



**Conservation and Demand Management
2011 Annual Report**

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Northern Ontario Wires Inc. 2011 CDM Annual Report

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Executive Summary

In 2011, Northern Ontario Wires Inc. ("NOW") achieved 9.5% of its Net Annual Peak Demand Savings (MW) overall four year target, and 31.9% of its Net Cumulative Energy Savings (GWh) overall four year target.

These results were based on the assumption that existing demand resources will continue to remain in place until 2014. If they do not, this would change the Net Annual Peak Demand Savings achievement to 7.9%. There would be no change to the Net Cumulative Energy Savings achievement.

NOW utilized Burman Energy Consultants Group Inc. (Burman Energy) as a third-party service provider through 2011 to deliver its CDM programs to the Cochrane, Iroquois Falls and Kapuskasing. While the full suite of OPA programming was offered to all customers, delays existed in the rollout of the portfolio. The 2011 year marked the first year NOW offered the full suite of Conservation programs to its customers. In 2010, residential programs centrally coordinated by the OPA were offered, as well, the Power Savings Blitz was offered to General Service less than 50kW customers. Additional efforts were therefore required in the development, coordination and implementation of processes. Additional process of building awareness, educating customers and promoting the programs/conservation also contributed to the delay of roll program rollouts.

However, it is also of note that because this is the first year of the programs, market saturation and program maturation are not as extenuating factors as they are for those LDCs which have been participating in the programs since their inception.

Recognizing that conservation is a long term process, involving behavioural change, these programs are seen only within a short term framework. The full impact of these programs will be realized as time progresses.

Since this program is effectively in a pseudo-pilot stage, with no historical perspective to reference, no changes in strategy are deemed necessary. Strategy will be reviewed again following one full year of programming.

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 licence of NOW to require NOW, as a condition of its licence, to achieve 5.880 GWh of energy savings and 1.060 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 licences. To comply with the Code requirements, NOW submitted its CDM Strategy on October 28, 2010 which provided a high level of description of how NOW intended to achieve its CDM targets.

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

1 Board-Approved CDM Programs

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 Conservation and Demand Management (“CDM”) program that is being offered in NOW’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. NOW will report these results upon receipt from the OPA. As of September 30, 2012, the OPA has not released its preliminary results of TOU savings to distributors. Therefore, NOW is not able to provide any verified savings related to NOW’s TOU program at this time.

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)		
	On Peak	Mid Peak	Off Peak
Effective Date			
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:

NOW began transitioning its RPP customers to TOU billing May 2011. At December 31st, 2011, 99% of RPP customers were on TOU billing. Approximately 150 small commercial customers remained.

1.3 NOW's Application with the OEB

NOW did not put forth any applications to the Board in 2011.

2 OPA-Contracted Province-Wide CDM Programs

2.1 Introduction

Effective February 1, 2011, NOW entered into an agreement with the OPA to deliver CDM programs extending from January 1, 2011 to December 31, 2014, these programs are listed below.

Initiative	Schedule	Date schedule posted	Customer Class
Residential Program			
Appliance Retirement	Schedule B-1, Exhibit D	Jan 26 2011	All residential rate classes
Appliance Exchange	Schedule B-1, Exhibit E	Jan 26 2011	All residential rate classes
HVAC Incentives	Schedule B-1, Exhibit B	Jan 26 2011	All residential rate classes
Conservation Instant Coupon Booklet	Schedule B-1, Exhibit A	Jan 26 2011	All residential rate classes
Bi-Annual Retailer Event	Schedule B-1, Exhibit C	Jan 26 2011	All residential rate classes
Retailer Co-op		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

Several initiatives, 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 both 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 for reporting.	Not launched to market
Home Energy Audit Tool	This is a provincial online audit tool to engage customers in conservation and help drive customer participation to CDM programs.	Not launched to market

