# **Newmarket-Tay Power Distribution Ltd**

# Conservation and Demand Management 2013 Annual Report

Submitted to:
Ontario Energy Board

Submitted on September 30, 2014

### **Executive Summary**

This annual report is submitted by Newmarket-Tay Power Distribution Ltd. (NTPDL) in accordance with the filing requirements set out in the CDM Code (Board File No. EB-2010-0215), specifically Appendix C Annual Report Template. Accordingly, this report outlines NTPDL CDM activities for the period of January 1, 2013 to December 31, 2013. It includes net peak demand and net energy savings achieved from 2011, 2012 and 2013, with discussion of the current/future CDM framework, CDM program activities, successes and challenges, as well as forecasted savings to the end of 2014.

NTPDL did not apply for any Board-Approved CDM Programs during 2013; 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 NTPDL. It may be noted NTPDL is one of the 10 LDCs participating in the OPA's Time of Use study and provided interval data for both the initial 2012 research and for 2013.

In 2011, NTPDL 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, institutional, industrial and low income. These programs were rolled-out by the OPA in June 2011. In 2011 Program activities were centered on building a foundation for full program execution over the next three years of the program term, including staffing, procurement, and program delivery.

To the end of 2013 NTPDL has achieved 2.2 MW (28.7 %) of target MW of net incremental peak demand savings and 31.0 (93.8%) of target GWh of net incremental energy savings in 2013. A summary of the achievements towards the CDM targets is shown below:

The updated forecast prepared for this report shows that there will be a shortfall of approximately 4.4 MW versus NTPDL's 2014 peak demand reduction target. Although, the peak demand savings are below target, NTPDL expects to achieve the 2014 electricity energy savings target. Given the expected shortfall, NTPDL continues to work actively on participant engagement. In addition NTPDL has been working with the Ontario Power Authority ("OPA") to improve program effectiveness; however it is NTPDL's position that in itself this activity will not fully overcome the forecasted peak demand savings shortfall.

### **Background**

On March 31, 2010, the Minister of Energy and Infrastructure of Ontario, under the guidance of sections 27.1 and 27.2 of the *Ontario Energy Board Act, 1998*, directed the Ontario Energy Board (OEB) to establish Conservation and Demand Management (CDM) targets to be met by electricity distributors. Accordingly, on November 12, 2010, the OEB amended the distribution license of NTPDL to require NTPDL, as a condition of its license, to achieve 33.1 GWh of energy savings and 8.8 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, NTPDL submitted its CDM Strategy on which provided a high level of description of how NTPDL intended to achieve its CDM targets.

The Code also requires a distributor to file annual reports with the Board. This is the third Annual Report by NTPDL and has been prepared in accordance with the Code requirement and covers the period from January 1, 2013 to December 31, 2013.

### 1 Board-Approved CDM Program

#### 1.1 Introduction

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

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

#### 1.2 TOU Pricing

#### 1.2.1 Background

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

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. NTPDL will report these results upon receipt from the OPA.

The OPA had retained The Brattle Group as the evaluation contractor and has been working with an expert panel convened to provide ongoing advice on methodology, data collection, models, savings allocation, etc. The initial evaluations were conducted in 2013 with five LDCs — Hydro One, THESL, Ottawa Hydro, Thunder Bay and Newmarket. Preliminary results from these five LDCs were issued to the five LDCs involved in the study in August 2013 and are now publically available on the OPA website. Preliminary results demonstrated some load shifting behaviours from the residential customer class.

Three additional LDCs were added to the study in 2014. The OPA advised that the TOU study will be complete in the summer of 2015 and final verified savings will be available for LDCs to include in the 2014 Annual Report.

#### 1.2.2 TOU PROGRAM DESCRIPTION

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

Initiative Frequency: Year-Round

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

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

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

**Initiative Activities/Progress:** 

NTPDL began transitioning RPP customers to TOU billing on December, 2007. As of September, 2009 all RPP customers were on TOU billing.

### 1.3 Application with the OEB

NTPDL did not submit a CDM program application to the OEB in 2013.

