



CANADIAN NIAGARA POWER INC.

A **FORTIS** ONTARIO
Company

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, Suite 2700
Toronto, ON M4P 1E4

**RE: Canadian Niagara Power Inc. (ED-2002-0572)
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 Canadian Niagara Power Inc.'s 2011 CDM Annual Report submission.

Sincerely

ORIGINAL SIGNED BY

Douglas Bradbury, P.Eng.
Director, Regulatory Affairs

Canadian Niagara Power Inc.

Conservation and Demand Management 2011 Annual Report

Submitted to:

Ontario Energy Board

Submitted on September 30, 2012

Template presented to July 17, 2012 EDA Forum

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
BACKGROUND	2
1 BOARD-APPROVED CDM PROGRAMS	3
1.1 INTRODUCTION.....	3
1.2 TOU PRICING	3
1.2.1 BACKGROUND	3
1.2.2 TOU PROGRAM DESCRIPTION	3
1.3 CANADIAN NIAGARA POWER INC.'S APPLICATION WITH THE OEB	4
2 OPA-CONTRACTED PROVINCE-WIDE CDM PROGRAMS	5
2.1 INTRODUCTION.....	5
2.2 PROGRAM DESCRIPTIONS	8
2.2.1 RESIDENTIAL PROGRAM	8
2.2.1.1 APPLIANCE RETIREMENT INITIATIVE	8
2.2.1.2 APPLIANCE EXCHANGE INITIATIVE	9
2.2.1.3 HVAC INCENTIVES INITIATIVE	10
2.2.1.4 CONSERVATION INSTANT COUPON BOOKLET INITIATIVE	11
2.2.1.5 BI-ANNUAL RETAILER EVENT INITIATIVE	12
2.2.1.6 RETAILER CO-OP	13
2.2.1.7 NEW CONSTRUCTION INITIATIVE	13
2.2.1.8 RESIDENTIAL DEMAND RESPONSE INITIATIVE	14
2.2.2 COMMERCIAL AND INSTITUTIONAL PROGRAM	16
2.2.2.1 EFFICIENCY: EQUIPMENT REPLACEMENT INCENTIVE (ERII)	16
2.2.2.2 DIRECT INSTALL LIGHTING INITIATIVE (DIL).....	17
2.2.2.3 EXISTING BUILDING COMMISSIONING INCENTIVE INITIATIVE	18
2.2.2.4 NEW CONSTRUCTION AND MAJOR RENOVATION INITIATIVE	19

2.2.2.5	ENERGY AUDIT INITIATIVE.....	20
2.2.3	<i>INDUSTRIAL PROGRAM</i>	22
2.2.3.1	PROCESS & SYSTEMS UPGRADES INITIATIVE (PSUI).....	22
2.2.3.2	MONITORING & TARGETING INITIATIVE	23
2.2.3.3	ENERGY MANAGER INITIATIVE.....	24
2.2.3.4	KEY ACCOUNT MANAGER (KAM).....	25
2.2.3.5	DEMAND RESPONSE 3.....	26
2.2.4	<i>LOW INCOME INITIATIVE (HOME ASSISTANCE PROGRAM)</i>	28
2.2.5	<i>PRE-2011 PROGRAMS COMPLETED IN 2011</i>	29
2.2.5.1	ELECTRICITY RETROFIT INCENTIVE PROGRAM	29
2.2.5.2	HIGH PERFORMANCE NEW CONSTRUCTION	29
2.2.5.3	MULTIFAMILY ENERGY EFFICIENCY REBATES (MEER)	29
2.3	PARTICIPATION.....	31
2.4	SPENDING	33
2.5	EVALUATION.....	36
2.5.1	<i>EVALUATION FINDINGS</i>	36
2.5.2	<i>EVALUATION RESULTS</i>	41
2.6	ADDITIONAL COMMENTS	45
3	COMBINED CDM REPORTING ELEMENTS	46
3.1	PROGRESS TOWARD CDM TARGETS.....	46
3.2	CDM STRATEGY MODIFICATIONS	47

Executive Summary

On November 1, 2010, Canadian Niagara Power Inc. (CNPI) submitted its initial 2011-2014 Conservation and Demand Management (“CDM”) strategy outlining CNPI’s plan to meet mandated targets set by the Ontario Energy Board (“OEB”). Subsequent to our filing, the OEB issued further direction May 20, 2011 requesting budgetary information. CNPI resubmitted its amended CDM Strategy on June 13, 2011 with both budgetary information derived from the Ontario Power Authority (“OPA”), revised CDM targets which were finalized by the OEB in its Decision and Order dated November 12, 2011, and revised energy and demand forecasts to reflect actual Master Agreement and program Schedules.

As detailed in *Section 3.1 Progress Toward CDM Targets*, CNPI has a combined mandated target of: Net Cumulative Energy Savings of 25.08 GWh (between 2011 and 2014) and a Net Annual Peak Demand Savings Target of 6.4 MW (summer 2014). With the results provided by the OPA for the 2011 Tier 1 provincial programs, CNPI has achieved: Net Cumulative Energy Savings of 7.63 GWh (between 2011 and 2014) and a Net Annual Peak Demand Savings Target of 0.39 MW (summer 2014). Compared to our strategy forecast, CNPI has achieved Energy savings 20.89% above our forecasted 2011 results, and 15.71% below our estimated 2011 Demand savings.

In 2011, CNPI transitioned from offering 3 OPA CDM programs, to a suite of over 20 Tier 1 OPA saveONenergy CDM Programs. In addition to the increase in program offerings, delays in entering the Master CDM Agreement with the OPA resulted in 2011 becoming a year of transition and slow program rollout. Although the majority of the program schedules may have been officially launched in Q1 2011, much of the marketing materials, applications or payment procedures were not fully implemented until mid 2011. As well, some programs did not make it into market at all (see *Section 2.1*). Most of the CDM programs were not in-market for our customers until Q3 2011. The process of launching these programs for our customers was not as prompt as expected, proving 2011 to be a year spent in “start-up mode” including building new brand awareness under the new saveONenergy banner, securing service providers to assist in program delivery and verification services, in addition to economic impacts felt by our entire customer base. Although 2011 was a year of transition, savings from residual 2010 retrofit projects were attributed to our 2011 CDM results helping to make them slightly higher than anticipated from original 2011-2014 saveONenergy programs, detailed in *Section 2.3 Participation Table 7*.

CNPI believes that should our progress continue to follow our 2011 results, we may achieve our Energy targets for 2014 provided all saveONenergy programs are available to LDCs. However, should programs such as *peaksaver*[®] PLUS fail to get into market successfully in 2012-13, and Demand Response 3 fail to be upgraded in our service territory as initially indicated, our Peak Demand savings for 2014 may not be achieved. An additional identified risk to not achieving target is the long planning and capital cycles our customers require for many of the potential C&I projects. If large commercial projects are not submitted for approval by March 2013, it is unlikely they will be installed and functional for the December 31, 2014 cut-off date, making these projects ineligible for the saveONenergy incentives and subsequently will not count towards CNPI’s mandated 2011-2014 CDM targets.

While CNPI is proceeding in all efforts to achieve the mandated targets, it is important to note the Environmental Commissioner of Ontario (“ECO”) reports of 2010 (Volume Two) and Annual Report 2011, indicates the ECO’s uncertainty that LDCs targets will be achieved. This uncertainty is due to a number of factors including sustaining momentum post-2014, delay in agreements and programs getting off the ground in 2011, and lack of formalized guidelines at the outset of the program period.

CNPI feels optimistically on track with 2011 projections, despite the late start and slow roll out, and will continue to offer the full suite of saveONenergy CDM programs to all levels of customers with the objective of meeting our targets by 2014.

