the end of 2014.

GPI 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 GPI.

In 2011, GPI 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 sectors. These programs were rolled-out by the OPA in early 2011. In 2011, program activities were centered on building a foundation for full program execution over the next three years of the program term, including staffing, procurement, and program delivery.

In 2012, GPI was active in promoting CDM programs. The utility was well represented at various community events, participated in conservation coupon promotions and purchased advertising in local newspaper and magazine publications. Mailing, telephone and visitation campaigns were run to promote all programs.

GPI achieved 0.45 MW of net incremental peak demand savings representing 21.7% of target in 2012. In energy savings, GPI achieved 7.1 GWh or 91.6% of target in 2012. Both of these results are under Scenario 1, which assumes demand savings persist for only one year.

The updated forecast prepared for this report (*shown in Section 5.1*) shows that GPI will likely achieve the 7.76 GWh energy savings target before 2014. The demand savings target of 2.06 MW may be achieved depending on the response to new programs launched in 2013 such as *peaksaver PLUS*®.

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 GPI's distribution license to require GPI, as a condition of its license, to achieve 7.76 GWh of energy savings and 2.06 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, GPI submitted its CDM Strategy (EB-2010-0215) on November 1, 2010, which provided a high level description of how GPI intended to achieve its CDM targets. In response to a Board letter on November 29, 2010 which requested budgetary information to be included in the report, an amended CDM strategy was submitted on February 14, 2011.

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

GPI submitted its 2011 Annual Report on September 28, 2012 which summarized the CDM activities, successes and challenges experienced by GPI for the January 1, 2011 to December 31, 2011 period. The OEB's 2011 CDM Results report identified the success of a few CDM programs to achieve significant energy savings, while noting several others had failed to launch or were unsuitable for the Grimsby market.

On December 21, 2012, the Minister of Energy directed the Ontario Power Authority (OPA) to proceed with a one-year extension of OPA Province-wide CDM programs to December 31, 2015. The Ministerial Directive did not amend the timelines for Local Distribution Companies ("LDCs") to achieve their energy savings and demand savings targets, nor did it specify further funding into 2015. The OPA provided some assurance at the LDC workshop on September 11, 2013 that there would be further funding in 2015; however, no specific details were mentioned. Therefore, the main focus of the LDCs remains the achievement of CDM targets by December 31, 2014 using the existing committed funding.

1 CONSERVATION FRAMEWORK

1.1 CURRENT FRAMEWORK

Ontario's current CDM framework is designed to create a culture of energy 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 to provide a portfolio of initiatives that would meet both broad and specific customer needs.

With just one Board-Approved CDM program and a diminishing slate of viable Province-Wide OPA programs, the LDCs have limited opportunities to provide customers with significant energy and demand savings and to achieve their CDM targets. The process to expand or change the current program initiatives or to pilot new initiatives has been challenging, taking considerable cost and effort.

Many existing CDM initiatives relevant to GPI have either been abandoned (such as the Home Energy Audit Tool initiative), are nearing market saturation (such as the Appliance Retirement initiative), or have been diminished (such as the Appliance Exchange initiative). GPI sought ways to implement the *peaksaver* PLUS® program in 2012, but the technology and reliability concerns of the proposed solution at the time posed too great a risk to GPI's customer service reputation.

1.2 FUTURE FRAMEWORK

LDCs are supportive of government's renewed commitment for conservation and demand management in Ontario. They are committed to working with the government and other stakeholders to develop the next framework for CDM in the Province. Moving forward, the future CDM framework should address the challenges of the current framework and build on its strengths.

Long-term and specific commitments for CDM funding to the LDCs are needed. This will allow LDCs to maintain current program infrastructure including LDC staff and third party contracts through 2015 and beyond. Otherwise, the CDM programs face a 'stop and start' pattern after which the infrastructure must be rebuilt. If specific 2015 PAB funding for LDCs is announced early, then the high costs to rebuild CDM programs can be averted.

On September 11, 2013, the OPA provided an assurance at their LDC workshop that PAB funding would be available in 2015, but without specific details. LDCs remain in a "wait and see" mode, limited in their ability to plan for CDM activity past 2014.

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.

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 licence, deliver Board-Approved CDM Programs, OPA-Contracted Province-Wide CDM Programs, or a combination of the two”.

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

2.2 TOU PRICING

2.2.1 BACKGROUND

In its April 26, 2012 CDM Guidelines, the OEB recognized 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. GPI will report these results upon receipt from the OPA. As of September 30, 2013, the OPA has not released its preliminary results of TOU savings to distributors. Therefore GPI is not able to provide any verified savings related to GPI’s TOU program at this time.

2.2.2 TOU PROGRAM DESCRIPTION

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

Initiative Frequency: Year-Round

Objectives: TOU pricing is designed to provide an incentive to consumers to shift energy usage to non-peak periods. Therefore peak demand reductions are expected, and energy conservation benefits may also be realized.

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

The RPP TOU price is adjusted twice annually by the OEB. A summary of the RPP TOU pricing to the end of 2012 is provided below:

Table 1: Regulated Price Plan Time-of-Use Pricing: Historical Review

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

Source: <http://www.ontarioenergyboard.ca/OEB/Consumers/Electricity/Electricity%20Prices/Historical%20Electricity%20Prices>

Delivery: The OEB set rates. LDCs perform installation and maintenance of the meters. The LDCs convert customers to TOU billing.

Initiative Activities/Progress:

GPI began transitioning its RPP customers to TOU billing on May 1, 2012. As of December 31st, 2012, 9,629 formerly RPP-tier customers were on TOU billing (comprised of 9,032 residential; 597 GS<50 customers). There were only three GS<50 customers remaining on RPP-tier billing, and in 2013, they were subsequently converted to TOU.

Spending:

As at December 31, 2012, there was a zero balance in the CDM variance account for Board-approved CDM Programs (*Account 1567*) with no funding or spending activity during the prior year.

2.3 GPI'S APPLICATION WITH THE OEB

GPI has no application with the OEB to provide Board-Approved CDM Programs. As mentioned above, the TOU program is the Board's only approved CDM program and no application for it is required.

3 OPA-CONTRACTED PROVINCE-WIDE CDM PROGRAMS

3.1 INTRODUCTION

Effective February 28, 2011, GPI entered into an agreement with the OPA to deliver CDM programs and initiatives extending from January 1, 2011 to December 31, 2014; these are listed below. Initiatives with strike-through lines were not registered and/or were not applicable for Grimsby:

Table 2a: OPA-Contracted Province-Wide CDM Programs In Market - 2012

Initiative	Schedule	Date Schedule Posted	Customer Class	LDC In-Market Date^(*)
Residential Program				
Appliance Retirement	Schedule B-1, Exhibit D	<i>Feb 28, 2011</i>	<i>All residential rate classes</i>	<i>Feb 28, 2011</i>
Appliance Exchange	Schedule B-1, Exhibit E	<i>Feb 28, 2011</i>	<i>All residential rate classes</i>	<i>Feb 28, 2011</i>
HVAC Incentives	Schedule B-1, Exhibit B	<i>Feb 28, 2011</i>	<i>All residential rate classes</i>	<i>Feb 28, 2011</i>
Conservation Instant Coupon Booklet	Schedule B-1, Exhibit A	<i>Feb 28, 2011</i>	<i>All residential rate classes</i>	<i>Feb 28, 2011</i>
Bi-Annual Retailer Event	Schedule B-1, Exhibit C	<i>Feb 28, 2011</i>	<i>All residential rate classes</i>	<i>Feb 28, 2011</i>
Retailer Co-op	n/a	<i>n/a</i>	<i>All residential rate classes</i>	<i>n/a</i>
Residential Demand Response	Schedule B-3	<i>Feb 28, 2011</i>	<i>All residential service classes</i>	<i>April 1, 2013</i>
New Construction Program	Schedule B-2	<i>Feb 28, 2011</i>	<i>All residential rate classes</i>	<i>Feb 28, 2011</i>
Commercial & Institutional Program				
Efficiency: Equipment Replacement	Schedule C-2	<i>Feb 28, 2011</i>	<i>All general service classes</i>	<i>Feb 28, 2011</i>
Direct Install Lighting	Schedule C-3	<i>Feb 28, 2011</i>	<i>General Service < 50 kW</i>	<i>Feb 28, 2011</i>
Existing Building Commissioning Incentive	Schedule C-6	<i>Feb 28, 2011</i>	<i>All general service classes</i>	<i>Feb 28, 2011</i>
New Construction and Major Renovation Initiative	Schedule C-4	<i>Feb 28, 2011</i>	<i>All general service classes</i>	<i>Feb 28, 2011</i>
Energy Audit	Schedule C-1	<i>Feb 28, 2011</i>	<i>All general service classes</i>	<i>Feb 28, 2011</i>

Initiative	Schedule	Date Schedule Posted	Customer Class	LDC In-Market Date^(*)
Commercial Demand Response (part of the Residential program schedule)	Schedule B-3	<i>Feb 28, 2011</i>	<i>All general service classes</i>	<i>April 1, 2013</i>
Demand Response 3 (part of the Industrial program schedule)	Schedule D-6	<i>Feb 28, 2011</i>	<i>General Service 50 kW & above</i>	<i>Feb 28, 2011</i>
Industrial Program				
Process & System Upgrades	Schedule D-1	<i>Feb 28, 2011</i>	<i>General Service 50 kW & above</i>	<i>Feb 28, 2011</i>
Monitoring & Targeting	Schedule D-2	<i>Feb 28, 2011</i>	<i>General Service 50 kW & above</i>	<i>Feb 28, 2011</i>
Energy Manager	Schedule D-3	<i>Feb 28, 2011</i>	<i>General Service 50 kW & above</i>	<i>Feb 28, 2011</i>
Key Account Manager (“KAM”)	Schedule D-4	<i>Feb 28, 2011</i>	<i>General Service 50 kW & above</i>	<i>Feb 28, 2011</i>
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	Schedule C-2	<i>Feb 28, 2011</i>	<i>General Service 50 kW & above</i>	<i>Feb 28, 2011</i>
Demand Response 3	Schedule D-6	<i>Feb 28, 2011</i>	<i>General Service 50 kW & above</i>	<i>Feb 28, 2011</i>
Home Assistance Program				
Home Assistance Program	Schedule E-1	<i>Feb 28, 2011</i>	<i>All residential rate classes</i>	<i>July 1, 2012</i>
Pre-2011 Programs				
Electricity Retrofit Incentive Program	n/a	<i>n/a</i>	<i>All general service classes</i>	<i>n/a</i>
High Performance New Construction	n/a	<i>n/a</i>	<i>All general service classes</i>	<i>n/a</i>
Toronto Comprehensive	n/a	<i>n/a</i>	<i>All general service classes</i>	<i>n/a</i>
Multifamily Energy Efficiency Rebates	n/a	<i>n/a</i>	<i>All general service classes</i>	<i>n/a</i>
Data Centre Incentive Program	n/a	<i>n/a</i>	<i>All general service classes</i>	<i>n/a</i>
EnWin Green Suites	n/a	<i>n/a</i>	<i>All general service classes</i>	<i>n/a</i>

** Many 2011-2014 initiatives are continuations or variations from earlier initiatives. An in-market date of Feb 28, 2011, when the agreement was signed, was used, unless they started later.*

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

Table 2b: OPA-Contracted Province-Wide CDM Programs Not In Market - 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 provisions in Article 3. Collaboration between the OPA and the LDCs on the program change management process began in 2011 and continued in 2012 in an effort to further enhance the saveONenergy program suite. The change management process allows for modifications to the Master Service Agreement and Initiative Schedules in order to 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>. Each of the OPA-Contracted Province-Wide CDM Program initiatives are discussed below with reference to GPI's related activities in the local service area. Other reference details such as the targeted customer types, objectives, and individual descriptions for each Program Initiative are listed in Appendix A.