### 2 OPA-Contracted Province-Wide CDM Programs

### 2.1 Introduction

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

Initiative	Schedule	Date schedule posted	In Market Date
Residential Programs			
Appliance Retirement	Schedule B-1, Exhibit D	Jan 26,2011	04/1/2011
Appliance Exchange	Schedule B-1, Exhibit E	Jan 26, 2011	04/1/2011
HVAC Incentives	Schedule B-1, Exhibit B	Jan 26, 2011	04/1/2011
Conservation Instant Coupon Booklet	Schedule B-1, Exhibit A	Jan 26, 2011	04/1/2011
Bi-Annual Retailer Event	Schedule B-1, Exhibit C	Jan 26, 2011	Spring/Fall
Retailer Co-op	n/a	n/a	
Residential Demand Response	Schedule B-3	Aug 22, 2011	Q2 2014
New Construction Program	Schedule B-2	Jan 26, 2011	09/1/2011
Home Assistance Program	Schedule E-1	May 9, 2011	
Commercial & Institutional Programs			
Efficiency: Equipment Replacement	Schedule C-2	Jan 26, 2011	06/1/2011
Direct Install Lighting  • General Service <50 kW	Schedule C-3	Jan 26, 2011	06/1/2011
Existing Building Commissioning Incentive	Schedule C-6	Feb 2011	09/1/201
New Construction and Major Renovation Initiative	Schedule C-4	Feb 2011	09/1/2011
Energy Audit	Schedule C-1	Jan 26, 2011	09/1/2011
Commercial Demand Response • General Service <50 kW	Schedule B-3	Jan 26, 2011	03/1/2011
Industrial Programs - General Service 50 l	W & above		
Process & System Upgrades	Schedule D-1	May 31, 2011	06/1/2011
Monitoring & Targeting	Schedule D-2	May 31, 2011	06/1/2011
Energy Manager	Schedule D-3	May 31, 2011	Do not qualify
Key Account Manager ("KAM")	Schedule D-4	May 31,2011	Do not qualify
Efficiency Equipment Replacement Incentive • (part of the C&I program schedule)	Schedule C-2	May 31, 2011	06//2011
Demand Response 3	Schedule D-6	May 31, 2011	03/1/2011

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

Electricity Retrofit Incentive Program

### 2.2 Program Descriptions

Full OPA-Contracted Province-Wide CDM Program descriptions are available on the OPA's website at http://www.powerauthority.on.ca/ldc-province-wide-program-documents and additional initiative information can be found on the saveONenergy website at <a href="https://saveonenergy.ca">https://saveonenergy.ca</a>. The targeted customer types, objectives, and individual descriptions for each Program Initiative are detailed in Appendix A.

#### 2.2.1 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 and help the environment.

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

#### Discussion:

The addition of LED measures to the Bi-Annual Retailer Event and in the Annual Coupon initiative in July 2013 has had a positive impact on customer participation. There was the added benefit of three LDC custom coded coupon options for LDCs to utilize in 2013.

The Residential Program Portfolio is predominately a carryover of Initiatives from previous programs. It is mostly driven by retailers and contractors who have fully delivered what was anticipated. Three new initiatives (Midstream Electronics, Midstream Pool Equipment and Home Energy Audit Tool) were not launched and subsequently removed from the schedule in 2013 with no new additions.

Work to revitalize and increase the effectiveness and breadth of the Initiatives through the Residential Program continue to be a high priority. New opportunities within the Residential marketplace need to be identified, developed and offered to customers.

# 2.2.1.1 Appliance Retirement Initiative (Exhibit D) Initiative Activities/Progress:

- Spring Home Show, On Bill Promotion, Web site and Customer Service activity
- As participation is very responsive to province wide advertising, OPA province-wide advertising should continue to play a key role if the initiative continues.

# 2.2.1.2 Appliance Exchange Initiative (Exhibit E) Initiative Activities/Progress:

- Spring Home Show, On Bill Promotion, Web site and Customer Service activity
- The restrictive, limited and sometimes non-participation of local stores can diminish the savings potential for this Initiative.

# 2.2.1.3 HVAC Incentives Initiative (Exhibit B) Initiative Activities/Progress:

- Spring Home Show, Out reach to local HVAC contractors, Local Advertising
- There are cases where non-participating contractors are offering their own incentives (by discounting their installations to match value of the OPA incentive).
- Contractors and customers have complained payment process is too long and cumbersome.

# 2.2.1.4 Conservation Instant Coupon Initiative (Exhibit A) Initiative Activities/Progress:

- Spring Home Show, Utility Newsletter, Bill Inserts Coupons
- The product list could be distinctive from the Bi-Annual Retailer Event Initiative in order to gain more consumer interest and uptake.
- In 2013, LDCs were provided with 3 custom coded coupons. All coupons have been provided with LDC custom coding in 2014 which allows LDCs to promote coupons based on local preferences.

# 2.2.1.5 Bi-Annual Retailer Event Initiative (Exhibit C) Initiative Activities/Progress:

#### Comments:

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

# 2.2.1.6 New Construction Program (Schedule B-2) Initiative Activities/Progress:

• NTPDL entered into a 3<sup>rd</sup> part Program delivery service for the New Construction Program. Minimal interest from local builders and no applications to date have been submitted.

#### **Additional Comments:**

- In 2013 the application process was streamlined, however continues to be too cumbersome for builders. This combined with limited return has resulted in this Initiative to continue to under-achieve.
- This Initiative may benefit from collaboration with the Natural Gas utilities.
- 2.2.1.7 *Residential Demand Response Program (Schedule B-3)* NTPDL did not participate in this program in 2013. Program was rolled out this past spring 2014.

#### 2.2.2 COMMERCIAL AND INSTITUTIONAL PROGRAM

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

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

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

# 2.2.2.1 Efficiency: Equipment Replacement Incentive (ERII) (Schedule C-2) Initiative Activities/Progress:

• In house resource dedicated to this program, direct customer one on one application processing and ongoing relationship with local contractors and electrical wholesale community. By far out best program to date.