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 OEB to establish CDM targets to be met by electricity distributors. Accordingly, on November 12, 2010, the OEB amended the distribution licence of CNPI to require CNPI, as a condition of its licence, to achieve a total of 25.08 GWh of energy savings and 6.40 MW of summer peak demand savings, over the period beginning January 1, 2011 through December 31, 2014.

These targets were issued to CNPI's service territories of Fort Erie and Gananoque, and Port Colborne Hydro Inc. Due to the lease agreement entered into by the City of Port Colborne for the distribution system of the City of Port Colborne, CNPI was subsequently assigned the CDM targets for Port Colborne Hydro Inc.

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 licences. To comply with the Code requirements, CNPI submitted its original CDM Strategy on November 1, 2010 and the amended CDM Strategy on June 13, 2011 which provided a high level of description of how CNPI intended to achieve its CDM targets.

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

This document was developed based a template prepared by Hydro One Networks Inc. The template was reviewed by the Reporting and Evaluation Working Group and the Ontario Power Authority (OPA) through May and June 2012. OEB Staff were consulted on May 28, 2012. It was sent to the Electricity Distributors Associate (EDA) on July 17, 2012, for circulation to all LDCs to use for their reporting requirement to the OEB.

1 Board-Approved CDM Programs

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 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 CDM program that is being offered in CNPI’s 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. 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. **CNPI will report these results upon receipt from the OPA. As of September 30, 2012, the OPA has not released its preliminary results of TOU savings to distributors. As CNPI did not begin TOU pricing in Fort Erie, Port Colborne and Gananoque until June 1, 2012, the earliest results under this Board-Approved CDM program will be reported in its 2012 CDM 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.

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

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

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

Initiative Activities/Progress:

CNPI began transitioning its RPP customers to TOU billing on June 1, 2012.

1.3 Canadian Niagara Power Inc.'s Application with the OEB

CNPI currently does not have an application before the OEB to deliver Board-Approved CDM Programs.

2 OPA-Contracted Province-Wide CDM Programs

2.1 Introduction

Effective June 10, 2011 CNPI entered into an agreement with the OPA to deliver CDM programs extending from January 1, 2011 to December 31, 2014, which are listed below. In addition, results will be reported from projects started pre-2011 which completed in 2011.

The delay in entering this agreement between CNPI and the OPA was due to the assigning of targets and amalgamation of budget for the Port Colborne service territory to CNPI.

Initiative	Schedule	Date schedule posted	Customer Class
Residential Program			
Appliance Retirement	Schedule B-1	Jan 26 2011	All residential rate classes
Appliance Exchange	Schedule B-1	Jan 26 2011	All residential rate classes
HVAC Incentives	Schedule B-1	Jan 26 2011	All residential rate classes
Conservation Instant Coupon Booklet	Schedule B-1	Jan 26 2011	All residential rate classes
Bi-Annual Retailer Event	Schedule B-1	Jan 26 2011	All residential rate classes
Retailer Co-op		Jan 26 2011	All residential rate classes
Residential Demand Response	Schedule B-3	Aug 22 2011	All general service classes
New Construction Program	Schedule B-2	Jan 26 2011	All residential rate classes
Commercial & Institutional Program			
Efficiency: Equipment Replacement	Schedule C-2	Jan 26 2011	All general service classes
Direct Install Lighting	Schedule C-3	Jan 26 2011	General Service < 50 kW
Existing Building Commissioning Incentive	Schedule C-6	Feb 2011	All general service classes
New Construction and Major Renovation Initiative	Schedule C-4	Feb 2011	All general service classes
Energy Audit	Schedule C-1	Jan 26, 2011	All general service classes
Commercial Demand Response (part of the Residential program schedule)	Schedule B-3	Jan 26, 2011	All general service classes
Demand Response 3 (part of the Industrial program schedule)	Schedule D-6	May 31, 2011	General Service 50 kW & above
Industrial Program			
Process & System Upgrades	Schedule D-1	May 31, 2011	General Service 50 kW & above

Monitoring & Targeting	Schedule D-2	May 31, 2011	General Service 50 kW & above
Energy Manager	Schedule D-3	May 31, 2011	General Service 50 kW & above
Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	Schedule C-2	May 31, 2011	General Service 50 kW & above
Demand Response 3	Schedule D-6	May 31, 2011	General Service 50 kW & above
Home Assistance Program			
Home Assistance Program	Schedule E-1	May 9, 2011	All residential rate classes
Pre-2011 Programs completed in 2011			
Electricity Retrofit Incentive Program	n/a	n/a	All general service classes
High Performance New Construction	n/a	n/a	All general service classes
Toronto Comprehensive	n/a	n/a	All general service classes
Multifamily Energy Efficiency Rebates	n/a	n/a	All general service classes
Data Centre Incentive Program	n/a	n/a	All general service classes
EnWin Green Suites	n/a	n/a	All general service classes

Several initiatives that were included in the schedules were not in market in 2011. The OPA has communicated that the initiatives listed in the table below were not in market in 2011 and that they represent a very small percentage of the forecasted energy and demand savings. During the 2011 program year, the OPA placed emphasis on supporting the implementation of initiatives that would offer the greatest ratepayer value and greatest amount of persisting savings.

Initiative Not in Market in 2011	Objective	Status
Residential Program		
Midstream Electronics	The objective of this initiative is to encourage retailers to promote and sell high efficiency televisions, and for distributors to distribute high efficiency set top boxes.	Not launched to market
Midstream Pool Equipment	The objective of this initiative is to encourage pool installers to sell and install efficient pool pump equipment in residential in-ground pools.	Not launched to market
First Nations Program	First Nations programs are delivered by OPA and results are attributed to LDCs	Not launched to market

	for reporting.	
Home Energy Audit Tool	This is a provincial online audit tool to engage customers in conservation and help drive customer participation to CDM programs.	Not launched to market
Commercial & Institutional Program		
Direct Service Space Cooling	The objective of this initiative is to offer free servicing of air conditioning systems and refrigeration units for the purpose of achieving energy savings and demand reduction.	Not launched to market in 2011. The OPA has no plans to launch this initiative in 2012
Demand Response 1	This initiative allows distribution customers to voluntarily reduce electricity demand during certain periods of the year pursuant to the DR 1 contract. The initiative provides DR payment for service for the actual electricity reduction provided during a demand response event.	No customer uptake for this initiative
Industrial Program		
Demand Response 1	As above	No customer uptake for this initiative

The Master CDM Program Agreement includes a program change management provisions in Article 3. Collaboration between the OPA and the Local Distribution Companies (LDCs) commenced in 2011 as the change management process was implemented to enhance the saveONenergy program suite. The change management process allows for modifications to the Master Service Agreement and initiative Schedules. The program enhancements 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.

2.2 Program Descriptions

2.2.1 RESIDENTIAL PROGRAM

2.2.1.1 APPLIANCE RETIREMENT INITIATIVE

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

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

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

Additional detail is available:

- Schedule B-1
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf
and
saveONenergy website <https://saveonenergy.ca/Consumer/Programs/Appliance-Retirement.aspx>

Initiative Activities/Progress:

- Bi-annual customer newsletters
- CNPI website
- Handouts for customers in office and at community events

In Market Date: June 10, 2011 – once CNPI signed the Master Agreement and Schedule B-1 we officially offered the Appliance Retirement program. However, as a roll-over program we did not stop promoting for January 2011. As well, CNPI is only responsible for marketing this initiative. The OPA is responsible for appliance pick-up and decommissioning.