3.2.1 RESIDENTIAL PROGRAM

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

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 Residential Program portfolio is predominately a carryover of initiatives from previous programs. However, the inclusion of LED technology into the Bi-annual Retailers events in 2012 and the annual coupons in 2013 has had a positive effect on consumer engagement.

GPI focussed primarily on Bi-annual Retailer Events, Coupons and HVAC incentives initiatives to build CDM savings in the Residential program area in 2012. The revamped *peaksaver* PLUS® program will be a major Residential initiative beyond 2012; it was initiated in GPI's service territory in April 2013. Provincial advertising for *peaksaver* PLUS® in 2012 was both premature and created customer service concerns, since Grimsby Power had decided not to install the current technology into customers' homes in order to accommodate the advertising. The equipment was prone to too great a risk of failure at the time.

Work to revitalize and increase the effectiveness and breadth of Residential Program initiatives needs to be a high priority. Coupon savings should be 100% attributable to the applicable utility. Opportunities within the Residential marketplace that may be considered include revised home energy audits and broader choices for recycling appliances and electronics.

3.2.1.1 APPLIANCE RETIREMENT INITIATIVE (Exhibit D)

Initiative Activities/Progress:

For Grimsby, there were 96 old appliances removed from service in 2012, representing a net energy savings of 37,883 kWh per year. The cumulative energy savings for this initiative were verified at 384,749 kWh. The 2012 count was significantly down from 165 units in 2011, supporting the view that the market is nearing saturation. New initiatives will be needed to encourage further homeowner savings in the appliance category. Marketing activity with respect to the program included distributing a bill insert in March 2012 to all residential customers, to match with radio advertising conducted by the OPA in the Golden Horseshoe area.

Additional Comments:

- With the increase in eligible appliance age from 15 to 20 years in 2012, the number of eligible participants diminished. This contributed to the slower uptake in 2012, despite a well-coordinated marketing effort.
- Due to the duration of the program, 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 strengthened 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: In Grimsby, 33 appliances were exchanged under the program in 2012, representing a net energy savings of 8,696 kWh per year. By comparison, there were only 12 exchanges in 2011. The cumulative energy savings for this initiative were verified at 30,022 kWh. Better advertising and understanding of the initiative by retailers probably contributed to the better participation in 2012. GPI printed an ad in the local community paper for two weeks prior to the event and posters were displayed for walk-in customers at the GPI office.

Additional Comments:

- While until 2012, the appliance exchange event included both window air conditioners and dehumidifier units, the air conditioners were essentially withdrawn from the eligible appliances for exchange in 2012 (*OPA E-Blast May 18, 2012*). This reduced the relevance of the program to Grimsby residents.
- Evaluation, Measurement, and Verification (EMV) results indicated that the value of savings for retired room air conditioners (“a/c”) was much lower than for dehumidifiers, so the program was diminished without a corresponding effort to expand the program by accepting other appliances (e.g. dishwashers, washer or dryer machines).
- 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.
- Notification regarding retailer participation and eligible measures continues to be delayed. Improved communications will aid in appropriate resource allocation and marketing of the initiative.

3.2.1.3 HVAC INCENTIVES INITIATIVE (Exhibit B)

Initiative Activities/Progress: In Grimsby, there were 229 HVAC units replaced in 2012 under the program, representing a net energy savings of 79,836 kWh per year. The cumulative energy savings for this initiative were verified at 748,197 kWh. This represents a 16% drop in participation from 2011, from 274 units. It also represents a 37% drop in kWh savings per year, from 127,173 kWh.

Marketing activities for this program included contacting all participating local contractors to promote the program and to offer assistance and marketing materials. A newspaper ad was also placed in the local paper in time for the fall heating season, September 2012.

Additional Comments:

- Incentive levels appear to be insufficient to prompt participants to upgrade HVAC equipment prior to the end of its useful life. It is hoped that the introduction of an Air Miles incentive in 2013 may help boost participation.

- 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 timely rebate funding to maintain a positive relationship between consumers, contractors, the OPA, and the participating LDC.
- In an effort to build capacity, mandatory training has been imposed for all participating HVAC contractors. This could present too much of a barrier for participation for some contractors as the lengthy application process already discourages contractor sales. It has been noted that there are approximately 4500-5000 HVAC contractors in the Province; however, only 1500 are participating in this program.
- There are cases where non-participating contractors are offering their own incentives (by discounting their installations to match the value of the OPA incentive) to make the sale. As this occurs outside of the initiative, the energy savings from these installations should be attributed to the appropriate LDC where possible.

3.2.1.4 CONSERVATION INSTANT COUPON BOOKLET INITIATIVE (Exhibit A)

Initiative Activities/Progress: In Grimsby, only 70 coupons were reported used in 2012 to achieve product discounts under this program, representing a net energy savings of 3,187 kWh per year. This was a significant decline from 2011 when 1,137 coupons were used. The cumulative energy savings for this initiative were verified at 180,050 kWh.

GPI made a strong marketing effort to boost usage of the LDC specific coupons during the year. The coupons were posted on the website with promotional news items. GPI sent a bill insert to all residential customers and distributed the LDC specific coupons at the in-store coupon events. The LDC specific coupons were also made available at the GPI office.

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 time delay for retailer submission of redeemed coupons varied from retailer to retailer and in some cases was lengthy. The delays and incomplete results reporting limited the ability to react and respond to initiative performance or changes in consumer behaviour.
- Without provincial coupon distribution, and with the delay in the initiative's 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 push specific coupons based on localized needs.
- The product list could be made more distinct 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: In Grimsby, consumers redeemed 2,418 coupons in 2012 to acquire product discounts under this program, representing a net energy savings of 61,041 kWh per year. Of note, the savings in 2012 were 9% lower than in 2011, despite 22% more coupons having been redeemed. The cumulative energy savings for this initiative were verified at 451,041 kWh.

GPI was active in promoting the bi-annual event, setting up booths at the Canadian Tire store and promoting them on the website and GPI offices. Newspaper ads were placed two weeks prior to the in-store event in addition to bill inserts that were distributed to 10,500 customers.

Additional Comments:

- This initiative is strongly influenced by the retail participants and has no direct involvement from the LDCs.
- Limited engagement by local retailers has restricted the savings potential of this initiative.
- The product list has changed very little over the past four years. 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 made more distinct 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 and 3) improved training for retailers as retail staff tend not to be knowledgeable regarding the products or promotion.
- 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.

3.2.1.6 RETAILER CO-OP

Initiative Activities/Progress: There was no participation in this initiative by Grimsby Power. GPI does not have staff resources available to effectively implement this initiative.

Additional Comments:

- This initiative is designed for LDCs with extensive resources to extend or create CDM initiatives and establish retailer relationships around them
- This initiative was not among the list of initiatives signed by GPI in the 2011 – 2014 CDM Program Registration

3.2.1.7 RESIDENTIAL DEMAND RESPONSE PROGRAM (Schedule B-3)

Initiative Activities/Progress: GPI launched the *peaksaver* PLUS® program for Grimsby in April 2013 using the *efergy* solution; there was no *peaksaver* PLUS® program in place in 2012. This initiative will likely have a positive impact on GPI's 2013 CDM results.

Additional Comments:

- Technology issues were the main barrier to implementing this initiative in 2012. GPI decided not to install the *Blue Collar* solution in 2012, which was the only available technology at the time to comply with the program. It was plagued with reliability issues and could have been problematic for customer service. It would quickly have become obsolete as well.
- Smart Meters installed by most LDCs did not have the capability to communicate directly to any of the In-Home Display units on the market. When proposing technical initiatives that rely on existing LDC hardware or technology, there should be an extensive consultative process between the OPA and LDCs.
- Introduction of new technology requires incentives for the development of such technology. Appropriate lead times for product analysis and assessment, procurement, testing and integration into the Smart Meter environment would have made the launch of this initiative more smooth.
- This is the main initiative within the Residential portfolio that drives demand savings for LDCs.
- Given the different LDCs smart meter environments, and needs, each LDC is positioning the initiative slightly different. As such, greater program flexibility is required to address unique LDC needs.
- The premature provincial advertising campaign in mid-2012 for *peaksaver* PLUS® was damaging to GPI customer relations since the initiative was not offered to customers at the time.

3.2.1.8 NEW CONSTRUCTION PROGRAM (Schedule B-2)

Initiative Activities/Progress: In Grimsby, none of the homebuilders completed the application under this program in 2012 despite being contacted and receiving information packages on the initiative.

Additional Comments:

- This initiative provides incentives to home builders to incorporate energy efficiency into their buildings. To support this, builders need training to adopt energy-saving building options into their designs. Consumers need training to find those builders who do adopt the energy-saving practices.
- The incentive currently goes to the builder, not the homeowner. If the incentive went to the homeowner, then there would be greater motivation for homeowners to select trained builders.
- Following limited provincial participation in 2011, the application process was revisited in 2012 to streamline administration in response to builder feedback. Provincial participation levels are expected to grow but there will be a lag for results to 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 are being processed through change management for 2012. However, the lengthy change management process has resulted in continued non-participation from builders.

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 were designed to help fund energy audits, to replace energy-wasting equipment and to support new construction projects that exceed existing codes and standards. Businesses may 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 business owners and operators in achieving demand and energy savings, and to facilitate a culture of conservation in the business community as well as in 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 proved 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, a complex program structure and a lengthy change management process restricted growth without providing the anticipated improved Measurement and Verification results. In addition, Evaluation, Measurement and Verification (EM&V) did not achieve transparency in their CDM net savings calculations.

LDC program management was 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 expedited change management process was developed as a means to accelerate certain program changes.

3.2.2.1 EQUIPMENT REPLACEMENT INCENTIVE INITIATIVE (ERII)- "RETROFIT" INITIATIVE (Schedule C-2)

Initiative Activities/Progress: In Grimsby, there were 10 Retrofit projects completed in 2012, up from just one in 2011. This produced a net energy savings of 633,896 kWh for the year. The cumulative energy savings for this initiative were verified at 2,037,654 kWh.