#### **Additional Comments:**

- A large proportion of LDC savings are attributed to ERII.
- The online application system continues to be challenging.
- Prescriptive and Engineered worksheets provide a much needed simplified application process for customers.

# 2.2.2.2 Direct Install Initiative (DIL) (Schedule C-3) Initiative Activities/Progress:

• Engaged 3<sup>rd</sup> party delivery agent, promotion through local Chamber of Commerce, word of mouth through local BIA organization.

#### **Additional Comments:**

- LED lighting was introduced in 2013 as a new measure and has been well received by customers who may not
  have previously qualified for DIL eligible upgrades.
- Good level of participation in 2012 & 2013, pool of potential customer is declining.

# 2.2.2.3 Existing Building Commissioning Incentive Initiative (Schedule C-6) Initiative Activities/Progress:

• There was minimal participation or opportunity in our service area for this Initiative. It is suspected that the lack of participation in the program is a result of the Initiative being limited to space cooling and a limited window of opportunity (cooling season) for participation.

# 2.2.2.4 New Construction and Major Renovation Initiative (HPNC) (Schedule C-4) Initiative Activities/Progress:

• There was minimal participation or opportunity in our service area for this Initiative

# 2.2.2.5 Energy Audit Initiative Initiative Activities/Progress:

- The introduction of the new audit component for one system (i.e. compressed air), has increased customer participation.
- The energy audit Initiative is considered an 'enabling' Initiative and 'feeds into' other saveONenergy Initiatives.

#### 2.2.3 INDUSTRIAL PROGRAM

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

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

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

#### Discussion:

The Industrial Program Portfolio has been able to provide significant incentives and valuable resources to large facilities to help them with energy efficiency upgrades and process system improvements. The Engineering Studies in particular as well as the Monitoring and Targeting initiative provide a unique opportunity for a customer to complete a comprehensive analysis of an energy intensive process that they otherwise may not undertake. The Energy Manager Initiative provides customers with a skilled individual whose only role is to assist them with conservation initiatives. To date these Energy Managers have played a key role in customer participation.

Extensive legal documents, complex program structure and lengthy change management have restricted the change and growth of this Portfolio. While the expedited change management has benefited the Commercial Portfolio, the Industrial Portfolio has not seen the same results due to the narrow scope of the process. For 2013 the change to the threshold for small capital projects and the new small capital project agreement are expected to improve the number of projects and savings achieved within PSUI. Likewise, a decision to proceed with 2012 natural gas load displacement generation projects applications will also increase uptake although the limited time to bring new projects into service is a barrier.

# 2.2.3.1 Process & Systems Upgrades Initiative (PSUI) (Schedule D-1) Initiative Activities/Progress: NTPDL does not qualify for this initiative.

# 2.2.3.2 Monitoring & Targeting Initiative (Schedule D-2) Initiative Activities/Progress: NTPDL does not qualify for this initiative.

#### 2.2.3.3 Energy Manager Initiative (Schedule D-3)

Initiative Activities/Progress: NTPDL does not qualify for this initiative.

#### 2.2.3.4 Key Account Manager (Schedule D-4)

Initiative Activities/Progress: NTPDL does not qualify for this initiative.

#### 2.2.3.5 Demand Response 3 (D-6)

Initiative Activities/Progress:

• Direct discussion with potential participates, program details, merits of particiaption

#### **Additional Comments:**

As of 2013, Aggregators were able to enter into contracts beyond 2014 which has allowed them to offer a
more competitive contract price (5 year) than if limited to 1 or 2 year contracts.

# 2.2.4 LOW INCOME INITIATIVE (HOME ASSISTANCE PROGRAM) (Schedule E-1) Initiative Activities/Progress:

- NTPDL retained the services of Green Saver to deliver program. Closely work with local social agencies to engage end use consumers.
- 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.

#### 2.2.5 PRE-2011 PROGRAMS

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

#### 3 2013 Results

- OPA Contracted Province wide CDM Programs Final Verified 2013 results
- Table 1: Newmarket-Tay Power Distribution Ltd Initiative and Program Level Net savings.

#### **OPA-Contracted Province-Wide CDM Programs Final Verified 2013 Results**

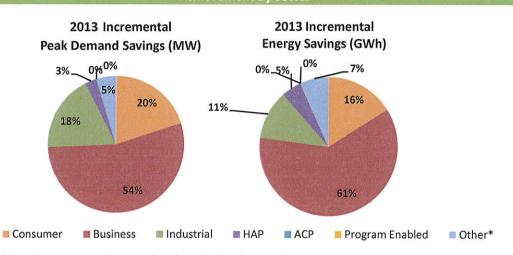
LDC: Newmarket - Tay Power Distribution Ltd.