Lessons Learned / Identified Challenges:

- The Appliance Retirement Initiative (previously The Great Refrigerator Round-Up) has been offered by LDCs since 2007. This initiative is approaching market saturation.
- While the OPA and the LDCs have reviewed this initiative to assess whether to include other products, appliances have a natural life cycle and the initiative cannot be expected to continually deliver the high level of results in perpetuity. These lower expectations have been taken into account when developing conservation portfolios.
- This initiative now faces some competition from independent retailers and municipalities.

- Results are very responsive to province wide advertising.
- Moving forward, in 2013, the age eligibility requirements for the primary appliance increases to 20 years. As a consequence, the number of eligible equipment will be reduced and is expected to result in reduced uptake.
- In previous years of this program, each LDC verified a quarterly list of customers by postal code who took part in the program. Due to postal code boundary overlap, and this verification process no longer taking place, it is possible that LDCs are not being attributed the correct customer uptake results.

2.2.1.2 APPLIANCE EXCHANGE INITIATIVE

Target Customer Type(s): Residential Customers

Initiative Frequency: Spring and Fall

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

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

Targeted End Uses: Window air conditioners and portable dehumidifiers

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

Additional detail is available:

- Schedule B-1
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf
and
saveONenergy website <https://saveonenergy.ca/Consumer.aspx>

Initiative Activities/Progress:

- Bi-annual customer newsletters
- CNPI website
- Handouts for customers in office and at community events

In Market Date: June 10, 2011 – once CNPI signed the Master Agreement and Schedule B-1 we officially offered the Appliance Exchange program. However, the first event was not until Spring 2011 and marketing materials were not available until late March.

Lessons Learned / Identified Challenges:

- The spring event had the participation of 3 retailers with 300 – 400 locations across the province. However, the Fall 2011 event had no retailer participation, therefore savings budgeted by the LDCs did not materialize.
- Evaluation, Measurement, and Verification (EMV) results indicated that the value of savings for retired room AC has dropped.

- The initiative may be achieving market saturation.
- The type of unit turned in is very dependent upon what is promoted by the retailers.
- Some LDCs may not have many or any participating retailers in their service territory.
- The marketing materials for these events were provided last minute and LDCs could not market the events through bill inserts and/or newspaper advertisements.
- The retailers were very delayed in confirming LDC participation agreements.

2.2.1.3 HVAC INCENTIVES INITIATIVE

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

Targeted End Uses: Central air conditioners and furnaces

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

Additional detail is available:

- Schedule B-1
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf
and
saveONenergy website <https://saveonenergy.ca/Consumer.aspx>

Initiative Activities/Progress:

- Bi-annual customer newsletters
- CNPI website
- Handouts for customers in office and at community events

In Market Date: June 10, 2011 – once CNPI signed the Master Agreement and Schedule B-1 we officially offered the HVAC incentive and began promoting to customers and contractors in Feb 2011.

Lessons Learned / Identified Challenges:

- Channel engagement is a highly effective method of connecting with customers; however channel partners require timeliness of the Rebate process to maintain a positive relationship between consumers, contractors, the OPA, and the participating LDC.
- There appears to be spillover from non-HRAI contractors who are ineligible for this initiative. There are cases where smaller independent contractors are offering their own incentives (by discounting their

installations to match value of the OPA incentive) to make the sale. As this occurs outside of the initiative, these installations not being attributed to any LDC.

- Rebate process has been slow resulting in frustrations for customers and contractors.
- Lack of contractor education early on, resulted in customer registration delays.

2.2.1.4 CONSERVATION INSTANT COUPON BOOKLET INITIATIVE

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

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

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

Additional detail is available:

- Schedule B-1
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf
and
saveONenergy website <https://saveonenergy.ca/Consumer.aspx>

Initiative Activities/Progress:

- Bi-annual customer newsletters
- CNPI website
- Handouts for customers in office and at community events

In Market Date: June 10, 2011 – once CNPI signed the Master Agreement and Schedule B-1 we officially offered the Coupon Booklet. However, the coupons were not mailed out until late March and CNPI did not receive our shipment of customized coupons until late April.

Lessons Learned / Identified Challenges:

- The downloadable coupons proved to be more successful than the mailed out booklets.
- This Initiative may benefit from an enabler such as a Conservation Card / Loyalty Card to increase customer participation.

- The timeframe for retailer submission of redeemed coupons vary from retailer to retailer. This delays the results reporting, which in turn limits the OPA and LDC abilities to react and respond to initiative performance or changes in consumer behaviour.
- Uptake by consumers was significantly less than what was originally projected by the OPA.
- Bar coding was done incorrectly for a number of LDCs (postal code issue) resulting in lost LDC specific results.
- Timing of coupons did not correspond with LDC event promotion. Having coupons available in early January would allow LDCs to better market at tradeshow throughout the year.

2.2.1.5 BI-ANNUAL RETAILER EVENT INITIATIVE

Target Customer Type(s): Residential Customers

Initiative Frequency: Bi-annual events

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

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

Targeted End Uses: Same as the conservation instant coupon booklet initiative

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

Additional detail is available:

- Schedule B-1
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf
and
saveONenergy website <https://saveonenergy.ca/Consumer.aspx>

Initiative Activities/Progress:

- Bi-annual customer newsletters
- CNPI website
- Handouts for customers in office and at community events

In Market Date: June 10, 2011 – once CNPI signed the Master Agreement and Schedule B-1 we officially offered the Bi-Annual Event. However, the first event was promoted in late March (for April start).

Lessons Learned / Identified Challenges:

- The Product list has changed very little over the past four years.
- Program evolution, including new products (for example, LED lighting) and review of incentive pricing for the coupon initiatives, must be a regular activity to ensure continued consumer interest.

- A review conducted by the Residential Working Group in Q4 2011 identified three areas of need for initiative evolution: 1) introduction of product focused marketing; 2) enhanced product selection and 3) improved training for retailers.
- Less cross promotional opportunities for LDCs to promote other projects.
- Late marketing of the initiative did not allow customers to properly promote the program through newspaper advertisement and bill inserts.

2.2.1.6 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:

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

Initiative Activities/Progress: No participation by retailers in CNPI service territory.

In Market Date: No participation by retailers in CNPI service territory.

Lessons Learned / Identified Challenges:

- The availability of retailer and/or LDC staff with product knowledge and the ability to conduct demonstration in store during the events would be an asset. This could be a valuable role for LDCs.

2.2.1.7 NEW CONSTRUCTION INITIATIVE

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

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

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

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

Additional detail is available:

- Schedule B-1
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contract/pdfs/Schedule%20B-2%20New%20Construction%20Program.pdf
 and
 saveONenergy website <https://saveonenergy.ca/Consumer.aspx>

Initiative Activities/Progress:

- Bi-annual customer newsletters
- CNPI website
- Handouts for customers in office and at community events

In Market Date: June 10, 2011 – once CNPI signed the Master Agreement and Schedule B-2 we officially offered the New Construction program.

Lessons Learned / Identified Challenges:

- There were limited (5) participants (builders) in the program. Because the online application system is a one to one relationship, this program was only practical for custom builders who were building one home at a time. Tract builders who might build 250 homes in a single phase would have to submit 250 applications to qualify for incentives. This administrative challenge has deterred all tract builders from participating in the program to date.
- Administrative requirements must align with perceived stakeholder payback. Changes are being processed through change management for 2012.
- Lengthy application process coupled with limited incentive amounts have resulted in little to no uptake.
- Payment of incentives to builders directly by the OPA reduces the role and exposure of LDCs.
- Home Builders felt that it was not cost effective to build to EnerGuide 85 or higher (takes too much time and there are additional costs).
- Little incentive for home builders and LDC to promote this program as savings attributed to most of the measures are insignificant.
- LDCs cannot act as an account representative to assist the home builder in completing the application.