Marketing Initiatives included:

- Contractor visits and facility audits of local Grimsby businesses
- Promotional mailings to key customers, including a brochure containing all Business CDM Programs mailed to the 20 top consuming customers in Grimsby
- Telephone solicitation for participation

- Breakfast seminars on key energy-saving topics of interest to local businesses
- Website postings
- Community newspaper advertising

Additional Comments:

- Almost 64% of GPI energy savings were attributed to the Retrofit program in 2012. This program provides the highest average savings per project ratio and is a main focus of CDM marketing activity.
- 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 facilities to complete capital upgrades.
- A number of interface issues in the CRM (the OPA centralized application system) were resolved in 2012; however, some LDC administrative back-office processing issues remain.
- 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.
- While the Ministerial Directive provides for continuity of the conservation programs for the participant, unclear direction on LDC administrative funding could result in many LDCs ‘ramping down’ programs in 2015. For the Retrofit initiative in particular, this would be unfortunate. The establishment of defined administrative funding for 2015 is required to avoid an expensive “stop and start” process.

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

Initiative Activities/Progress: The Direct Install program has met with considerable success in Grimsby. There were an additional 48 applications completed in 2012 representing net energy savings of 123,968 kWh per year. This was up from 25 applications in 2011. The cumulative 2011-2014 energy savings for this initiative were verified at 670,196 kWh.

Marketing activities included:

- Contractor visits and facility audits of local Grimsby businesses
- Telephone solicitation for participation
- Direct Mail-outs to all remaining eligible businesses
- Website postings
- Community newspaper advertising
- Promotional mailings to key customers, including a brochure containing all Business CDM Programs mailed to the 20 top consuming customers in Grimsby

Additional Comments:

- Many local small businesses have recognized the benefits of participating in this program, and Grimsby Power has focused on meeting the demand for it. An advantage to consumers is the relatively quick turn-around in payment.
- Increasing the incentive envelope from \$1,000 to \$1,500 in late 2012 (*Dec 4, 2012*) ensured the ongoing marketability of the program; a review of the eligible measure price list provided support for contractor participation.
- 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 would be a big advantage. They already have an understanding of the initiative and its benefits, and would be more likely to participate than other business prospects.
- Successful execution of the previous rendition of this initiative (i.e. *Power Savings Blitz*) has resulted in diminished potential for the 2011-2014 initiative in Grimsby. The market is nearing saturation since Grimsby's business base is relatively small.
- Electrical contractor's margins have been reduced due to flat labour rates, increased costs for materials, greater distances between retrofits, and more door knocking required for each successful sale. This has led to a reduction in vendor channel participation in the Grimsby area.
- The eligibility requirements have now been revamped and expanded; however, there has been limited communication and documentation of this to the marketplace.

3.2.2.3 EXISTING BUILDING COMMISSIONING INCENTIVE INITIATIVE (Schedule C-6)

Initiative Activities/Progress: There has been no uptake for this initiative in Grimsby. Marketing activities included promotional mailings to key customers, including a brochure containing all Business CDM Programs mailed to the 20 top consuming customers in Grimsby.

Additional Comments:

- Grimsby has very few large business consumers as potential target applicants for this initiative.
- Participation is mainly channel partner driven, however there were too many barriers in the particulars of the initiative for many channel partners to participate, most notably the limitation of eligible measures to space cooling systems.
- The customer expectation is that the program be expanded to include a broader range of measures for a more holistic approach to building recommissioning. 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: There has been no uptake for this initiative in Grimsby. Marketing activities included:

- Promotional mailings to key customers, including a brochure containing all Business CDM Programs mailed to the 20 top consuming customers in Grimsby
- Sell sheets specific to HPNC were made available at various events

Additional Comments:

- This is a continuation of the High Performance New Construction program previously delivered by Enbridge Gas under contract with the OPA (and subcontracted to Union Gas), which ran until December 2010.
- There is typically a long sales cycle for these projects, and then a long project development cycle. Provincially, the program did not launch until mid-2011 and it had limited participation.
- With the Ministerial Directive, facility projects that have a completion date near the end of 2014 may now be more secure for funding than previously.
- Participants' estimated completion dates tend to be inaccurate and are usually 6 months longer.

- 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 cost and effort required to participate through the custom stream exceeds the value of the incentive for many customers.

3.2.2.5 ENERGY AUDIT INITIATIVE (Schedule C-1)

Initiative Activities/Progress: There were just two Energy Audits conducted in Grimsby in 2012, representing a net energy savings of 50,353 kWh. The cumulative energy savings for this initiative were verified at 151,058 kWh.

Marketing Initiatives included promotional mailings to key customers, including a brochure containing all Business CDM Programs mailed to the 20 top consuming customers in Grimsby.

Additional Comments:

- Provincially, customer uptake was limited in 2011, however it improved through 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. Despite this, there are low 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 and including a section recommending further enhancements should be considered.
- Customers look to the LDCs to recommend audit companies. A centralized prequalified list provided by the OPA would 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.
- Customers expect a greater connection with other CDM initiatives as a result of completing the Energy Audit. The initiative should be reviewed under Change Management for a means to assist participants with audits in hand to implement other electricity savings initiatives.

3.2.3 INDUSTRIAL PROGRAM

Description: Large facilities are discovering the benefits of energy efficiency through the Industrial Program initiatives which are designed to help identify and promote energy saving opportunities. They include financial incentives and technical expertise to help organizations modernize systems for enhanced productivity and product quality, as well as provide a substantial boost to energy productivity. They allow facilities to take control of their energy so they can create long-term competitive energy advantages which reach across the organization.

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

Objective: 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:

Grimsby has a very limited industrial base, and no Large-Use rate class customers. CDM savings in this program have been limited to the DR-3 initiative.

The Industrial Program portfolio has been able to provide valuable resources to large facilities such as Energy Managers in enabling Engineering Studies. The Engineering Studies in particular provide a unique opportunity for customers to complete comprehensive analyses of energy intensive processes that they would not otherwise be able to undertake. Energy Managers are skilled individuals whose only role is to assist customers 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 beyond 2014 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 agreements are expected to improve the number of projects and savings achieved within the Industrial Program initiatives. 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: There has been no uptake for this initiative in Grimsby. There is a limited industrial base in the municipality.

Additional Comments:

- The PSUI program targets large customers who are undertaking major capital projects. There is typically a long sales cycle to sell these projects, and then a long project development cycle. As such, provincial results from PSUI did not appear in 2011-2012. The majority of the results are expected in 2013-2014, with a much reduced benefit to cumulative energy savings targets.
- In Ontario, 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 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.
- 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 document with less onerous conditions on the customer.

3.2.3.2 MONITORING & TARGETING INITIATIVE (Schedule D-2)

Initiative Activities/Progress: There has been no uptake for this initiative in Grimsby.

Additional Comments:

- The Monitoring and Targeting ("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, who would establish guidelines for installing an effective M&T system. This has been a barrier for some customers. As such, a limited number of applications have been received to date in the province.
- 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 the Retrofit initiative to allow smaller facilities to employ M&T systems.

3.2.3.3 ENERGY MANAGER INITIATIVE (Schedule D-3)

Initiative Activities/Progress: Grimsby does not have any Large-use consumers for which this initiative was designed, so there was no uptake for it.

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.
- 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.
- New energy managers require training, time to familiarize themselves with facilities, staff and time to establish “credibility”. Energy Managers have started filling their pipeline with projects but few projects were implemented in 2012.
- Delays with processing EEM payments caused LDCs to delay payments to participants beyond contract requirements.
- Overall, the Energy Managers in place have successfully been able to build capacity and deliver energy saving projects within their respective large commercial/industrial facilities.
- The requirement that 30% of target must come from projects with no participant incentive is identified as an issue for most REMs, although final targets are not due until 2013. The Working group has proposed to remove this requirement for REM’s provided they are not resident full-time at a customer facility to find the non-incented savings.
- A decision on extending funding for the Energy Manager initiative is required in 2013, which should continue beyond 2014, failing which these expert resources will be lost in favour of full-time employment elsewhere.

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

Initiative Activities/Progress: Grimsby does not have any Large-use consumers for which this initiative was designed, so there was no uptake for it.

Additional Comments:

- Finding personnel with this type of skill set has been difficult for many LDCs. 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, which should continue beyond 2014, failing which these expert resources will be lost in favour of full-time employment elsewhere.

3.2.3.5 DEMAND RESPONSE 3 (Schedule D-6)

Initiative Activities/Progress: There are three participants in the DR-3 program in Grimsby, providing an estimated net demand savings of 381 kW and an energy savings benefit of 8,459 kWh. The cumulative energy savings for this initiative were verified at 23,757 kWh. These are administered by the OPA and do not directly involve the LDC.

Additional Comments:

- No program improvements were made in 2012; however, it was accepted that prior participants who renewed their DR-3 contract within the 2011-2014 term may contribute demand savings toward LDC targets.
- Until 2013, aggregators were unable to enter into contracts beyond 2014. This change permits 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, complicated and can reduce customer compensation amounts; they 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 the 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 2012, there was no uptake for this initiative in Grimsby - this despite considerable effort made to find eligible applicants. Marketing Initiatives included:

- Contacting all social housing providers
- Distributing brochures at various events

Additional Comments:

- There is considerable difficulty identifying eligible customers.
- This Initiative Schedule was finalized later than the rest of the OPA Initiatives with PAB funding being made available in mid-2012.
- Awareness of the program amongst social agencies took time to develop. Benefits started to become evident in late 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

Net Energy Savings of 250 kWh were realized in 2012 through pre-2011 programs. This was spillover from projects virtually completed in 2011. The net cumulative energy savings for 2012 for this program were verified at 2,488,339 kWh. The targeted customer types, objectives and descriptions of these programs are detailed in Appendix B. There was no marketing effort assigned to this program in 2012, as all pre-2011 projects were virtually complete by the end of 2011.

4 2012 CDM RESULTS

4.1 PARTICIPATION AND SAVINGS

GPI focused in 2012 on building on the most successful initiatives for the Grimsby service area: Retrofits, Direct Lighting and the Bi-Annual Retailer Event, and the results reflected this focused effort with improved participation in these areas, as noted in *Table 3* below:

Table 3: Participation Levels for OPA-Contracted Province-Wide CDM Programs 2011 vs 2012 for Grimsby

Initiative	Unit	Incremental Activity (New program activity occurring within the specified reporting period)			
		2011	2012	2013	2014
Consumer Program					
Appliance Retirement	Appliances	165	96		
Appliance Exchange	Appliances	12	33		
HVAC Incentives	Equipment	274	229		
Conservation Instant Coupon Booklet	Items	1,137	70		
Bi-Annual Retailer Event	Items	1,984	2,418		
Retailer Co-op	Items	0	0		
Residential Demand Response (switch/therm)	Devices	0	0		
Residential Demand Response (IHD)	Devices	0	0		
Residential New Construction	Homes	0	0		
Business Program					
Retrofit	Projects	1	10		
Direct Install Lighting	Projects	25	48		
Existing Building Commissioning Incentive	Buildings	0	0		
New Construction and Major Renovation Incentive	Buildings	0	0		
Energy Audit	Audits	0	2		
Commercial Demand Response	Devices	0	0		
Commercial Demand Response (IHD)	Devices	0	0		
Demand Response 3 (part of the Industrial program)	Facilities	1	1		
Industrial Program					
Process & System Upgrades	Projects	0	0		
Monitoring & Targeting	Projects	0	0		
Energy Manager	Managers	0	0		
Efficiency: Equipment Replacement Incentive (part of Demand Response 3)	Projects	0	0		
Demand Response 3	Facilities	1	2		
Home Assistance Program					
Home Assistance Program	Homes	0	0		
Pre-2011 Programs					
Electricity Retrofit Incentive Program	Projects	6	0		
High Performance New Construction	Projects	1	0		
Toronto Comprehensive	Projects	0	0		
Multifamily Energy Efficiency Rebates	Projects	0	0		
Data Centre Incentive Program	Projects	0	0		
EnWin Green Suites	Projects	0	0		
Other					
Program Enabled Savings	Projects	0	0		
Time-of-Use Savings	Homes				

In 2012, GPI achieved **91.8%** of its Net Cumulative Energy Savings target, and **40.2%** of its Net Annual Peak Demand Savings target. This placed GPI in the top 9 LDCs in terms of both Demand and Energy Savings.