FINAL 2013 Progress to Targets	2013 Incremental	Program-to-Date Progress to Target (Scenario 1)	Scenario 1: % of Target Achieved	Scenario 2: % of Target Achieved
Net Annual Peak Demand Savings (MW)	1.0	2.2	25.5%	28.5%
Net Energy Savings (GWh)	3.1	31.0	93.9%	93.9%

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

Scenario 2 = Assumes that demand response resources remain in the LDC service territory until 2014

#### **Achievement by Sector**



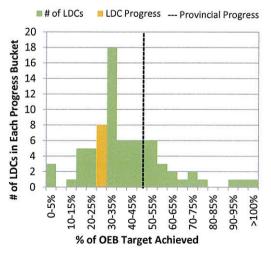
<sup>\*</sup>Other includes adjustments to previous years' results and savings from pre-2011 initiatives

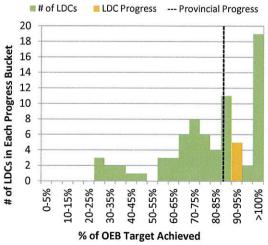
### Comparison: LDC Achievement vs. LDC Community Achievement (Progress to Target)

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

#### % of OEB Peak Demand Savings Target Achieved

### % of OEB Energy Savings Target Achieved





Initiative	Unit	(new prog	Incremen ram activity occ reportin	Incremental Activity (new program activity occurring within the specified reporting period)	e specified	Net Incr	emental Peak Demand Savi Jemand savings from activit specified reporting period)	Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)	.W.) hin the	Net in (new energy s	Net incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)	gy Savings (kW ivity within the eriod)	h) specified	Program-to-Date Verified Progress to Target (excludes DR) 2014 Net Annual Peak Cumulative Energy Demand Savings (RW) Savings (RW)	s DR) 2011-2014 Net Cumulative Energy Savings (kWh)
On sell most Drowners		2011•	2012*	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014	2014
Appliance Retirement	Appliances	406	232	97		22	13	9		157 917	92 356	17,5 14		41	000 540
Appliance Exchange	Appliances	12	12	25		1	2	5	Ī	1.192	3.024	9.236		7	31 497
HVAC Incentives	Equipment	753	933	800		256	196	167	Ī	470,202	329.402	285.796		619	3 440 608
Conservation Instant Coupon Booklet	Items	3,363	204	2,292		00	2	3		123,657	9,237	50,920		13	624.182
Bi-Annual Retailer Event	Items	6,290	2,009	6,242		11	10	8		194,149	176,934	113,499		29	1,534,396
Retailer Co-op	Items	0	0	0		0	0	0		0	0	0		0	0
Residential Demand Response	Devices	0	0	0		0	0	0		0	0	0		0	0
Residential Demand Response (IHD)	Devices	0	0	0		0	0	0		0	0	0		0	0
Residential New Construction	Homes	0	0	0		0	0	0		0	0	0		0	0
Consumer Program Lotal						298	222	189		947,112	610,954	500,723		708	6,621,232
Business Frogram	Projects	75	62	85		383	407	200		100000	200000				
Direct Install Lighting	Projects	57	25	90		283	407	B87	T	1,660,494	2,118,035	1,418,754		970	15,817,489
Ruilding Commissioning	Ruildings	707	757	110		149	187	88 0	Ī	411,964	741,993	323,829		370	4,271,008
New Construction	Buildings	0		,					Ī	0	0	0		0	0
Energy Audit	Audits	0	0	4 6		0 0	0	0 %	T	0	0	13,635		2 %	27,271
Small Commercial Demand Response	Devices	0	0	, ,				87	T	0	0	145,352		26	290,705
Small Commercial Demand Response (IHD)	Devices	0	0	0			0 0			0 0					0
Demand Response 3	Facilities	1	1	1		102	102	103		3.968	1.482	1.380		0 0	6 830
Business Program Total	THE STATE OF THE PARTY OF THE P		(B) 7-50 C (1-2-2-7)	The State State of the	AND PROPERTY.	534	691	517	200	2.076.427	2.861.510	1.902.951	8/1-5/4.VE-75-4	1372	20 413 302
dustrial Program										and to soft	orchant's	10057006		4,916	206,614,02
Process & System Upgrades	Projects	0	0	0		0	0	0		0	0	0		C	0
Monitoring & Targeting	Projects	0	0	0		0	0	0		0	0	0		0	0
Energy Manager	Projects	0	0	7		0	0	15		0	0	354,051		1	433,755
Retrofit	Projects	2	0	0		13	0	0		77,896	0	0		13	311,584
Demand Response 3	Facilities	0	0	1		0	0	157		0	0	3,576		0	3,576
Industrial Program Total					Selection of the	13	0	172		77,896	0	357,627		15	748,915
Home Assistance Program Home Assistance Drogram	Homos		444	111		c		-			20.00				
Home Assistance Program Total	2000	,	1		Congress Special Section		ח עי	26	7460H-101-101		54,595	147,538	Section Control	31	456,370
original Program								67		2	24,333	141,330	90 CAN WARE A	31	456,370
Home Assistance Program	Homes	0	0	0		0	0	0		c	0	0			c
Direct Install Lighting	Projects	0	0	0		0	0	0	Ī	0	0	0 0		0 0	0
Aboriginal Program Total		New States	AND THE PROPERTY.	W. E. C. C. C. C. C. C.	Salar Control	0	0	0	Service and the		0	0	Marine and the	0	0 0
e-2011 Programs completed in 2011															
Electricity Retrofit Incentive Program	Projects	11	0	0		78	0	0		455,514	0	0		78	1,822,057
High Performance New Construction	Projects	1	0	0		29	1	0		151,315	723	0		30	607,429
Toronto Comprehensive	Projects	0	٥	0		0	0	0		0	0	0		0	0
Multifamily Energy Efficiency Rebates	Projects	0	0	0		0	0	0		0	0	0		0	0
LDC Custom Programs	Projects	0	٥	0		0	0	0		0	0	0		0	0
Pre-2011 Programs completed in 2011 Total	tal				Me 10 20 4 St	108	1	0	See No Section	628'909	723	0		109	2,429,486
Other Drougen Emblod Savings	Designate														
Time-of-like Savings	Homes								Ī	0				0 0	0 1
Other Total		,	,	,	CONTRACTOR OF THE PARTY OF THE	0		0 0	All the state of t	0	0		EUO KAMPAUK	0	
Adjustments to 2011 Verified Becults						Management	96	,		The second second		,	000m0000000000000000000000000000000000	•	>
Adjustments to 2012 Verified Besults	V						8	2 8			£07'60-	211 005		₹ ₩	-2/6,651
								2				444,033		<b>2</b>	092,650
Energy Efficiency Total						851	817	644		3,704,295	3,526,298	2,903,883		2,234	30,658,898
Adjustments to Drawing Versel Verified Berufts Total	Joseph Total					102	102	280		3,968	1,482	4,957		0	10,406
Adjustments to Previous Tears Vermed Results Total OPA-Contracted LDC Portfolio Total (inc. Adjustments)	Adjustments)					063	46	45		3 709 263	-69,163	211,095		0 0	356,635
Activity and savings for Demand Response resources for each year	c for each year	The Ido fine from on the		ead sent has hee	2013 annual report has been left blank pendi		from desilent	g a results update from evaluations; results will be updated once	ated once	continue	andone for	- Cull	Cull Offe Towards	6250	31,023,333
				The second second second											