2.2.1.8 RESIDENTIAL DEMAND RESPONSE INITIATIVE

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

Initiative Frequency: Year round

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

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

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

Delivery: LDC's recruit customers and procure technology

Additional detail is available:

- Schedule B-1
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/SCHED_2011_ResDR_B_3_110727%28MJB%29v15_redacted.pdf
and
saveONenergy website <https://saveonenergy.ca/Consumer.aspx>

Initiative Activities/Progress:

- CNPI did not participate in the previous *peaksaver* programs.

In Market Date: The *peaksaver*® Extension was a roll-over from 2010 and was in market for January, 2011. Although CNPI signed the Master Agreement June 10, 2011 and Schedule B-3 for *peaksaver*® PLUS August 16, 2011, this program was not in market for 2011.

Lessons Learned / Identified Challenges:

- The schedule for Peaksaver Plus was posted in August 2011, but this did not provide adequate time for product procurement for 2011, and part of 2012. The product procurement process uncovered that the In Home Display units that communicate with installed smart meter technology were still in development and not ready for market deployment. Consequently, LDCs could not be in market with the Peaksaver Plus program until 2012, and possibly as far as 2013.
- Introduction of new technology requires incentives for the development of such technology. Appropriate lead times for LDC analysis and assessment, product procurement, and testing and integration into the Smart Meter environment are also required. Making seemingly minor changes to provincial technical specifications can create significant issues when all LDCs attempt to implement the solution in their individual environments.
- Where a provincial solution is not available to all participants, attention to addressing specific LDC concerns is needed.

2.2.2 COMMERCIAL AND INSTITUTIONAL PROGRAM

2.2.2.1 EFFICIENCY: EQUIPMENT REPLACEMENT INCENTIVE (ERII)

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

Initiative Frequency: Year round

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

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

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

Delivery: LDC delivered.

Additional detail is available:

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

Initiative Activities/Progress:

- Bi-annual customer newsletters
- CNPI website
- Handouts for customers in office and at community events
- Customer site visits
- Email complete Business Program overview to business customers

In Market Date: June 10, 2011 – once CNPI signed the Master Agreement and Schedule C-2 we officially offered ERII to our customers. However, the online application system was not in place until March 2011.

Lessons Learned / Identified Challenges:

- ERII (previously Equipment Replacement Incentive Program – ERIP) has been offered by LDCs for many years. It is a high performing, cost-effective program, and there were many pre-2011 projects completing in 2011 (via ERIP).
- A major challenge for the ERII program in 2011 was payment delays. The centralized electronic processes were not ready as required by the Master Agreement. The lack of having these automated processes,

exasperated by a greater than expected volume of pre-2011 projects completing in 2011, caused considerable payment delays. Based on the lessons learned in the 2011 process, the centralized process review used for 2012 project payment has been streamlined.

- In March 2011, the revised iCON system was launched by the OPA. This is the major online application system implemented to aid the 2011-2014 ERII application process. With system applications of this size and functionality, it was expected that there would be various issues identified at the time of the release, and on-going, to prove that the system was "ready for market." Unfortunately, the resolution of these issues, with the corresponding time lags and workarounds, was seen to be a barrier to some customer participation in the 2011 program year. In addition, there were also on-going issues and limitations with the back-end CRM system that affected LDCs ability to effectively review and approve applications. Some LDCs (and their third party service providers) have developed parallel systems to monitor their applications.
- EM&V and indemnity clauses in the ERII Participant Agreement are being interpreted as burdensome and difficult to budget for as an eventuality. Participant Agreements are too onerous and lengthy. This can scare away smaller participants. The OPA should revise the wording in the agreement.
- Participant incentive payment from the OPA to the LDC is commonly delayed.

2.2.2.2 DIRECT INSTALL LIGHTING INITIATIVE (DIL)

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

Initiative Frequency: Year round

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

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

Target End Uses:

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

Additional detail is available:

- Schedule C-3
<http://www.powerauthority.on.ca/sites/default/files/page/Schedule%20C-3%20Direct%20Install%20Initiative%20-%20redacted.pdf>

and

saveONenergy website <https://saveonenergy.ca/Business.aspx>

Initiative Activities/Progress:

- Bi-annual customer newsletters
- CNPI website

- Handouts for customers in office and at community events
- CNPI Service Provider and Contractors continuing with cold calls and visits to eligible customers, to build on momentum created during 2009-2010 program participation
- Email complete Business Program overview to business customers

In Market Date: June 10, 2011 – once CNPI signed the Master Agreement and Schedule C-3 we officially offered DIL to our customers. After service provider delivery agent procurement, we began installations in the late fall 2011.

Lessons Learned / Identified Challenges:

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

2.2.2.3 EXISTING BUILDING COMMISSIONING INCENTIVE INITIATIVE

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

Initiative Frequency: Year round

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

Description: This Initiative offers Participants incentives for the following:

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

Targeted End Uses: Chilled water systems for space cooling

Delivery: LDC delivered.

Additional detail is available:

- Schedule C-6

http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20C-6%20Commissioning%20Initiative.pdf

and

saveONenergy website <https://saveonenergy.ca/Business/Program-Overviews/Existing-Building-Commissioning.aspx>

Initiative Activities/Progress:

- Bi-annual customer newsletters
- CNPI website
- Handouts for customers in office, community events or during customer site visits
- Email complete Business Program overview to business customers

In Market Date: June 10, 2011 – once CNPI signed the Master Agreement and Schedule C-6 we officially offered the Existing Building Commissioning Incentive Initiative to our customers.

Lessons Learned / Identified Challenges:

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

2.2.2.4 NEW CONSTRUCTION AND MAJOR RENOVATION INITIATIVE

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

Initiative Frequency: Year round

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

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

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

Delivery: LDC delivers to customers and design decision makers.

Additional detail is available:

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

Initiative Activities/Progress:

- Bi-annual customer newsletters
- CNPI website
- Handouts for customers in office and at community events
- Email complete Business Program overview to business customers

In Market Date: June 10, 2011 – once CNPI signed the Master Agreement and Schedule C-4 we officially offered HPNC to our customers.

Lessons Learned / Identified Challenges:

- This is a continuation of the High Performance New Construction program previously delivered by Enbridge Gas under contract with the OPA (and subcontracted to Union Gas), which ran until December 2010.
- For 2011, new industry participation was limited due to the delays in redesign of certain aspects of the Initiative such as:
 - 2011 prescriptive incentives needed to be aligned with ERII incentives
 - In the cases of delivering large projects (i.e. custom applications), 2011 participation was limited due to 1) building code changes and 2) level of documentation required.
- Complex custom applications resulted in limited uptake.
- CNPI has one application in the Port Colborne service territory but due to the miscommunication to customers of the High Performance New Construction program being transferred from the Gas utility to the LDC's, the customer was not aware that pre-approval was now required under the new program rules before construction began. CNPI is now submitting a Waiver to the OPA requesting this project be approved to proceed for incentive under the initiative.

2.2.2.5 ENERGY AUDIT INITIATIVE

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

Initiative Frequency: Year round

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

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

Targeted End Uses: Various

Delivery: LDC delivered.

Additional detail is available:

- Schedule C-1
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20C-1%20Energy%20Audit%20Initiative.pdf
and
saveONenergy website <https://saveonenergy.ca/Business/Program-Overviews/Audit-Funding.aspx>

Initiative Activities/Progress:

- Bi-annual customer newsletters
- CNPI website
- Handouts for customers in office, community events or during customer site visits
- Email complete Business Program overview to business customers

In Market Date: June 10, 2011 – once CNPI signed the Master Agreement and Schedule C-1 we officially offered the Energy Audit Initiative to our customers.