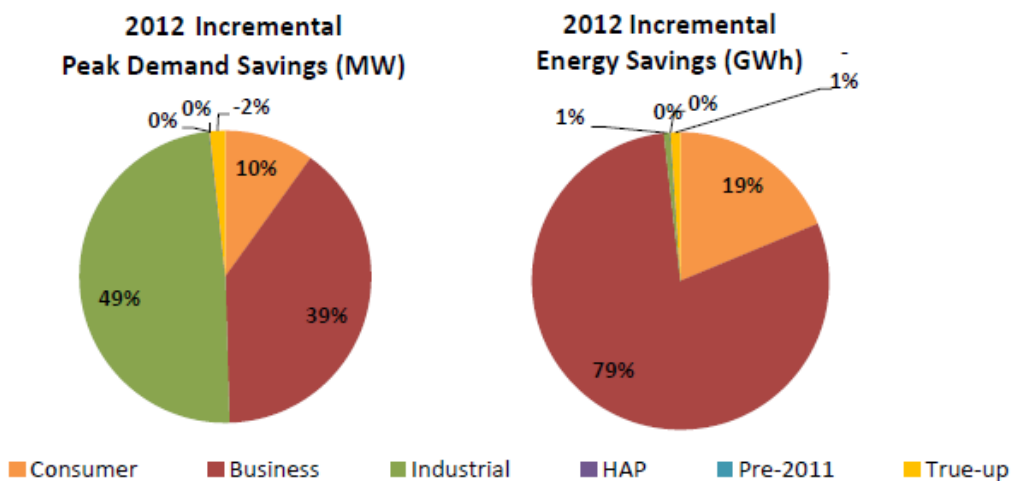
These results were based on the assumption that existing demand resources remain in place until 2014 (*Scenario 2*). If they do not, this would change the Net Cumulative Energy Savings achievement to 91.6% (*Scenario 1*). The Net Annual Peak Demand Savings achievement would change to 21.7% (*per Table 4 below*).

Table 4: OPA-Contracted Province-Wide CDM Programs FINAL 2012 Results for Grimsby

OPA-Contracted Province-Wide CDM Programs FINAL 2012 Results				
LDC: Grimsby Power Inc.				
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)	0.6	0.4	21.7%	40.2%
Net Energy Savings (GWh)	1.0	7.1	91.6%	91.8%

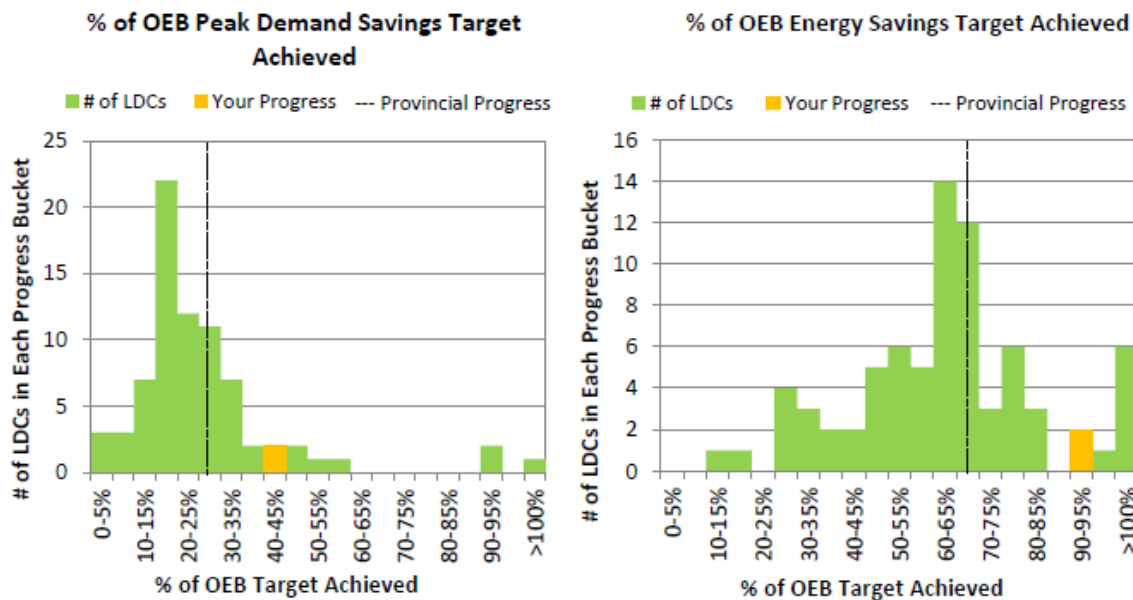
Scenario 1 = Assumes that demand resource resources have a persistence of 1 year
Scenario 2 = Assumes that demand response resources remain in your territory until 2014

Achievement by Sector



Comparison: Your Achievement vs. LDC Community Achievement (Progress to Target)

The following graphs assume that demand response resources remain in your territory until 2014
(aligns with Scenario 2)



The following table provides a summary of Gross-to-Net CDM Savings by Program for 2012. The OPA was able to provide the verified Gross Savings data in time for the report deadline, so these are as shown:

Table 5: Summary of Grimsby Power Gross-to-Net CDM Savings by Program in 2012

Program	Gross Savings		Net Savings		Contribution to Targets	
	Incremental Peak Demand Savings (MW)	Incremental Energy Savings (GWh)	Incremental Peak Demand Savings (MW)	Incremental Energy Savings (GWh)	Program-to-Date: Net Annual Peak Demand Savings (MW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (GWh)
Consumer Program Total	0.12	0.33	0.06	0.19	0.15	1.79
Business Program Total	0.29	0.97	0.25	0.81	0.20	2.86
Industrial Program Total	0.31	0.01	0.31	0.01	0.00	0.02
Home Assistance Program Total	0.00	0.00	0.00	0.00	0.00	0.00
Pre-2011 Programs Total	0.00	0.00	0.00	0.00	0.11	2.49
Adjustments from 2011	(0.01)	0.01	(0.01)	(0.01)	(0.01)	(0.06)
Total OPA Contracted Province-Wide CDM	0.70	1.31	0.61	0.99	0.45	7.11

4.2 EVALUATION FINDINGS

4.2.1 GPI EVALUATION RESULTS

The most successful of the 2012 initiatives for GPI were the Retrofit and Direct Install Lighting initiatives. These achieved 757,864 kWh in Net Incremental Savings for 2012, representing 76.3% of the total. Other successful programs were the HVAC, Bi-Annual Retail Event, Energy Audit and Appliance Retirement initiatives. These contributed a combined incremental net savings of 229,113 kWh, representing 23.1% of the total.

While CDM savings from Pre-2011 programs were an important component of the 2011 CDM report, they provided almost no savings in 2012.

Shown below are the final EM&V results of the 2012 CDM program initiatives for GPI, depicting Net Demand and Energy savings by initiative, both incremental per year and cumulative for the 2011-2014 period. The Demand savings data shown assume that those savings will persist only one year.

- *Table 6a* provides insight into the participation levels, demand and energy savings by initiative for 2012
- *Table 6b* shows corrections that were made to 2011 verified results as a result of errors and omissions. The corrections were incorporated into 2012 results in the line labelled, 'Adjustments to Previous Year's Verified Results' in *Table 6a*.
- *Table 6c* shows Realization Rates and Net-to-Gross Ratios used for each initiative to calculate Net Savings. These are incorporated in the results shown in *Table 6a*.

Table 6a: Grimsby Power Inc. Participation, Demand and Energy Savings in OPA-Contracted Province-Wide CDM Initiatives

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	165	96			10	6			67,826	37,883			15	384,749
Appliance Exchange	Appliances	12	33			1	5			1,179	8,696			5	30,022
HVAC Incentives	Equipment	274	229			72	48			127,173	79,836			119	748,197
Conservation Instant Coupon Booklet	Items	1,137	70			3	1			42,622	3,187			3	180,050
Bi-Annual Retailer Event	Items	1,984	2,418			4	3			66,980	61,041			7	451,041
Retailer Co-op	Items	0	0			0	0			0	0			0	0
Residential Demand Response (switch/pstat)	Devices	0	0			0	0			0	0			0	0
Residential Demand Response (IHD)	Devices	0	0			0				0					
Residential New Construction	Homes	0	0			0	0			0	0			0	0
Consumer Program Total						89	62			305,780	190,642			150	1,794,059
Business Program															
Retrofit	Projects	1	10			0	129			33,992	633,896			129	2,037,654
Direct Install Lighting	Projects	25	48			32	34			79,312	123,968			58	670,196
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	2			0	10			0	50,353			10	151,058
Small Commercial Demand Response	Devices	0	0			0	0			0	0			0	0
Small Commercial Demand Response (IHD)	Devices	0	0			0				0				0	0
Demand Response 3	Facilities	1	1			75	75			2,932	1,095			0	4,026
Business Program Total						107	249			116,235	809,311			198	2,862,934
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	0	0			0	0			0	0			0	0
Demand Response 3	Facilities	1	2			211	306			12,367	7,364			0	19,731
Industrial Program Total						211	306			12,367	7,364			0	19,731
Home Assistance Program															
Home Assistance Program	Homes	0	0			0	0			0	0			0	0
Home Assistance Program Total						0	0			0	0			0	0
Pre-2011 Programs completed in 2011															
Electricity Retrofit Incentive Program	Projects	6	0			88	0			511,483	0			88	2,045,934
High Performance New Construction	Projects	1	0			21	0			110,414	250			22	442,405
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						110	0			621,898	250			110	2,488,339
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						230	236			1,040,981	999,108			458	7,141,306
Demand Response Total (Scenario 1)						286	381			15,299	8,458			0	23,757
OPA-Contracted LDC Portfolio Total (inc. Adjustments)						516	606			1,056,280	992,936			447	7,106,538
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:		2,060	7,760,000
												% of Full OEB Target Achieved to Date (Scenario 1):		21.7%	91.6%