Table 2: Summarized Program Results

	Gross Savings	avings	Net Savings	vings	Contributio	Contribution to Targets
Program	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	376	854.081	189	500.723	708	6,621.232
Business Program Total	675	2,593.374	517	1,902.951	1,372	20,413.302
Industrial Program Total	179	396.967	172	357.627	15	748.915
Home Assistance Program Total	26	147.538	26	147.538	31	456.370
Pre-2011 Programs completed in 2011 Total	0	0	0	0	109	2,429.486
Other Adjustments	61	270.264	45	211.095	-1	356.635
Total OPA Contracted Province-Wide CDM Programs *please make sure you complete the total line	1,317	4,262.223	950	3,119.935	2,233	31,025.939

#### 3.1 Evaluation

#### 2013 KEY EVALUATION FINDINGS

#### CONSUMER PROGRAM

#### **Appliance Retirement Initiative**

- Per unit savings increased for both energy (+15.4%) and demand (+4.0%) between 2012 and 2013 due to a greater proportion of
  refrigerators/freezers with large volumes and a manufacturer date before National Appliance Energy Conservation Act (NAECA) was
  implemented. Dehumidifiers also show a higher per unit savings related to the change in ENERGY STAR definitions.
- Overall participation continues to decline with 20,952 appliances recycled in 2013, compared with 34,146 in 2012 and 56,110 in 2011. The
  program has experienced close to a 40% reduction (39.1% 2011 to 2012, 41.1% 2012 to 2013) in recycled appliances in each subsequent
  year of operation.
- Net to gross ratio stayed constant at around 43% between 2012 and 2013

#### Appliance Exchange Initiative

- Increased per unit energy and demand savings due to an adjustment to the assumed consumption of "conventional" and Energy Star dehumidifiers. The calculated weighted average annual energy savings of a exchanged dehumidifier increased 36.6%
- Of the participants surveyed who reported they had replaced the dehumidifiers they exchanged, 100% reported purchasing ENERGY STAR® models.
- 21% increase in the number of eligible dehumidifiers collected in the program. In 2013, 5,337 dehumidifier units were collected compared to 3,617 dehumidifier units and 219 window air conditioners.
- Net to Gross ratio (NTG) was 52.6% which is a slight increase of the 2012 NTG of 51.5%

#### Heating and Cooling Initiative

- Total participation (equipment) increased 7.5% from 2012 to 91,581.
- Per unit furnace savings decreased from 1139 kWh/yr in 2012 to 1090 kWh/yr due to a slight shift in the number of participants who use
  their furnace fan non-continuously both before and after the retrofit as opposed to changing from continuous to non-continuous
  operation
- Per unit energy and demand savings assumptions for central air conditioners did not change from 2012.