Lessons Learned / Identified Challenges:

- Customer uptake in 2011 was slow. Hence, little if any savings were realized in 2011, but projects are expected for 2012.
- Customers expect a greater connection with other CDM Initiatives as a result of completing the Energy Audit. The Initiative should be reviewed under Change Management for the means to readily incent Participants with Audits in hand to implement other electricity savings Initiatives.
- CNPI received 7 applications from one customer (Niagara Region) for this program in 2011, with an expected audit complete in 2012

2.2.3 INDUSTRIAL PROGRAM

2.2.3.1 PROCESS & SYSTEMS UPGRADES INITIATIVE (PSUI)

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

Initiative Frequency: Year round

Objectives: The objectives of this Initiative are to:

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

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

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

Targeted End Uses: Process and systems

Delivery: LDC delivered.

Additional detail is available:

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

Initiative Activities/Progress:

- CNPI website
- Handouts for customers in office, community events or during customer site visits
- Email complete Business Program overview to business customers

In Market Date: June 10, 2011 – when CNPI signed the Master Agreement and Schedule D-1 was posted May 31, 2011 – at which time we officially offered PSUI to our customers.

Lessons Learned / Identified Challenges:

- The PSUI program targets large customers that are undertaking large capital projects. There is typically a long sales cycle to sell these projects, and then a long project development cycle. As such, results from PSUI did not appear in 2011. Limited results are expected to appear in 2012. The majority of the results are expected in 2013-2014, with a much reduced benefit to cumulative energy savings targets.
- Steps are being taken in the 2012 change management process to simplify and streamline the micro-project application process and to allow smaller projects to be directed to the ERII stream.
- Given the size of the projects involved, the contract required for PSUI is a lengthy and complicated document. Attempts are being made through change management in 2012 to simplify the document while still protecting the ratepayer.
- With the considerable customer interest in on-site Load Displacement projects, the Initiative should be reviewed to ensure that these projects may be accepted as part of the PSUI Initiative.
- This program relies on a Technical Reviewer which was not contracted by the OPA until November, 2011. This delay has made it difficult to achieve any savings in 2011, and as a result, LDCs lost out on a full year of potential cumulative energy savings from PSUI projects.
- The contract length for PSUI is too long and filled with lengthy and complicated provisions. The contract is a significant barrier to customer participation, especially for small industrial, municipal, or institutional customers who do not have access to in-house legal services.

2.2.3.2 MONITORING & TARGETING INITIATIVE

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

Initiative Frequency: Year round

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

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

Targeted End Uses:

Delivery: LDC delivered.

Additional detail is available:

- Schedule D-2

http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20D-2%20Monitoring%20and%20Targeting%20Initiative.pdf

and

saveONenergy website <https://saveonenergy.ca/Business.aspx>

Initiative Activities/Progress:

- CNPI website
- Handouts for customers in office, community events, or during customer site visits
- Email complete Business Program overview to business customers

In Market Date: June 10, 2011, CNPI signed the Master Agreement and Schedule D-2 was posted May 31, 2011 – at which time we officially offered the Monitoring & Targeting Initiative to our customers.

Lessons Learned / Identified Challenges:

- The M&T initiative was originally targeted at larger customers with the capacity to review the M&T data. This review requires the customer facility to employ an Energy Manager, or a person with equivalent qualifications, which has been a barrier for some customers. Through the change management process in 2012, changes are being made to both the M&T schedule and ERII to allow smaller facilities to employ M&T systems.

2.2.3.3 ENERGY MANAGER INITIATIVE

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:

Delivery: LDC delivered.

Additional detail is available:

- Schedule D-3

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

and

saveONenergy website <https://saveonenergy.ca/Business.aspx>

Initiative Activities/Progress:

- CNPI website
- Handouts for customers in office, community events, or during customer site visits
- Email complete Business Program overview to business customers

In Market Date: June 10, 2011 CNPI signed the Master Agreement and Schedule D-3 was posted May 31, 2011 – at which time we officially offered the Energy Manager Initiative to our customers.

Lessons Learned / Identified Challenges:

- The energy managers have proven to be a popular resource.
- At the beginning, it took longer than expected to set up the energy manager application process.
- Some LDCs are reporting difficulties in hiring capable Roving Energy Managers (REM).
- LDCs that are too small to qualify for their own REM, are teaming up with other utilities to hire an REM.

2.2.3.4 KEY ACCOUNT MANAGER (KAM)

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

Initiative Frequency: Year round

Objective: This initiative offers LDCs the opportunity to access funding for the employment of a KAM in order to support them in fulfilling their obligations related to the PSUI. The KAM is considered to be a key element in assisting the consumer in overcoming traditional barriers related to energy management and help them achieve savings since the KAM can build relationships and become a significant resource of knowledge to the customer.

Description:

Targeted End Uses:

Delivery: LDC delivered.

Additional detail is available:

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

Initiative Activities/Progress:

- CNPI website
- Handouts for customers in office, community events, or during customer site visits
- Email complete Business Program overview to business customers

In Market Date: June 10, 2011 CNPI signed the Master Agreement and Schedule D-4 was posted May 31, 2011.

Lessons Learned / Identified Challenges:

- CNPI participated in the opportunity for a shared KAM with other area LDCs, headed up by Horizon Utilities Corp.
- The KAM assigned to CNPI was successful in attaining a Preliminary Engineering Study for a large industrial customer but this project is not expected to complete until 2013 due to customer timing issues and obligations

2.2.3.5 DEMAND RESPONSE 3

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

Initiative Frequency: Year round

Objective: This Initiative provides for Demand Response (DR) payment for service to DR3 participants to compensate them for making available electricity demand response during a demand response event.

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

Targeted End Uses:

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

Additional detail is available:

- Schedule D-6
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20D-6%20Demand%20Response%203%202011-2014.pdf
and
saveONenergy website <https://saveonenergy.ca/Business.aspx>

Initiative Activities/Progress:

- Bi-annual customer newsletters
- CNPI website

- Handouts for customers in office, community events, or during customer site visits
- Email complete Business Program overview to business customers
- Established a relationship with a specific DR3 Aggregator to cross promote the initiative

In Market Date: June 4, 2011 CNPI signed the Master Agreement and Schedule D-6 was posted May 31, 2011 – at which time we officially offered DR3 to our customers.

Lessons Learned / Identified Challenges:

- Customer data is not provided by the OPA on an individual customer basis due to contractual requirements with the aggregators. This limits LDCs' ability to effectively market to prospective participants. LDCs are now approaching the Aggregators individually and working to develop agreements in order to identify potential customers of this initiative.

2.2.4 LOW INCOME INITIATIVE (HOME ASSISTANCE PROGRAM)

Target Customer Type(s): Income Qualified Residential Customers

Initiative Frequency: Year Round

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

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

Targeted End Uses: End uses based on results of audit

Delivery: LDC delivered.

Additional detail is available:

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

Initiative Activities/Progress:

- CNPI was delayed in entering the agreement for this program in 2011 as the amalgamation of budget for the Port Colborne service territory to CNPI was not finalized by the OPA until April 2012, at which time CNPI began investigating third party service providers to assist with program delivery.

In Market Date: June 10, 2011 CNPI signed the Master Agreement and Schedule E was posted May 9, 2011. However, third party delivery agent procurement was not completed until 2012 and program will not be going to market until fall 2012.

Lessons Learned / Identified Challenges:

- Difficulty identifying eligible customers.
- This Initiative Schedule was finalized later (May 2011) than the rest of the OPA Initiatives and in 2011 only 2 LDCs were in market.
- Centralized payment processes were not developed in 2011, but were in place mid-2012. This resulted in some LDCs delaying their launch to market, or for some pulling out of the market until the payment processes were completed.
- The financial scope, complexity, and customer privacy requirements of this Initiative resulted in a lengthy procurement process. Some LDCs must adhere to very transparent procurement processes which meant that delivery of the program did not start in 2011.
- CNPI had difficulty in finding a service provider to cover its various, non-contiguous, service areas.