Table 6b: Adjustments to Grimsby Power Inc. 2011 Verified Results due to Errors or Omissions – (Included in 2012 Adjustments in Table 3a)

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)				Program-to-Date Verified Progress to Target (excludes DR)	
		2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
Consumer Program															
Appliance Retirement	Appliances	0				0				0				0	0
Appliance Exchange	Appliances	0				0				0				0	0
HVAC Incentives	Equipment	-43				-11				-19,861				-11	-79,442
Conservation Instant Coupon Booklet	Items	19				0				628				0	2,513
Bi-Annual Retailer Event	Items	186				0				4,976				0	19,905
Retailer Co-op	Items	0				0				0				0	0
Residential Demand Response (switch/pstat)*	Devices	0				0				0				0	0
Residential Demand Response (IHD)	Devices	0				0				0				0	0
Residential New Construction	Homes	0				0				0				0	0
Consumer Program Total						-11				-14,256				-11	-57,023
Business Program															
Retrofit	Projects	0				0				0				0	0
Direct Install Lighting	Projects	0				0				0				0	0
Building Commissioning	Buildings	0				0				0				0	0
New Construction	Buildings	0				0				0				0	0
Energy Audit	Audits	0				0				0				0	0
Small Commercial Demand Response (switch/pstat)*	Devices	0				0				0				0	0
Small Commercial Demand Response (IHD)	Devices	0				0				0				0	0
Demand Response 3*	Facilities	0				0				0				0	0
Business Program Total						0				0				0	0
Industrial Program															
Process & System Upgrades	Projects	0				0				0				0	0
Monitoring & Targeting	Projects	0				0				0				0	0
Energy Manager	Projects	0				0				0				0	0
Retrofit	Projects	0				0				0				0	0
Demand Response 3*	Facilities	0				0				0				0	0
Industrial Program Total						0				0				0	0
Home Assistance Program															
Home Assistance Program	Homes	0				0				0				0	0
Home Assistance Program Total						0				0				0	0
Pre-2011 Programs completed in 2011															
Electricity Retrofit Incentive Program	Projects	0				0				0				0	0
High Performance New Construction	Projects	0				0				-375				0	-1,501
Toronto Comprehensive	Projects	0				0				0				0	0
Multifamily Energy Efficiency Rebates	Projects	0				0				0				0	0
LDC Custom Programs	Projects	0				0				0				0	0
Pre-2011 Programs completed in 2011 Total						0				-375				0	-1,501
Other															
Program Enabled Savings	Projects	0				0				0				0	0
Time-of-Use Savings	Homes														
Other Total						0				0				0	0

Table 6c: Grimsby Power Inc. Realization Rates and Net-to-Gross Ratios by Initiative (As used in Table 3a to determine Net Savings)

Initiative	Peak Demand Savings								Energy Savings							
	Realization Rate				Net-to-Gross Ratio				Realization Rate				Net-to-Gross Ratio			
	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
Consumer Program																
Appliance Retirement		1.00				0.46				1.00				0.47		
Appliance Exchange		1.00				0.52				1.00				0.52		
HVAC Incentives		1.00				0.50				1.00				0.49		
Conservation Instant Coupon Booklet		1.00				1.00				1.00				1.05		
Bi-Annual Retailer Event		1.00				0.91				1.00				0.92		
Retailer Co-op		n/a				n/a				n/a				n/a		
Residential Demand Response (switch/pstat)*		n/a				n/a				n/a				n/a		
Residential Demand Response (IHD)		n/a				n/a				n/a				n/a		
Residential New Construction		n/a				n/a				n/a				n/a		
Business Program																
Retrofit		1.00				0.78				1.24				0.81		
Direct Install Lighting		0.68				0.94				0.85				0.94		
Building Commissioning		n/a				n/a				n/a				n/a		
New Construction		n/a				n/a				n/a				n/a		
Energy Audit		n/a				n/a				n/a				n/a		
Small Commercial Demand Response (switch/pstat)*		n/a				n/a				n/a				n/a		
Small Commercial Demand Response (IHD)		n/a				n/a				n/a				n/a		
Demand Response 3*		n/a				n/a				n/a				n/a		
Industrial Program																
Process & System Upgrades		n/a				n/a				n/a				n/a		
Monitoring & Targeting		n/a				n/a				n/a				n/a		
Energy Manager		n/a				n/a				n/a				n/a		
Retrofit																
Demand Response 3*		n/a				n/a				n/a				n/a		
Home Assistance Program																
Home Assistance Program		n/a				n/a				n/a				n/a		
Pre-2011 Programs completed in 2011																
Electricity Retrofit Incentive Program		n/a				n/a				n/a				n/a		
High Performance New Construction		1.00				0.50				1.00				0.50		
Toronto Comprehensive		n/a				n/a				n/a				n/a		
Multifamily Energy Efficiency Rebates		n/a				n/a				n/a				n/a		
LDC Custom Programs		n/a				n/a				n/a				n/a		
Other																
Program Enabled Savings		n/a				n/a				n/a				n/a		
Time-of-Use Savings		n/a				n/a				n/a				n/a		

4.2.2 OPA PROVINCE-WIDE EVALUATION FINDINGS

The province achieved **17.8%** of the demand savings target of 1,330 MW at the end of 2012. Likewise, they achieved **65.1%** of the energy savings target of 6,000 GWh in 2012. Cumulatively, Retrofits made up the highest proportion of savings for both the demand and energy measures, 35.4% for demand and 37.9% for energy. The HVAC incentive was second in terms of demand savings, comprising 21.5% of the total. The Pre-2011 ERIP initiative was second in terms of the energy savings measure, comprising 12.4% of the total actual energy savings in 2012.

The following tables depict the verified 2012 CDM savings realized by the Province.

- *Table 7a* provides insight into the participation levels, demand and energy savings by initiative for 2012
- *Table 7b* shows corrections that were made to 2011 verified results as a result of errors and omissions. The corrections were incorporated into 2012 results in the line labelled, 'Adjustments to Previous Year's Verified Results' in *Table 7a*.
- *Table 7c* shows Realization Rates and Net-to-Gross Ratios used by Initiative to calculate Net Savings. These are incorporated in the results shown in *Table 7a*.

Table 7a: Province-Wide Initiatives and Program Level Savings by Year

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)				Program-to-Date Verified Progress to Target (excludes DR)	
		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	56,110	34,146			3,299	2,011			23,005,812	13,424,518			5,171	132,176,857
Appliance Exchange	Appliances	3,688	3,836			371	556			450,187	974,621			689	4,512,525
HVAC Incentives	Equipment	111,587	85,221			32,037	19,060			59,437,670	32,841,283			51,097	336,274,530
Conservation Instant Coupon Booklet	Items	559,462	30,891			1,344	230			21,211,537	1,398,202			1,575	89,040,754
Bi-Annual Retailer Event	Items	870,332	1,060,901			1,681	1,480			29,387,468	26,781,674			3,161	197,894,897
Retailer Co-op	Items	152	0			0	0			2,652	0			0	10,607
Residential Demand Response (switch/pstat)*	Devices	19,550	98,388			10,947	49,038			24,870	359,408			0	384,279
Residential Demand Response (IHD)	Devices	0	49,689			0				0					
Residential New Construction	Homes	7	19			0	2			743	17,152			2	54,430
Consumer Program Total						49,681	72,377			133,520,941	75,796,859			61,696	760,348,879
Business Program															
Retrofit	Projects	2,516	5,605			24,467	61,147			136,002,258	314,922,468			84,018	1,480,647,459
Direct Install Lighting	Projects	20,297	18,494			23,724	15,284			61,076,701	57,345,798			31,181	391,072,869
Building Commissioning	Buildings	0	0			0	0			0	0			0	0
New Construction	Buildings	10	69			123	764			411,717	1,814,721			888	7,091,031
Energy Audit	Audits	103	280			0	1,450			0	7,049,351			1,450	21,148,054
Small Commercial Demand Response	Devices	132	294			84	187			157	1,068			0	1,224
Small Commercial Demand Response (IHD)	Devices	0	0			0				0				0	0
Demand Response 3*	Facilities	145	151			16,218	19,389			633,421	281,823			0	915,244
Business Program Total						64,617	98,221			198,124,253	381,415,230			117,535	1,900,875,881
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	39			0	1,086			0	7,372,108			1,086	22,116,324
Retrofit	Projects	433				4,615				28,866,840				4,613	115,462,282
Demand Response 3*	Facilities	124	185			52,484	74,056			3,080,737	1,784,712			0	4,865,449
Industrial Program Total						57,098	75,141			31,947,577	9,156,820			5,699	142,444,054
Home Assistance Program															
Home Assistance Program	Homes	46	5,033			2	566			39,283	5,442,232			569	16,483,831
Home Assistance Program Total						2	566			39,283	5,442,232			569	16,483,831
Pre-2011 Programs completed in 2011															
Electricity Retrofit Incentive Program	Projects	2,016	0			21,662	0			121,130,219	0			21,662	484,552,876
High Performance New Construction	Projects	145	69			5,098	3,251			26,185,591	11,901,944			8,349	140,448,197
Toronto Comprehensive	Projects	577	0			15,805	0			86,964,886	0			15,805	347,859,545
Multifamily Energy Efficiency Rebates	Projects	110	0			1,981	0			7,595,683	0			1,981	30,382,733
LDC Custom Programs	Projects	8	0			399	0			1,367,170	0			399	5,468,679
Pre-2011 Programs completed in 2011 Total						44,945	3,251			243,251,550	11,901,944			48,195	1,088,712,030
Other															
Program Enabled Savings	Projects	0	16			0	2,304			0	1,188,362			2,304	3,565,086
Time-of-Use Savings	Homes														
Other Total							2,304				1,188,362			2,304	3,565,086
Adjustments to Previous Year's Verified Results															
							1,406				18,689,081			1,156	73,818,598
Energy Efficiency Total						136,610	109,191			603,144,419	482,474,435			235,998	3,826,263,564
Demand Response Total (Scenario 1)						79,733	142,670			3,739,185	2,427,011			0	6,166,196
OPA-Contracted LDC Portfolio Total (inc. Adjustments)						216,343	253,267			606,883,604	503,590,526			237,154	3,906,348,358
* 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:		1,330,000	6,000,000,000
												% of Full OEB Target Achieved to Date (Scenario 1):		17.8%	65.1%