#### **Annual Coupons**

- Customers redeemed more than ten times as many annual coupons in 2013 as in 2012 because of new LED coupons and full year
  availability of all coupons. Customers redeemed 13% more annual coupons in 2013 than in 2011, the first full year of annual coupons due
  to the high volume of new LED coupons.
- There was a significant reduction in savings specialty CFL related measures. In 2013, the findings showed around 30% of participants are replacing incandescent bulbs compared to 60% of participants replacing incandescent bulbs in 2012.
- Despite the significant per unit savings reductions, the Net Annual Savings from Annual Coupons in 2013 was more than 5.5 times that in 2012. This is primarily because of higher participation due to the inclusion of LED coupons and full year availability of all coupons.
- 93% of coupons redeemed in 2013 were for general purpose LEDS and specialty CFLs and LEDs, producing 89% of net annual energy savings and 84% of net demand savings.
- Measure NTG ratio was approximately 8% higher in 2013 than in 2012 due to the inclusion of participant like spillover, i.e., purchase of additional coupon initiative measures without using coupons because of program influence.

#### **Bi-Annual Coupon Events**

- 19% increase in the number of coupons redeemed during the Spring and Fall Events in 2013 compared to 2012 because of substantial increase in LED purchases with event coupons.
- 36% lower net annual savings in 2013 compared to 2012 primarily because of significant reductions in per unit savings estimates for standard and specialty CFLs. In 2013, findings showed a decrease in replacement rate of incandescent bulbs. Only 30% of 2013 participants are estimated to have replaced incandescent bulbs compared to 60% of participants replacing incandescent bulbs in 2012. This leads to a change in the baseline assumption for the savings calculations.
- 87% of coupons redeemed were for general purpose and specialty CFLs and LEDs, producing 80% of net annual energy savings and 73% of net demand savings.
- Measure NTG ratio was approximately 8% higher in 2013 than in 2012 due to the inclusion of participant like spillover, i.e., purchase of additional coupon initiative measures without using coupons because of program influence.

#### peaksaverPLUS

- . The cycling strategy for CAC load control was changed from 50% simple cycling to 60% simple cycling.
- Under 1-in-10 year weather conditions, the 2013 estimated impacts for load control devices are higher than the 2012 estimates in all
  months and are between 10 and 15% higher during the core summer months of June through August.
- Load impact estimates for the average small and medium business and for electric water heaters among residential customers are also unchanged from the prior year's analysis
- · This year's IHD analysis has yielded an estimate of no statistically significant energy savings.

#### **Residential New Construction**

- Energy and demand savings for the Initiative increased by 300% compared to the combined 2011 and 2012 results; number of projects also increased from 45 in 2011 and 2012 to 86 in 2013.
- All projects are opting for the prescriptive or performance path. No custom project applications were received in 2013, similar to 2011-2012.
- Net-to-gross ratio for the initiative was higher by 14% from 49% in 2012 to 63% in 2013.

#### HOME ASSISTANCE PROGRAM

#### Home Assistance Program

- Participation increased significantly to 26,756 participants in 2013 from 5,033 in 2012
- Realization rates were slightly lower in 2013 (0.88 for kWh and 0.26 for kW) than in 2012 (0.98 for kWh and 0.32 for kW) primarily due to
  updated verified per unit assumptions.
- Realization rate for demand savings remained low as FAST Tool calculated kW savings for certain insulation measures remained very high
  and recommended revisions to kW savings factors were not yet in use in 2013 (changes to the FAST Tool to address these issues were
  made in early 2014)

#### **BUSINESS PROGRAM**

#### Retrofit

- A total of 8,785 projects completed in 2013. Reported energy savings for individual projects ranged from 1 kWh to over 5,000,000 kWh
- . Net to Gross ratio (NTG) for energy was 72.8%, consistent with prior years
- NTG for demand was 72.0%, consistent with prior years
- · NTG ratios are comparable to similar programs across North America

#### Small Business Lighting

- In 2013 the initiative introduced: a) an increase in the incentive to \$1500 from \$1000, b) new LED measures c) Agribusiness eligibility, resulting in the stabilization of participation and an increase in savings.
- 17,782 projects completed in 2013 (3.8% decrease from 2012)
- However, 12.2% increase in Net Verified Energy Savings relative to 2012.
- . The average incentive per project and savings per project both increased between 2012 to 2013
- Net to Gross ratio (NTG) for 2013 remained unchanged at 94%

#### **Audit Funding**

- 319 audits were completed in 2013
- 2013 sample saw more recommended measures implemented without incentives (33% in 2013 vs. 13% in 2012)
- . The average per audit summer peak demands savings is estimated to be 13 kW.

#### **Existing Building Commissioning**

- · 29 unique participants in the 2013 population
- · No Commissioning projects completed the hand-off/completion phase in 2013
- · Improvements to the chilled water system controls were the most commonly targeted measure.
- Large variation in estimated savings results between preliminary investigation phase and actual implementation phase

#### **High Performance New Construction**

- Number of projects increased by 25% from 69 in 2012 to 86 in 2013.
- Custom projects, representing only about 8% of the total number of projects, account for 67% of verified demand savings and 54% of verified energy savings.
- A realization rate of 72% for energy savings is low due to the low realization rate of the Agribusiness high ventilation, low speed fans which
  comprised of 15% of the HPNC prescriptive project energy savings.
- Net-to-gross ratio for the initiative was higher by 5% from 49% in 2012 to 54% in 2013.