2.2.5 PRE-2011 PROGRAMS COMPLETED IN 2011

2.2.5.1 ELECTRICITY RETROFIT INCENTIVE PROGRAM

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

Initiative Frequency: Year Round

Description: Refer to section 2.2.2.1

Initiative Activities/Progress: This program was not marketed in 2011

In Market Date: 2010 Initiative with projects completed in 2011

2.2.5.2 HIGH PERFORMANCE NEW CONSTRUCTION

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

Initiative Frequency: Year round

Description: Refer to section 2.2.2.5

Initiative Activities/Progress: N/A for CNPI

In Market Date: 2010 Initiative through Enbridge Gas with projects completed in 2011 going towards CNPI targets; however there were no projects completed in CNPI service territory.

2.2.5.3 MULTIFAMILY ENERGY EFFICIENCY REBATES (MEER)

Target Customer Type(s): Multifamily Residential Buildings

Initiative Frequency: Year round

Objective: The objective of this Initiative was to offer incentives for multifamily building specific measures that achieve reductions in electricity demand and consumption by upgrading to more energy efficient equipment for lighting, space cooling, ventilation and other measures including an occupant educational component.

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: lighting, HVAC, Energy Star® appliances and other measures

Initiative Activities/Progress: N/A for 2011

In Market Date: 2010 Initiative through GreenSaver with projects completed in 2011 going toward CNPI target.
No projects completed in CNPI service territory.

2.3 Participation

Table 1: Participation

#	Initiative	Activity Unit	Uptake/ Participation Units
Consumer Program			
1	Appliance Retirement	Appliances	219
2	Appliance Exchange	Appliances	67
3	HVAC Incentives	Equipment	323
4	Conservation Instant Coupon Booklet	Coupons	2576
5	Bi-Annual Retailer Event	Coupons	4447
6	Retailer Co-op	Items	0
7	Residential Demand Response	Devices	0
10	New Construction Program	Houses	0
Business Program			
11	Efficiency: Equipment Replacement	Projects	8
12	Direct Installed Lighting	Projects	14
14	Existing Building Commissioning Incentive	Buildings	0
15	New Construction and Major Renovation Incentive	Buildings	0
16	Energy Audit	Audits	7
17	Commercial Demand Response (part of the Residential program schedule)	Devices	0
19	Demand Response 3 (part of the Industrial program schedule)	Facilities	0
Industrial Program			
20	Process & System Upgrades*	Projects	
	a) preliminary study		1
	b) engineering study		0
	c) project incentive		0
21	Monitoring & Targeting	Projects	0
22	Energy Manager	Managers	0

23	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	Projects	0
25	Demand Response 3	Facilities	0
Home Assistance Program			
26	Home Assistance Program	Units	0
Pre 2011 Programs Completed in 2011			
27	Electricity Retrofit Incentive Program	Projects	32
28	High Performance New Construction	Projects	0
29	Toronto Comprehensive	Projects	
30	Multifamily Energy Efficiency Rebates	Projects	0
31	Data Centre Incentive Program	Projects	
32	EnWin Green Suites	Projects	

2.4 Spending

Table 2: Spending

#	Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
Consumer Program						
1	Appliance Retirement	9620.13				9620.13
2	Appliance Exchange					
3	HVAC Incentives	8757.13				8757.13
4	Conservation Instant Coupon Booklet	8828.77				8828.77
5	Bi-Annual Retailer Event	8757.13				8757.13
6	Retailer Co-op					
7	Residential Demand Response	9086.67				9086.67
10	New Construction Program	9074.25				9074.25
Business Program						
11	Efficiency: Equipment Replacement	26718.72				26718.72
12	Direct Install Lighting*	13223.28				13223.28
14	Existing Building Commissioning Incentive	13203.60				13203.60
15	New Construction and Major Renovation Initiative	13486.66				13486.66
16	Energy Audit	13235.85				13285.85
17	Commercial Demand Response (part of the Residential schedule)					
19	Demand Response 3 (part of the Industrial schedule)					
Industrial Program						
20	Process & System Upgrades					
	a) preliminary study	1207.41				1207.41
	b) engineering study	1178.88				1178.88
	c) program incentive	1178.88				1178.88
21	Monitoring & Targeting	1281.38				1281.38

22	Energy Manager	2366.92				2366.92
23	Efficiency: Equipment Replacement Incentive (part of the C&I schedule)					
25	Demand Response 3	3353.62				3353.62
Home Assistance Program						
26	Home Assistance Program	7229.27				7229.27
Pre 2011 Programs Completed in 2011						
27	Electricity Retrofit Incentive Program					
28	High Performance New Construction					
29	Toronto Comprehensive					
30	Multifamily Energy Efficiency Rebates					
31	Data Centre Incentive Program					
32	EnWin Green Suites					
TOTAL Province-wide CDM PROGRAMS		151788.57				151788.57

*Note: Funding for Direct Install Lighting was significantly delayed with payments not flowing to the LDCs until 2012. Therefore, CNPI did not pay out any of the PBF or PI until payment was received from the OPA and did not report this as funds received and/or remitted in 2011.

Describe and detail the allocation of funds, both cumulatively and in the one year period applicable to the Annual Report, on each of the following OPA-Contracted Province-Wide CDM Programs that over the course of 2011 were Not in Market.

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

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

2.5 Evaluation

2.5.1 EVALUATION FINDINGS

Table 3: Evaluation Findings

#	Initiative	Evaluation Findings
Consumer Program		
1	Appliance Retirement	<ul style="list-style-type: none"> *Overall participation continues to decline year over year <ul style="list-style-type: none"> *Participation declined 17% from 2010 (from over 67,000 units in 2010 to over 56,000 units in 2011) *97% of net resource savings achieved through the home pick-up stream <ul style="list-style-type: none"> *Measure Breakdown: 66% refrigerators, 30% freezers, 4% Dehumidifiers and window air conditioners *3% of net resource savings achieved through the Retailer pick-up stream <ul style="list-style-type: none"> *Measure Breakdown: 90% refrigerators, 10% freezers *Net-to-Gross ratio for the initiative was 50% <ul style="list-style-type: none"> *Measure-level free ridership ranges from 82% for the retailer pick-up stream to 49% for the home pick-up stream *Measure-level spillover ranges from 3.7% for the retailer pick-up stream to 1.7% for the home pick-up stream
2	Appliance Exchange	<ul style="list-style-type: none"> *Overall eligible units exchanged declined by 36% from 2010 (from over 5,700 units in 2010 to over 3,600 units in 2011) <ul style="list-style-type: none"> *Measure Breakdown: 75% window air conditioners, 25% dehumidifiers *Dehumidifiers and window air conditioners contributed almost equally to the net energy savings achieved <ul style="list-style-type: none"> *Dehumidifiers provide more than three times the energy savings per unit than window air conditioners *Window air conditioners contributed to 64% of the net peak demand savings achieved *Approximately 96% of consumers reported having replaced their exchanged units (as opposed to retiring the unit) *Net-to-Gross ratio for the initiative is consistent with previous evaluations (51.5%)
3	HVAC Incentives	<ul style="list-style-type: none"> *Total air conditioner and furnace installations increased by 14% (from over 95,800 units in 2010 to over 111,500 units in 2011) <ul style="list-style-type: none"> *Measure Breakdown: 64% furnaces, 10% tier 1 air conditioners (SEER 14.5) and 26% tier 2 air conditioners (SEER 15) *Measure breakdown did not change from 2010 to 2011 *The HVAC Incentives initiative continues to deliver the majority of both the energy (45%) and demand (83%) savings in the consumer program <ul style="list-style-type: none"> *Furnaces accounted for over 91% of energy savings achieved for this initiative