Table 7b: Adjustments to Province-Wide 2011 Verified Results due to Errors & Omissions (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)
Consumer Program															
Appliance Retirement	Appliances	0				0				0				0	0
Appliance Exchange	Appliances	0				0				0				0	0
HVAC Incentives	Equipment	-18,866				-5,278				-9,721,817				-5,278	-38,887,267
Conservation Instant Coupon Booklet	Items	8,216				16				275,655				16	1,102,621
Bi-Annual Retailer Event	Items	81,817				108				2,183,391				108	8,733,563
Retailer Co-op	Items	0				0				0				0	0
Residential Demand Response (switch/pstat)*	Devices	0				0				0				0	0
Residential Demand Response (IHD)	Devices	0				0				0				0	0
Residential New Construction	Homes	19				1				13,767				1	55,069
Consumer Program Total						-5,153				-7,249,004				-5,153	-28,996,015
Business Program															
Retrofit	Projects	303				3,204				16,216,165				3,083	64,398,674
Direct Install Lighting	Projects	444				501				1,250,388				372	4,624,945
Building Commissioning	Buildings	0				0				0				0	0
New Construction	Buildings	12				828				3,520,620				828	14,082,482
Energy Audit	Audits	93				481				2,341,392				481	9,365,567
Small Commercial Demand Response (switch/pstat)*	Devices	0				0				0				0	0
Small Commercial Demand Response (IHD)	Devices	0				0				0				0	0
Demand Response 3*	Facilities	0				0				0				0	0
Business Program Total						5,014				23,328,565				4,764	92,471,668
Industrial Program															
Process & System Upgrades	Projects	0				0				0				0	0
Monitoring & Targeting	Projects	0				0				0				0	0
Energy Manager	Projects	0				0				0				0	0
Retrofit	Projects	0				0				0				0	0
Demand Response 3*	Facilities	0				0				0				0	0
Industrial Program Total						0				0				0	0
Home Assistance Program															
Home Assistance Program	Homes	0				0				0				0	0
Home Assistance Program Total						0				0				0	0
Pre-2011 Programs completed in 2011															
Electricity Retrofit Incentive Program	Projects	12				138				545,536				138	2,182,145
High Performance New Construction	Projects	34				1,407				2,065,200				1,407	8,260,800
Toronto Comprehensive	Projects	0				0				0				0	0
Multifamily Energy Efficiency Rebates	Projects	0				0				0				0	0
LDC Custom Programs	Projects	0				0				0				0	0
Pre-2011 Programs completed in 2011 Total						1,545				2,610,736				1,545	10,442,945
Other															
Program Enabled Savings	Projects	0				0				0				0	0
Time-of-Use Savings	Homes														
Other Total						0				0				0	0
Adjustments to Previous Year's Verified Results						1,406				18,690,297				1,156	73,918,598

* Activity & savings for Demand Response resources for each year and quarter represent the savings from all active facilities or devices contracted since January

Table 7c: Province-Wide Realization Rate and Net-to-Gross Ratios

Initiative	Peak Demand Savings								Energy Savings							
	Realization Rate				Net-to-Gross Ratio				Realization Rate				Net-to-Gross Ratio			
	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
Consumer Program																
Appliance Retirement		1.00				0.46				1.00				0.47		
Appliance Exchange		1.00				0.52				1.00				0.52		
HVAC Incentives		1.00				0.50				1.00				0.49		
Conservation Instant Coupon Booklet		1.00				1.00				1.00				1.05		
Bi-Annual Retailer Event		1.00				0.91				1.00				0.92		
Retailer Co-op		n/a				n/a				n/a				n/a		
Residential Demand Response (switch/pstat)*		n/a				n/a				n/a				n/a		
Residential Demand Response (IHD)		n/a				n/a				n/a				n/a		
Residential New Construction		3.65				0.49				7.17				0.49		
Business Program																
Retrofit		0.93				0.75				1.05				0.76		
Direct Install Lighting		0.69				0.94				0.85				0.94		
Building Commissioning		n/a				n/a				n/a				n/a		
New Construction		0.98				0.49				0.99				0.49		
Energy Audit		n/a				n/a				n/a				n/a		
Small Commercial Demand Response (switch/pstat)*		n/a				n/a				n/a				n/a		
Small Commercial Demand Response (IHD)		n/a				n/a				n/a				n/a		
Demand Response 3*		n/a				n/a				n/a				n/a		
Industrial Program																
Process & System Upgrades		n/a				n/a				n/a				n/a		
Monitoring & Targeting		n/a				n/a				n/a				n/a		
Energy Manager		1.16				0.90				1.16				0.90		
Retrofit																
Demand Response 3*		n/a				n/a				n/a				n/a		
Home Assistance Program																
Home Assistance Program		0.32				1.00				0.99				1.00		
Pre-2011 Programs completed in 2011																
Electricity Retrofit Incentive Program		n/a				n/a				n/a				n/a		
High Performance New Construction		1.00				0.50				1.00				0.50		
Toronto Comprehensive		n/a				n/a				n/a				n/a		
Multifamily Energy Efficiency Rebates		n/a				n/a				n/a				n/a		
LDC Custom Programs		n/a				n/a				n/a				n/a		
Other																
Program Enabled Savings		1.06				1.00				2.26				1.00		
Time-of-Use Savings		n/a				n/a				n/a				n/a		

The following is a summary of the 2012 EM&V findings for all of the evaluated **saveONenergy** initiatives, based on the *Final 2012 EM&V Findings* report issued August 30, 2013:

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. In 2011, both online coupons AND coupon mailing booklets were available

HVAC

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

Appliance Retirement

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

Appliance Exchange

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

peaksaver PLUS

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

- Evaluation to date has indicated savings from in-home displays (IHDs) are not statistically significant (in and around zero). However, since the 2012 evaluation did not include a full year analysis (specifically during 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 saying 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 in 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 the initiative.
- The majority of energy savings (62%) comes from lighting measures, while 21% of energy savings resulted from refrigerator and freezer replacements.

4.3 SPENDING

In 2011 and 2012, GPI received Program Administration Based (PAB) funding for the administration of OPA-Contracted Province-Wide CDM Programs offered in GPI’s service area. Participant Incentive (PI) funding and Performance Based Funding (PBF) for the administration of Retrofit and Direct Install Lighting projects was also received on a cost recovery basis.

GPI paid Burman Energy a significant portion of the PAB funding to administer CDM programs in Grimsby, although a portion was withheld to support GPI’s internal costs as well.

Of note, there were no expenditures in 2012 on OPA-Contracted Province-Wide CDM Programs that were Not-In-Market. *Table 8*, taken from the 2011 Annual CDM Report depicts total spending, all in 2011, on programs Not-In-Market.

Table 8: GPI CDM Spending On Program Initiatives Not-In-Market in 2011

Initiative	Program Administration Budget (PAB)
Initiatives Not-In-Market	
Midstream Electronics	\$0.00
Midstream Pool Equipment	\$0.00
Demand Service Space Cooling	\$1,192.00
Demand Response 1 (Commercial)	\$0.00
Demand Response 1 (Industrial)	\$2,740.00
Home Energy Audit Tool	\$0.00
TOTAL Province-wide CDM PROGRAMS Not In Market	\$3,932.00

The *Table 9* depicts total spending on OPA-Contracted Province-Wide CDM Programs in 2012 by initiative. *Table 10* depicts the same chart with cumulative spending for 2011 and 2012.

Table 9: GPI CDM Spending By Program Initiative in 2012

Initiative	Program Administration Budget (PAB)	Performance Based Funding (PBF)	Participant Incentives (PI)	TOTAL
Consumer Program				
Appliance Retirement	\$4,874.69			\$4,874.69
Appliance Exchange	\$5,955.60			\$5,955.60
HVAC Incentives	\$4,841.69			\$4,841.69
Conservation Instant Coupon Booklet	\$9,275.71			\$9,275.71
Bi-Annual Retailer Event	\$4,319.69			\$4,319.69
Residential Demand Response	\$6,881.50			\$6,881.50
New Construction Program	\$8,225.59			\$8,225.59
TOTAL CONSUMER PROGRAM:	\$44,374.47			\$44,374.47
Business Program				
Retrofit - ERII	\$35,309.00		\$78,304.32	\$113,613.32
Direct Installed Lighting	\$20,670.61	\$13,750.00	\$53,334.00	\$87,754.61
Existing Building Commissioning	\$7,134.36			\$7,134.36
New Construction and Major	\$7,371.86			\$7,371.86
Energy Audit	\$7,734.35			\$7,734.35
Commercial Demand Response	\$0.00			\$0.00
Demand Response 3	\$0.00			\$0.00
TOTAL BUSINESS PROGRAM	\$78,220.18	\$13,750.00	\$131,638.32	\$223,608.50
Industrial Program				
Process & System Upgrades				
a) preliminary study	\$833.33			\$833.33
b) engineering study	\$833.33			\$833.33
c) program incentive	\$833.33			\$833.33
Monitoring & Targeting	\$833.34			\$833.34
Energy Manager	\$0.00			\$0.00
Key Account Manager	\$0.00			\$0.00
Efficiency: Equipment Replacement	\$0.00			\$0.00
Demand Response 3	\$1,731.22			\$1,731.22
TOTAL INDUSTRIAL PROGRAM	\$5,064.55	\$0.00	\$0.00	\$5,064.55
Home Assistance Program				
Home Assistance Program	\$9,930.12			\$9,930.12
Pre 2011 Programs				
Electricity Retrofit Incentive Program	\$0.00			\$0.00
High Performance New Construction	\$0.00			\$0.00
Toronto Comprehensive	\$0.00			\$0.00
Multifamily Energy Efficiency Rebates	\$0.00			\$0.00
Data Centre Incentive Program	\$0.00			\$0.00
EnWin Green Suites	\$0.00			\$0.00
TOTAL PRE-2011 PROGRAMS	\$0.00	\$0.00	\$0.00	\$0.00
TOTAL Province-wide CDM PROGRAMS	\$137,589.32	\$13,750.00	\$131,638.32	\$282,977.64

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Table 10: Cumulative GPI CDM Spending By Program Initiative in 2011 / 2012

Initiative	Program Administration Budget (PAB)	Performance Based Funding (PBF)	Participant Incentives (PI)	TOTAL
Consumer Program				
Appliance Retirement	\$14,546.69			\$14,546.69
Appliance Exchange	\$7,449.60			\$7,449.60
HVAC Incentives	\$13,843.69			\$13,843.69
Conservation Instant Coupon Booklet	\$15,235.71			\$15,235.71
Bi-Annual Retailer Event	\$5,776.69			\$5,776.69
Residential Demand Response	\$9,425.50			\$9,425.50
New Construction Program	\$10,131.59			\$10,131.59
TOTAL CONSUMER PROGRAM:	\$76,409.47			\$76,409.47
Business Program				
Retrofit - ERII	\$44,574.00		\$78,304.32	\$122,878.32
Direct Installed Lighting	\$33,612.61	\$18,975.00	\$72,460.75	\$125,048.36
Existing Building Commissioning	\$8,326.36			\$8,326.36
New Construction and Major	\$10,253.86			\$10,253.86
Energy Audit	\$10,426.35			\$10,426.35
Commercial Demand Response	\$0.00			\$0.00
Demand Response 3	\$0.00			\$0.00
TOTAL BUSINESS PROGRAM	\$107,193.18	\$18,975.00	\$150,765.07	\$276,933.25
Industrial Program				
Process & System Upgrades				
a) preliminary study	\$1,083.33			\$1,083.33
b) engineering study	\$1,083.33			\$1,083.33
c) program incentive	\$1,083.33			\$1,083.33
Monitoring & Targeting	\$1,083.34			\$1,083.34
Energy Manager	\$250.00			\$250.00
Key Account Manager	\$250.00			\$250.00
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	\$0.00			\$0.00
Demand Response 3	\$4,479.22			\$4,479.22
TOTAL INDUSTRIAL PROGRAM	\$9,312.55	\$0.00	\$0.00	\$9,312.55
Home Assistance Program				
Home Assistance Program	\$9,930.12			\$9,930.12
Pre 2011 Programs				
Electricity Retrofit Incentive Program	\$7,439.00			\$7,439.00
High Performance New Construction	\$0.00			\$0.00
Toronto Comprehensive	\$0.00			\$0.00
Multifamily Energy Efficiency Rebates	\$0.00			\$0.00
Data Centre Incentive Program	\$0.00			\$0.00
EnWin Green Suites	\$0.00			\$0.00
TOTAL PRE-2011 PROGRAMS	\$7,439.00	\$0.00	\$0.00	\$7,439.00
TOTAL Province-wide CDM PROGRAMS	\$210,284.32	\$18,975.00	\$150,765.07	\$380,024.39

4.4 ADDITIONAL COMMENTS

GPI contracted Burman Energy to administer all CDM programs in the Grimsby service area. Through them, GPI promoted the Direct Install and Retrofit programs with direct visits to over 100 local small businesses.