### 3.2 Spending

Table 3 and 4 summarize the total spending by initiative that NTPDL has incurred in 2013 and cumulatively since 2011. It is detailed by the Program Administration Budget (PAB), Participant Based Funding (PBF), Participant Incentives (PI) and Capability Building Funding (CBF).

Table 3: 2013

Initiative	PAB	PBF	PI	CBF	TOTAL
Consumer Program					
Appliance Retirement	10,861				10,861
Appliance Exchange	3,830				3,830
HVAC Incentives	53,211				53,211
Annual Coupons	11,631				11,631
Bi-Annual Retailer Event	12,284				12,284
Retailer Co-op	-				-
Residential Demand Response	-				=1
New Construction Program	6,638				6,638
Business Program					
Equipment Replacement	96,879		375,646		472,525
Direct Installed Lighting	18,204	16,439	88,229		122,872
Existing Building Commissioning Incentive	1,160				1,160
New Construction and Major Renovation Initiative	3,584				3,584
Energy Audit	10,453				10,453
Small Commercial Demand	-				-2
Response					
Demand Response 3					-
Industrial Program					
Process & System Upgrades	-		_		
a) preliminary engineering study	921	_			921
b) detailed engineering study	-		-		-
c) program incentive	53,262			_	53262
Monitoring & Targeting	-				-
Energy Manager	-				
Key Account Manager ("KAM")	-				-
Equipment Replacement	-				-
Demand Response 3	539				539
Home Assistance Program					
Home Assistance Program	46,580	105,250			151,831
TOTAL SPENDING	330,037	121,689	463,875	-	915,601

Table 4: Cumulative Spending (2011-2014)

			1000	SERVICE TO SERVICE		
Initiative	PAB	PBI	PI	CBF	TOTAL	18.9

Consumer Program				
Appliance Retirement	32,212			32,212
Appliance Exchange	17,624			17,624
HVAC Incentives	92,022			92,022
Annual Coupons	36,286			36,286
Bi-Annual Retailer Event	32,986			32,986
Retailer Co-op	-			-
Residential Demand Response	-			-
New Construction Program	21,056			21,056
Business Program	$L_{i}(A_{i}^{2})$ , $L_{i}(A_{i}^{2})$	b in their		
Equipment Replacement	297,486		757,115	1,054,601
Direct Installed Lighting	102,543	110,410	512,517	725,470
Existing Building Commissioning Incentive	11,240			11,240
New Construction and Major Renovation Initiative	19,170			19,170
Energy Audit	63,868			63,868
Small Commercial Demand				
Response	-			
Demand Response	-			=
Industrial Program		note at leasting to the		建 河 医高性 医红色
Process & System Upgrades	-			
a) preliminary engineering study	921			921
b) detailed engineering study	-			H
c) program incentive	53,262			53,262
Monitoring & Targeting	-			-
Equipment Replacement Incentive	-			
Demand Response 3	2,679			2,679
Home Assistance Program				
Home Assistance Program	89,897	136,241		226,139
Pre 2011 Programs				
Electricity Retrofit Incentive	100.001			190,081
Program	190,081			
High Performance New				
Construction				
Initiatives Not In Market				
Midstream Electronics				
Midstream Pool Equipment				
Demand Service Space Cooling	12,968			12,968
Demand Response 1				
Home Energy Audit Tool	171			171
TOTAL SPENDING	886,391	246,652	1,269,632	- 2,592,755

## **4 Combined CDM Reporting Elements**

### 4.1 Progress Towards CDM Targets

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

Implementation Period		Annual	(MW)	
Implementation Period	2011	2012	2013	2014
2011 – Verified by OPA	1.0	.9	.8	.8
2012 – Verified by OPA		.9	.8	.7
2013 – Verified by OPA			1.0	.7
2014				
Verified I	Net Annual Peak	<b>Demand Savir</b>	ngs in 2014:	2.2
	2014 Ann	ual CDM Capa	city Target:	8.8
Verified Portion of P	eak Demand Sav	rings Target Ac	hieved (%):	25.5%

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

Implementation Period		Annual	(GWh)		Cumulative (GWh)
	2011	2012	2013	2014	2011-2014
2011 – Verified by OPA	3.7	3.7	3.7	3.6	14.7
2012 – Verified by OPA	3.3	10.2			
2013 – Verified by OPA			3.1	2.8	6.2
2014					
Veri	fied Net Cum	ulative Ener	gy Savings 2	011-2014:	31.0
	2011-201	L4 Cumulativ	e CDM Ener	gy Target:	33.1
Verified Por	tion of Cumu	lative Energy	y Target Ach	ieved (%):	93.8%