		<ul style="list-style-type: none"> *Net-to-Gross ratio for the initiative was 17% higher than 2010 (from 43% in 2010 to 60% in 2011) *Increase due in part to the removal of programmable thermostats from the program, and an increase in the net-to-gross ratio for both Furnaces and Tier 2 air conditioners (SEER 15)
4	Conservation Instant Coupon Booklet	<ul style="list-style-type: none"> *Customers redeemed nearly 210,000 coupons, translating to nearly 560,000 products *Majority of coupons redeemed were downloadable (~40%) or LDC-branded (~35%) *Majority of coupons redeemed were for multi-packs of standard spiral CFLs (37%), followed by multi-packs of specialty CFLs (17%) *Per unit savings estimates and net-to-gross ratios for 2011 are based on a weighted average of 2009 and 2010 evaluation findings *Careful attention in the 2012 evaluation will be made for standard CFLs since it is believed that the market has largely been transformed
5	Bi-Annual Retailer Event	<ul style="list-style-type: none"> *Customers redeemed nearly 370,000 coupons, translating to over 870,000 products *Majority of coupons redeemed were for multi-packs of standard spiral CFLs (49%), followed by multi-packs of specialty CFLs (16%) *Per unit savings estimates and net-to-gross ratios for 2011 are based on a weighted average of 2009 and 2010 evaluation findings *Standard CFLs and heavy duty outdoor timers were reintroduced to the initiative in 2011 and contributed more than 64% of the initiative's 2011 net annual energy savings *While the volume of coupons redeemed for heavy duty outdoor timers was relatively small (less than 1%), the measure accounted for 10% of net annual savings due to high per unit savings *Careful attention in the 2012 evaluation will be made for standard CFLs since it is believed that the market has largely been transformed.
6	Retailer Co-op	*Initiative was not evaluated in 2011 due to low uptake. Verified Bi-Annual Retailer Event per unit assumptions and free-ridership rates were used to calculate net resource savings
7	Residential Demand Response	<ul style="list-style-type: none"> *Approximately 20,000 new devices were installed in 2011 *99% of the new devices enrolled controlled residential central AC (CAC) *2011 only saw 1 atypical event (in both weather and timing) that had limited participation across the province *The ex ante impact developed through the 2009/2010 evaluations was maintained for 2011; residential CAC: 0.56 kW/device, commercial CAC: 0.64 kW/device, and Electric Water Heaters: 0.30 kW/device
10	New Construction Initiative	<ul style="list-style-type: none"> *Initiative was not evaluated in 2011 due to limited uptake *Business case assumptions were used to calculate savings
Business Program		
11	Efficiency: Equipment	<ul style="list-style-type: none"> *Gross verified energy savings were boosted by lighting projects in the prescriptive and custom measure tracks *Lighting projects overall were determined to have a realization rate of 112%; 116% when including interactive energy

	Replacement	<p>changes</p> <ul style="list-style-type: none"> *On average, the evaluation found high realization rates as a result of both longer operating hours and larger wattage reductions than initial assumptions *Low realization rates for engineered lighting projects due to overstated operating hour assumptions *Custom non-lighting projects suffered from process issues such as: the absence of required M&V plans, the use of inappropriate assumptions, and the lack of adherence to the M&V plan *The final realization rate for summer peak demand was 94% <ul style="list-style-type: none"> *84% was a result of different methodologies used to calculate peak demand savings *10% due to the benefits from reduced air conditioning load in lighting retrofits *Overall net-to-gross ratios in the low 70's represent an improvement over the 2009 and 2010 ERIP program where net-to-gross ratios were in the low 60's and low 50's, respectively. <ul style="list-style-type: none"> Strict eligibility requirements and improvements in the pre-approval process contributed to the improvement in net-to-gross ratios
12	Direct Installed Lighting	<ul style="list-style-type: none"> *Though overall performance is above expectations, participation continues to decline year over year as the initiative reaches maturity *70% of province-wide resource savings persist to 2014 <ul style="list-style-type: none"> *Over 35% of the projects for 2011 included at least one CFL measure *Resource savings from CFLs in the commercial sector only persist for the industry standard of 3 years *Since 2009 the overall realization rate for this program has improved <ul style="list-style-type: none"> *2011 evaluation recorded the highest energy realization rate to date at 89.5% *The hours of use values were held constant from the 2010 evaluation and continue to be the main driver of energy realization rate *Lights installed in "as needed" areas (e.g., bathrooms, storage areas) were determined to have very low realization rates due to the difference in actual energy saved vs. reported savings
14	Existing Building Commissioning Incentive	<ul style="list-style-type: none"> *Initiative was not evaluated in 2011, no completed projects in 2011
15	New Construction and Major Renovation Initiative	<ul style="list-style-type: none"> *Initiative was not evaluated in 2011 due to low uptake *Assumptions used are consistent with preliminary reporting based on the 2010 Evaluation findings and consultation with the C&I Work Group (100% realization rate and 50% net-to-gross ratio)
16	Energy Audit	<ul style="list-style-type: none"> *The evaluation is ongoing. The sample size for 2011 was too small to draw reliable conclusions.
17	Commercial	<ul style="list-style-type: none"> *See residential demand response (#7)

	Demand Response (part of the Residential program schedule)	
19	Demand Response 3 (part of the Industrial program schedule)	*See Demand Response 3 (#25)
Industrial Program		
20	Process & System Upgrades	*Initiative was not evaluated in 2011, no completed projects in 2011
21	Monitoring & Targeting	n/a
22	Energy Manager	n/a
23	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	*See Efficiency: Equipment Replacement (#11)
25	Demand Response 3	<p>*Program performance for Tier 1 customers increased with DR-3 participants providing 75% of contracted MW for both sectors</p> <p>*Industrial customers outperform commercial customers by provide 84% and 76% of contracted MW, respectively</p> <p>*Program continues to diversify but still remains heavily concentrated with less than 5% of the contributors accounting for the majority (~60%) of the load reductions.</p> <p>*By increasing the number of contributors in each settlement account and implementation of the new baseline methodology the performance of the program is expected to increase</p>

Home Assistance Program		
26	Home Assistance Program	* Initiative was not evaluated in 2011 due to low uptake *Business Case assumptions were used to calculate savings
Pre-2011 Programs completed in 2011		
27	Electricity Retrofit Incentive Program	* Initiative was not evaluated *Net-to-Gross ratios used are consistent with the 2010 evaluation findings (multifamily buildings 99% realization rate and 62% net-to-gross ratio and C&I buildings 77% realization rate and 52% net-to-gross ratio)
28	High Performance New Construction	* Initiative was not evaluated *Net-to-Gross ratios used are consistent with the 2010 evaluation findings (realization rate of 100% and net-to-gross ratio of 50%)
29	Toronto Comprehensive	
30	Multifamily Energy Efficiency Rebates	* Initiative was not evaluated *Net-to-Gross ratios used are consistent with the 2010 evaluation findings
31	Data-Centre Incentive Program	
32	EnWin Green Suites	

2.5.2 EVALUATION RESULTS

Table 4: Evaluation Results

#	Initiative	Realization Rate		Gross Savings		Net-to-Gross Ratio		Net Savings		Contribution to Targets	
		Peak Demand Savings	Energy Savings	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Peak Demand Savings	Energy Savings	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Program-to-Date: Net Annual Peak Demand Savings (kW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh)
Consumer Program											
1	Appliance Retirement	100%	100%	26	182,793	51%	52%	13	93,881	13	375,421
2	Appliance Exchange	100%	100%	12	13,630	52%	52%	6	7,024	2	23,748
3	HVAC Incentives	100%	100%	155	290,070	60%	60%	94	173,523	94	694,091
4	Conservation Instant Coupon Booklet	100%	100%	5	88,378	114%	111%	6	97,458	6	389,834
5	Bi-Annual Retailer Event	100%	100%	8	137,456	113%	110%	9	150,171	9	600,684
7	Residential Demand Response	0%	0%	0	0	-	-	0	0	0	0
8	Residential New Construction	-	-	0	0	-	-	0	0	0	0