In addition, GPI was active in the community with CDM-related activities in 2012. The Grimsby Power booth was prominent at several community functions including the *Home and Garden Show* in April, the *Happening at the Park* in late June, *The Festival on the Forty* in August and the *Appliance Exchange Event* in June. Small businesses in Grimsby showed a great deal of interest, particularly in the Direct Install Lighting initiative.

GPI achieved good success in 2012 with the CDM programs in place. GPI hopes to build on that momentum, and with several new initiatives, the potential for renewed success is high.

5 COMBINED CDM REPORTING ELEMENTS

5.1 PROGRESS TOWARDS CDM TARGETS

5.1.1 GPI'S PROGRESS TOWARD CDM TARGETS

The following tables depict GPI's verified demand and energy savings for 2012 under Scenario 1, where demand savings are assumed to persist for just one year. GPI achieved 21.7% of the demand savings target and 91.6% of the energy savings target in 2012. This compares to 2011 values under Scenario 1 of 10.8% and 53.6% respectively.

Table 11a: Net Peak Demand Savings at the End User Level (MW)

Implementation Period	Annual			
	2011	2012	2013	2014
2011 - Verified	0.5	0.2	0.2	0.2
2012 - Verified		0.6	0.2	0.2
2013				
2014				
Verified Net Annual Peak Demand Savings Persisting in 2014:				0.4
Grimsby Power Inc. 2014 Annual CDM Capacity Target				2.1
Verified Portion of Peak Demand Savings Target Achieved in 2014(%):				21.7%

Table 11b: Net Energy Savings at the End-User Level (GWh)

Implementation Period	Annual				Cumulative
	2011	2012	2013	2014	2011-2014
2011 - Verified	1.1	1.0	1.0	1.0	4.2
2012 - Verified		1.0	1.0	1.0	2.9
2013					
2014					
Verified Net Cumulative Energy Savings 2011-2014:					7.1
Grimsby Power Inc. 2011-2014 Annual CDM Energy Target					7.8
Verified Portion of Cumulative Energy Target Achieved (%):					91.6%

*2011 energy adjustments included in cumulative energy savings.

5.1.2 PROVINCIAL PROGRESS TOWARD CDM TARGETS

The Final Report on CDM Results from the OPA outlined the province's progress toward its targets. Overall, the province achieved 17.8% of the Demand Savings (kW) target and 65.1% of the energy savings target in 2012. By comparison, GPI achieved better than average success on both fronts.

Table 12a: Province-wide Net Peak Demand Savings (MW) Performance

Implementation Period	Annual			
	2011	2012	2013	2014
2011	216.3	136.6	135.8	129.0
2012		253.3	109.8	108.2
2013				
2014				
Verified Net Annual Peak Demand Savings in 2014:				237.2
2014 Annual CDM Capacity Target				1,330
Verified Peak Demand Savings Target Achieved - 2011 (%):				17.8%

Table 12b: Province-wide Net Cumulative Energy Savings (GWh) Performance

Implementation Period	Annual				Cumulative
	2011	2012	2013	2014	2011-2014
2011	606.9	603.0	601.0	582.3	2,393
2012		503.6	498.4	492.6	1,513
2013					
2014					
Verified Net Cumulative Energy Savings 2011-2014:					3,906
2011-2014 Cumulative CDM Energy Target:					6,000
Verified Portion of Energy Target Achieved - 2011 (%):					65.1%

*2011 energy adjustments included in cumulative energy savings.

5.2 VARIANCE FROM CDM STRATEGY

The following table provides a comparison of the original CDM Strategy document projections to verified results. The GPI forecast of CDM Savings expected for 2013 / 2014 shows that with favourable participation levels, GPI may achieve the demand savings target of 2,060 kW by 2014, but with little room to spare. It looks promising that GPI will achieve the energy-saving target of 7,760,000 kWh ahead of schedule, even in 2013.

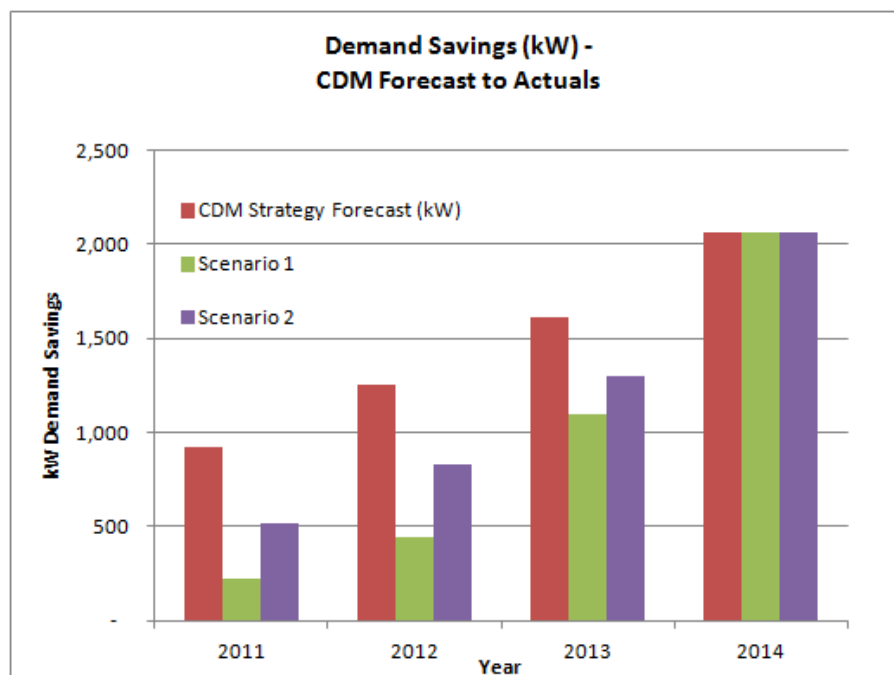
Table 13: Comparison Between GPI's Verified Results for 2012 and the CDM Strategy report issued Feb 14, 2011 (Includes 2013 / 2014 Forecast)

Overall YEAR	Targets Per CDM Strategy ^(*)		Demand Savings Trend (kW)		Energy Savings Trend (kWh)	
	Demand Savings (kW)	Energy Savings (kWh)	Scenario 1:	Scenario 2:	Scenario 1:	Scenario 2:
			Demand Savings Persist for 1 Year	Demand Savings Persist to 2014	Demand Savings Persist for 1 Year	Demand Savings Persist to 2014
2011	920	827,000	222	515	4,159,279	4,205,920
2012	1,250	2,559,000	447	828	7,106,538	7,123,680
2013	1,610	5,054,000	1,100	1,300	7,800,000	7,900,000
2014	2,060	8,377,000	2,060	2,060	8,377,000	8,377,000

^(*) EB-2010-0215 - GPI CDM/GEA 2011-2014 Strategy Filing, as amended February 14, 2011

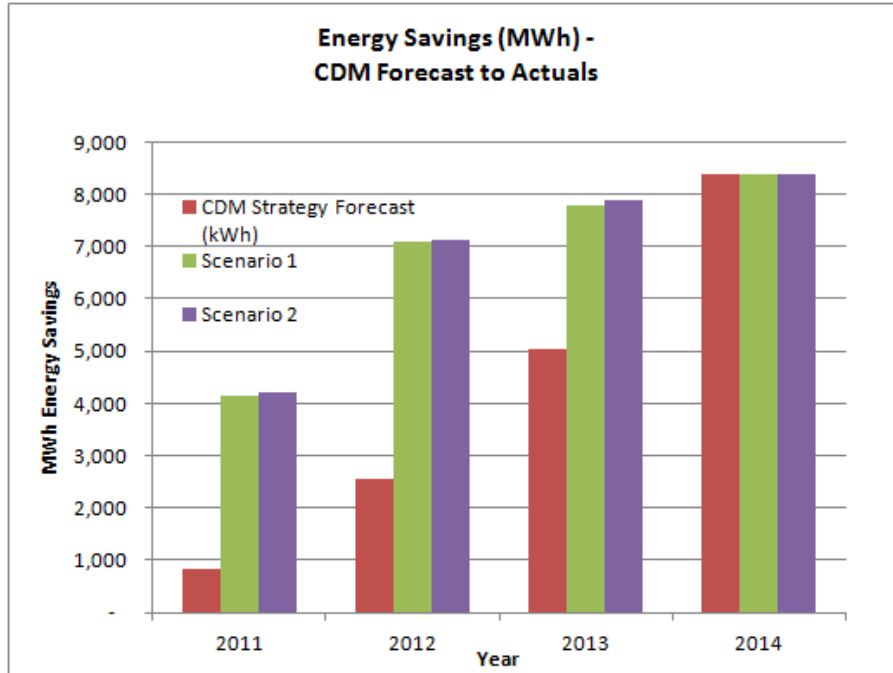
The following graphs depict Demand and Energy Savings achieved in 2011, 2012 and forecast for 2013 and 2014, comparing them to the forecast presented in GPI's CDM 2011-2014 Strategy Filing (EB-2010-0215).

Table 14a: Graph Comparison of Demand Savings Performance to CDM Strategy Forecast



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Table 14b: Graph Comparison of Energy Savings Performance to CDM Strategy Forecast



As shown, the forecast for demand savings overestimated actuals under both Scenario 1 and 2 in the early years. Compared to the original forecasts, Demand Savings under Scenario 1 were lower than forecast by 64.2% in 2012.

The energy savings forecast on the other hand clearly underestimated the actual results for both Scenario 1 and 2. Energy Savings in 2012 under Scenario 1 were above forecast by 177.7%.