#### Appendix A: Initiative Descriptions

### Residential Program

#### APPLIANCE RETIREMENT INITIATIVE (Exhibit D)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

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

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

Additional Detail: Schedule B-1, Exhibit D on the OPA extranet and SaveONenergy website

#### APPLIANCE EXCHANGE INITIATIVE (Exhibit E)

Target Customer Type(s): Residential Customers

Initiative Frequency: Spring and Fall

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

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

Targeted End Uses: Window air conditioners and portable dehumidifiers

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

Additional Detail: Schedule B-1, Exhibit C on the OPA extranet and SaveONenergy website

#### **HVAC INCENTIVES INITIATIVE (Exhibit B)**

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

Targeted End Uses: Central air conditioners and furnaces

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

Additional Detail: Schedule B-1, Exhibit B on the OPA extranet and SaveONenergy website

#### CONSERVATION INSTANT COUPON INITIATIVE (Exhibit A)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

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

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

Additional Detail: Schedule B-1, Exhibit A on the OPA extranet and SaveONenergy website

#### BI-ANNUAL RETAILER EVENT INITIATIVE (Exhibit C)

Target Customer Type(s): Residential Customers

Initiative Frequency: Bi-annual events

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

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

Targeted End Uses: As per the Conservation Instant Coupon Initiative

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

Additional Detail: Schedule B-1, Exhibit C on the OPA extranet and saveONenergy website

#### **RETAILER CO-OP**

Target Customer Type(s): Residential Customers

Initiative Frequency: Year Round

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

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

Targeted End Uses: As per the Conservation Instant Coupon Initiative

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

#### NEW CONSTRUCTION PROGRAM (Schedule B-2)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

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

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

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

Additional Detail: Schedule B-1, Exhibit C on the OPA extranet and SaveONenergy website

#### RESIDENTIAL DEMAND RESPONSE PROGRAM (Schedule B-3)

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

Initiative Frequency: Year round

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

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

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

Delivery: LDC's recruit customers and procure technology

Additional Detail: Schedule B-1, Exhibit C on the OPA extranet and SaveONenergy website

### **C&I Program**

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

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

Initiative Frequency: Year round

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

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

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

Delivery: LDC delivered.

Additional Detail: Schedule C-2 on the OPA extranet and saveONenergy website

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

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

Initiative Frequency: Year round

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

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

Target End Uses: Lighting and electric water heating measures

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

Additional Detail: Schedule C-3 on the OPA extranet and SaveONenergy website

### 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: Schedule C-6 on the OPA extranet and SaveONenergy website Additional detail is available:

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

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

Initiative Frequency: Year round

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

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

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

**Delivery**: LDC delivers to customers and design decision makers.

Additional Detail: Schedule C-4 on the OPA extranet and SaveONenergy website

#### **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: Schedule C-1 on the OPA extranet 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 project in systems which are intrinsically complex and capital intensive;
   and
- Increase the capability of distribution customers to implement energy management and system optimization projects.

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

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

Targeted End Uses: Process and systems

**Delivery:** LDC delivered with Key Account Management support, in some cases. **Additional Detail:** Schedule D-1 on the OPA extranet 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, will now be able to use historical energy consumption performance to analyze and set targets.

Targeted End Uses: Process and systems

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

Additional Detail: Schedule D-2 on the OPA extranet and saveONenergy website

https://saveonenergy.ca/Business.aspx

#### DEMAND RESPONSE 3 (Schedule D-6)

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

Initiative Frequency: Year round

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

**Description:** Demand Response 3 ("DR3") is a demand response Initiative for commercial and industrial customers, of 50 kW or greater to reduce the amount of power being used during certain periods of the year. The DR3 Initiative is a contractual resource that is an economic alternative to procurement of new generation capacity. DR3 comes with specific contractual obligations requiring participants to reduce their use of electricity relative to a baseline when called upon. This Initiative makes payments for participants to be on standby and payments for the actual electricity reduction provided during a demand response event. Participants are scheduled to be on standby approximately 1,600 hours per calendar year for possible dispatch of up to 100 hours or 200 hours within that year depending on the contract.

Targeted End Uses: Commercial and Industrial Operations

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

**Additional Detail:** Schedule D-6 available on the OPA and SaveONenergy website <a href="https://saveonenergy.ca/Business.aspx">https://saveonenergy.ca/Business.aspx</a>

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

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

Target Customer Type(s): Income Qualified Residential Customers

Initiative Frequency: Year Round

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

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

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

**Delivery:** Green Saver

Additional Detail: Schedule E available on the OPA extranet.

### Appendix B: Pre-2011 Programs

#### **ELECTRICITY RETROFIT INCENTIVE PROGRAM**

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

Initiative Frequency: Year Round

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

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

Targeted End Uses: Electricity savings measures

Delivery: LDC Delivered - dedicated staff member to this program

#### HIGH PERFORMANCE NEW CONSTRUCTION

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

Initiative Frequency: Year round

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

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

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

Delivery: Willis Energy

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

Targeted End Uses: Electricity saving measures

**Delivery**: OPA contracted with Greensaver