Business Program											
9	Efficiency: Equipment Replacement	90%	105%	18	152,574	73%	76%	13	114,842	13	459,368
10	Direct Install Lighting	108%	90%	14	40,284	93%	93%	15	37,406	13	141,530
11	Existing Building Commissioning Incentive	-	-	0	0	-	-	0	0	0	0
12	New Construction and Major Renovation Incentive	-	-	0	0	-	-	0	0	0	0
13	Energy Audit	-	-	0	0	-	-	0	0	0	0
14	Commercial Demand Response (part of the Residential program schedule)	0%	0%	0	0	-	-	0	0	0	0
15	Demand Response 3 (part of the Industrial program schedule)	76%	100%	0	0	n/a	n/a	0	0	0	0
Industrial Program											
16	Process &	-	-	0	0	-	-	0	0	0	0

	System Upgrades										
17	Monitoring & Targeting	-	-	0	0	-	-	0	0	0	0
18	Energy Manager	-	-	0	0	-	-	0	0	0	0
19	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	-	-	0	0	-	-	0	0	0	0
20	Demand Response 3	84%	100%	150	7,420	n/a	n/a	126	7,420	0	7,420
Home Assistance Program											
21	Home Assistance Program	-	-	0	0	-	-	0	0	0	0
Pre-2011 Programs completed in 2011											
22	Electricity Retrofit Incentive Program	77%	77%	462	2,370,242	52%	52%	240	1,232,526	240	4,930,103

Assumes demand response resources have a persistence of 1 year

Table 5: Summarized Program Results

Program	Gross Savings		Net Savings		Contribution to Targets	
	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Program-to-Date: Net Annual Peak Demand Savings (kW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh)
Consumer Program Total	207	712,326	128	522,058	123	2,083,778
Business Program Total	32	192,858	29	152,247	26	600,898
Industrial Program Total	150	7,420	126	7,420	0	7,420
Home Assistance Program Total	0	0	0	0	0	0
Pre-2011 Programs completed in 2011 Total	462	2,373,047	240	1,233,928	240	4,935,713
Total OPA Contracted Province-Wide CDM Programs	851	3,285,651	523	1,915,654	389	7,627,809

2.6 Additional Comments

When CNPI was preparing the CDM Strategy, estimates were based on previous program participation, and utilization of the OPA's "Resource Tool" program, for estimating program uptake and overall results. However, with only offering 3 CDM programs prior to 2011, it was unknown what the initiative assumptions and participation rates would produce in terms of target achievement.

With programs such as Direct Install Lighting and Appliance Retirement reaching market saturation, and CNPI not having participated in the *peaksaver* program between 2008 and 2010, specific programs were targeted through the OPA Resource Tool program which indicated a potential achievement higher than anticipated participation, such as the Heating & Cooling Incentive, Demand Response 3 and the *peaksaver* PLUS program.

3 Combined CDM Reporting Elements

3.1 Progress Toward CDM Targets

CNPI's mandated targets:

Peak Demand

CNPI (Fort Erie & Gananoque): 4.070 MW
 CNPI (Port Colborne): 2.330 MW
Total Peak Demand Target for CNPI: 6.400 MW

Energy

CNPI (Fort Erie & Gananoque): 15.810 GWh
 CNPI (Port Colborne): 9.270 GWh
Total Energy Target for CNPI: 25.080 GWh

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

Implementation Period	Annual			
	2011	2012	2013	2014
2011 - Verified	0.52	0.40	0.40	0.39
2012				
2013				
2014				0.00
Verified Net Annual Peak Demand Savings Persisting in 2014:				0.39
Canadian Niagara Power Inc. 2014 Annual CDM Capacity Target:				6.4
Verified Portion of Peak Demand Savings Target Achieved in 2014(%):				6.08%
LDC Milestone submitted for 2011				21.79%
Variance				-15.71%

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

Implementation Period	Annual				Cumulative
	2011	2012	2013	2014	2011-2014
2011 - Verified	1.92	1.91	1.91	1.90	7.63
2012					
2013					
2014					
Verified Net Cumulative Energy Savings 2011-2014:					7.63
Canadian Niagara Power Inc. 2011-2014 Cumulative CDM Energy Target:					25.08
Verified Portion of Cumulative Energy Target Achieved (%):					30.41%
LDC Milestone submitted for 2011					9.52%
Variance					20.89%

3.2 CDM Strategy Modifications

As part of our CDM Strategy to the OEB, CNPI forecasted energy and demand savings for each of the four years between 2011-2014. CNPI fell short of reaching the forecasted 1.39 MW by 15.71%. Alternatively, CNPI was above forecasted cumulative energy of 3.075 GWh target by 20.89%.

Several assumptions were made at the time forecasts were determined in November 2010.

- That all programs would be available and marketable January 1, 2011
- Historical customer participation as well as limited pre-2011 program participation by CNPI could be used to reasonably forecast the next four years. This included both customer participation as well as anticipated energy and demand savings.
- Implementation of initiatives would follow the design concepts.

When targets were originally set by the OEB, CNPI was in the final years of a ten-year lease of the distribution business of the City of Port Colborne (Port Colborne Hydro Inc.). After discussions with the OEB and OPA, it was determined that the targets would remain separate for CNPI and Port Colborne with the Port Colborne target being assigned to CNPI. The funding allocated to Port Colborne was then amalgamated with the funding to CNPI by the OPA and essentially one budget allocated to CNPI as a whole. However, with the completion and final outright purchase of the distribution business from the City of Port Colborne completed in April 2012, CNPI has fully incorporated that business under the CNPI distribution licence and requests that the OEB CDM mandated targets also be amalgamated.

CNPI's service territories have experienced a negative to low population growth (averaging 1.6% overall) between 2006 and 2011 according to 2011 Statistics Canada Census data, compared to an overall growth rate of 5.5% for Canada. In addition, a number of considerable reductions in large customer demand and energy consumption, in 2011, which continued into 2012 with customer closures, resulted in significant economic impacts affecting the entire community (specifically the Town of Fort Erie). Due to the economic impacts still affecting the global economy, lack of growth and decline in the large customer base, the CNPI service territories have seen an overall decline of 146.27 GWh since 2008, which the OEB used as the base year to set the mandated targets.

In 2011, a hold was placed on the OPA's Fit/Microfit program in order for a ministerial review; a large wind turbine manufacturer in the Town of Fort Erie was forced to reduce labour, halt production which reduced their monthly electric load. With this noteworthy decline affecting all customer levels, CNPI requests a review of the mandated targets set by the OEB and anticipates a reduction based on the impacts discussed, and an amalgamation of the Port Colborne targets with CNPI's.

CNPI is anticipating meeting its strategy forecast for years 2012-2014 should the current level of customer participation continue and in some cases increase, and target readjustment granted by the OEB. This is also contingent on demand centric initiatives commencing and persisting to 2014 within all customer segments. The delay in *peaksaver* PLUS and uncertainty of Demand Response 3 was not anticipated at the time our CDM Strategy to the OEB was submitted and subsequently amended. Any further reduction in measures, delay in initiatives to market, as well as large customer closures, will have impact on our ability to reach our mandated target. CNPI is confident in the strategy for meeting energy targets is sound, and once the *peaksaver* PLUS program is in market (estimated to be early 2013), this will contribute toward targets for peak demand savings.