5.3 OUTLOOK TO 2014 AND STRATEGY MODIFICATIONS

The CDM strategy presented by GPI in February 2011 (EB-2010-0215) predicted high growth in Demand Savings, and more modest growth in Energy Savings. In fact, the reverse happened in both 2011 and 2012. The initiatives with high Demand Savings were adopted slowly, while several Energy Savings initiatives have grown rapidly.

The energy savings realized from such programs as the Retrofit and DIL initiatives were difficult to predict at the time the CDM forecast was prepared. Local businesses showed enthusiasm for these initiatives, which drove savings close to target, up from 53.6% in 2011, to 91.6% in 2012.

Sources for demand savings were primarily from the Demand Response 3, which provided over 50% of demand savings achieved in 2012. Residential HVAC and the Business program Retrofit and DIL initiatives also made significant contributions to the demand savings. The progress toward target improved from 10.8% to 21.7% in 2012 under Scenario 1.

Consumer Programs:

Consumer programs contributed almost 20% of the energy savings achieved by GPI in 2012 and 10% of the demand savings. While marketing efforts were directed at boosting the HVAC initiative due to its relatively high CDM values per participant, actual projects declined from 2011. Eligible applicants for the HVAC initiative were increasingly difficult to find.

The Residential Demand Response program (*peaksaver PLUS*®) will assist GPI in meeting its Demand Savings targets in late 2013 and 2014. While there have been ongoing technological and logistical issues with the effective implementation of this initiative, there is much interest in it.

Commercial & Institutional Programs:

Over 40% of the total demand savings and 80% of the total energy savings were derived in the Commercial & Institutional program sector. Grimsby small businesses in particular, showed great interest in initiatives such as the Retrofit and the Direct Install Lighting initiatives. The Retrofit program was the most active initiative and provided high demand and energy savings. Its CDM energy savings value per project averaged above 63,000 kWh. It went from 1 to 10 completed projects in 2012 and there remained good potential for growth of this initiative into 2013. GPI will continue to seek growth in participation for this initiative, although many of the businesses most likely to participate have already done so.

Industrial Programs:

The DR-3 initiative provided all the energy and demand savings for the Industrial program in 2012. GPI has little control over the results of this initiative. With larger users, it often takes longer for existing marketing efforts to produce results. For this reason, GPI will continue to pursue its existing marketing strategy and to seek new opportunities to grow participation in this program sector.

Home Assistance Program

Despite an initial investment and assignment of personnel to administer the initiative, there were no energy or demand savings from the Home Assistance program in 2012. The difficulty in finding eligible applicants has been a significant barrier to its success.

Summary

GPI has actively promoted CDM programs in Grimsby using "...bill inserts, newspaper ads, online advertising and attendance at community events." (*Page 2, GPI CDM Strategy*). This tactic will continue, in order to build awareness and interest in the saveONenergy programs. The focus will change to particular initiatives over time, particularly those with high CDM values per project (or unit). Future new effort will be directed at the *peaksaver PLUS*® initiative, in addition to those previously highlighted: Retrofits, Direct Install Lighting, Bi-annual Retailer Events and HVAC Incentives.

In addition, GPI is actively pursuing leads in business conservation projects by providing information sessions and holding face-to-face meetings with local business leaders in order to build on GPI's success.

6 CONCLUSION

Over the course of 2012, GPI has achieved 0.45 MW in peak demand savings and 7.11 GWh in energy savings, which represents 21.7% and 91.6% of GPI's 2014 target, respectively (*under Scenario 1*). These results are representative of a considerable effort expended by GPI, 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 subsequent CDM terms.

However, despite continuing improvements to existing programs, GPI 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, GPI expects to readily meet its 7.76 GWh consumption target but will struggle to meet its 2.06 MW demand savings target. Depending on the success of such new to market programs as *peaksaver PLUS*[®] and the re-vamped HVAC program, GPI hopes to achieve the demand savings target without much time to spare.

Looking ahead, there is limited opportunity to make valuable changes to the current program portfolios and have these changes reflected in GPI's 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 industry and consumers.

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 located in Ontario.

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

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

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

Additional detail is available from the OPA:

- Schedule B-1, Exhibit D
- SaveOnEnergy website: <https://saveonenergy.ca/Consumer.aspx>

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 (A/C) and dehumidifiers in exchange for coupons/discounts towards the purchase of new energy efficient equipment.

Targeted Items: Window air conditioners and portable dehumidifiers

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

Additional detail is available from the OPA:

- Schedule B-1, Exhibit E, and
- SaveOnEnergy website: <https://saveonenergy.ca/Consumer.aspx>

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 Items: Central air conditioners and furnaces

Delivery: OPA contracts centrally for delivery of the program and LDCs are encouraged to convince local contractors to participate in the Initiative.

Additional detail is available from the OPA:

- Schedule B-1, Exhibit B, and
- Saveonenergy website <https://saveonenergy.ca/Consumer.aspx>

CONSERVATION INSTANT COUPON BOOKLET INITIATIVE
(Exhibit A)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

Targeted Items: 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, clotheslines and programmable thermostats

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

Additional details are available from the OPA:

- Schedule B-1, Exhibit A, and
- Saveonenergy website: <https://saveonenergy.ca/Consumer.aspx>

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 Items: Same as the conservation instant coupon booklet initiative

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

Additional detail is available from the OPA:

- Schedule B-1, Exhibit C, and
- Saveonenergy website: <https://saveonenergy.ca/Consumer.aspx>

NEW CONSTRUCTION PROGRAM (Schedule B-2)

Target Customer Type(s): Residential Home Builders, and by extension, 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 Items: All-off switch, ECM motors, ENERGY STAR qualified central a/c, lighting control products, lighting fixtures, EnerGuide 83 whole home, EnerGuide 85 whole home

Delivery: Local engagement of builders will be the responsibility of the LDC and will be supported by OPA media coverage, thereby driving builders to their LDC for additional information.

Additional detail is available from the OPA:

- Schedule B-2, and
- Saveonenergy website: <https://saveonenergy.ca/Consumer.aspx>

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: Before 2011, this was known as the *peaksaver*™ program. Participants were eligible to receive a free programmable thermostat or switch, including installation, together with a \$25 bill credit. LDCs were given the opportunity to continue to offer the standard load control program (programmable thermostat or switch with a \$25 bill credit) for the first 8 months of 2011 (referred to as *peaksaver*®Extension). After August 2011, the Extension ended and the program (including marketing) ceased until new IHD products were available. Under the new *peaksaver* PLUS® program, participants receive access to price and real-time consumption information on an In-Home Display (IHD) in place of the bill credit.

Targeted Items: central air conditioning, water heaters and pool pumps

Delivery: LDC's recruit customers and procure technology

Additional detail is available from the OPA:

- Schedule B-3, and
- Saveonenergy website: <https://saveonenergy.ca/Consumer.aspx>

COMMERCIAL AND INSTITUTIONAL PROGRAM

EQUIPMENT REPLACEMENT INCENTIVE INITIATIVE (ERII) A.K.A. "RETROFIT" INITIATIVE (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 from the OPA:

- Schedule C-2, and
- Saveonenergy website <https://saveonenergy.ca/Business/Program-Overviews/Retrofit-for-Commercial.aspx>

DIRECT INSTALL INITIATIVE (DIL) A.K.A. "SMALL BUSINESS LIGHTING" (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 commercial, institutional and agricultural facilities and multi-family buildings, for the purpose of achieving electricity savings and peak demand savings.

Description: The Direct Installed Lighting initiative targets customers in the General Service <50 kW 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: Energy efficient lighting and water heating systems

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

Additional detail is available from the OPA:

- Schedule C-3, and
- Saveonenergy website <https://saveonenergy.ca/Business/Program-Overviews/Small-Business-Lighting-and-AC.aspx>

***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 from the OPA:

- Schedule C-6, and
- Saveonenergy website: <https://saveonenergy.ca/Business/Program-Overviews/Existing-Building-Commissioning.aspx>

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

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

Initiative Frequency: Year-round

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

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

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

Delivery: LDC delivers to customers and design decision makers.

Additional detail is available from the OPA:

- Schedule C-4, and
- Saveonenergy website: <https://saveonenergy.ca/Business/Program-Overviews/New-Construction.aspx>

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 from the OPA:

- Schedule C-1, and
- Saveonenergy website: <https://saveonenergy.ca/Business/Program-Overviews/Audit-Funding.aspx>

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

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 from the OPA:

- Schedule D-1, and
- SaveONenergy website <https://saveonenergy.ca/Business.aspx>

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, would 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 from the OPA:

- Schedule D-2, and
- SaveONenergy website <https://saveonenergy.ca/Business.aspx>

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 from the OPA:

- Schedule D-3, and
- SaveONenergy website <https://saveonenergy.ca/Business.aspx>

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 from the OPA:

- ScheduleD-4

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 (“DR-3”) 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 DR-3 Initiative is a contractual resource that is an economic alternative to procurement of new generation capacity. DR-3 comes with specific contractual obligations requiring participants to reduce their use of electricity relative to a baseline when called upon. 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: DR-3 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 from the OPA:

- Schedule D-6, and
- SaveONenergy website <https://saveonenergy.ca/Business.aspx>

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

LOW INCOME (HOME ASSISTANCE) PROGRAM

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 -1

APPENDIX B: PRE-2011 PROGRAM INITIATIVES

ELECTRICITY RETROFIT INCENTIVE PROGRAM (“ERIP”)

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

Initiative Activities/Progress: The ERIP program finished in 2010; it was replaced with the 2011-2014 ERII “Retrofit” Program. In Grimsby, there were no ERIP projects that started in 2010 and finished in 2012. Cumulative energy savings for the ERIP program are verified at 2,045,934 kWh for 2011-2014.

In Market Date: The ERIP program ran successfully in Grimsby from 2007.

Additional Comments:

- While it took some time for companies to realize the benefits of participating in ERIP, the uptake was significant over the term of the program with 24 successful applicants.
- Applicants complained about low incentive amounts and the lack of continuity and certainty of the program after December 2010

HIGH PERFORMANCE NEW CONSTRUCTION (“HPNC”)

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

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

Delivery: Through Enbridge Gas (and subcontracted to Union Gas)

Initiative Activities/Progress: The HPNC program had limited uptake with only one project finished in 2011. Spillover net incremental energy savings of 250 kWh were attributed to Grimsby for 2012. Cumulative energy savings for the HPNC program are verified at 442,405 kWh for 2011-2014.

In Market Date: In Grimsby, the HPNC program was in place from 2010.

Additional Comments:

- Not applicable

MULTIFAMILY ENERGY EFFICIENCY REBATES

Target Customer Type(s): Residential Multi-unit buildings

Initiative Frequency: Year-round

Objective: Improve energy efficiency of Multi-unit building

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

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

Targeted End Uses: Electricity saving measures

Delivery: OPA contracted with Greensaver

Initiative Activities/Progress: There was no uptake for this program in Grimsby in 2011-2012.

In Market Date: Not applicable

Additional Comments:

- GreenSaver was not active in the Grimsby area