Commercial & Institutional Program		
Direct Service Space Cooling	The objective of this initiative is to offer free servicing of air conditioning systems and refrigeration units for the purpose of achieving energy savings and demand reduction.	Not launched to market in 2011. The OPA has no plans to launch this initiative 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 provision in Article 3. Collaboration between the OPA and the Local Distribution Companies (LDCs) commenced in 2011, as the change management process was implemented to enhance the saveONenergy program suite. The change management process allows for modifications to the Master Service Agreement and initiative Schedules. The program enhancements 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 (Exhibit D)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

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

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

Additional detail is available:

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

Initiative Activities/Progress:

NOW had 66 appliances picked up and decommissioned in 2011. Marketing activities for this program included:

- A bill insert specifically for the Fridge and Freezer pickup. Mailed April 1, 2011; qty 6,000.

In Market Date:

NOW began actively offering this initiative March, 2011.

Lessons Learned:

- 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.

2.2.1.2 APPLIANCE EXCHANGE INITIATIVE (Exhibit E)

Target Customer Type(s): Residential Customers

Initiative Frequency: Spring and Fall

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

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

Targeted End Uses: Window air conditioners and portable dehumidifiers

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

Additional detail is available:

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

Initiative Activities/Progress:

NOW had five appliances exchanged in 2011. No direct LDC marketing activities took place for this initiative.

In Market Date:

NOW began actively offering this initiative March, 2011.

Lessons Learned:

- The spring event had the participation of 3 retailers involving 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 specific, and dependent upon product promoted by the retailers.

2.2.1.3 HVAC INCENTIVES INITIATIVE (Exhibit B)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

Targeted End Uses: Central air conditioners and furnaces

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

Additional detail is available:

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

Initiative Activities/Progress:

NOW had one customer install a qualifying HVAC unit in 2011. Marketing activities for this program included:

- A direct mail bill insert was mailed June 2011. Qty 6,000

In Market Date:

NOW began actively offering this initiative March, 2011.

Lessons Learned:

- Channel engagement is a highly effective method of connecting with customers; however, channel partnering does 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.

2.2.1.4 CONSERVATION INSTANT COUPON BOOKLET INITIATIVE (Exhibit A)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

Targeted End Uses: ENERGY STAR® qualified Standard Compact Fluorescent Lights (CFLs), ENERGY STAR® qualified Light Fixtures lighting control products, weatherstripping, hot water pipe wrap, electric water heater blanket, heavy duty plug-in timers, advanced power bars, clotheslines, 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, Exhibit A
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf and
- Saveonenergy website <https://saveonenergy.ca/Consumer.aspx>

Initiative Activities/Progress:

NOW had 541 products purchased, using conservation coupons mailed by the OPA. No direct LDC marketing activities took place for this initiative.

In Market Date:

NOW began actively offering this initiative March, 2011.

Lessons Learned:

- 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 varies from retailer to retailer. This delays the results reporting, which, in turn, limits the ability of the OPA and LDC to react and respond to initiative performance or changes in consumer behaviour.

2.2.1.5 BI-ANNUAL RETAILER EVENT INITIATIVE (Exhibit C)

Target Customer Type(s): Residential Customers

Initiative Frequency: Bi-annual events

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

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

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

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

Additional detail is available:

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

Initiative Activities/Progress:

NOW had 924 products purchased during the Bi-Annual Retailer Event. No direct LDC marketing activities took place for this initiative.

In Market Date:

NOW began actively offering this initiative March, 2011

Lessons Learned:

- 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.

2.2.1.6 NEW CONSTRUCTION PROGRAM (Schedule B-2)

Target Customer Type(s): Residential Customers

Initiative Frequency: Year round

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

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

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

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

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

Additional detail is available:

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

Initiative Activities/Progress:

NOW did not receive any applications for the New Construction Program in 2011. NOW hosted two information sessions, one in Kapuskasing and one in Cochrane, in June 2011 to promote and engage the local home builders.

In Market Date:

NOW began actively offering this initiative June, 2011.

Lessons Learned:

- There were limited (5) participants 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.

2.2.1.7 RESIDENTIAL DEMAND RESPONSE PROGRAM (Schedule B-3)

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

Initiative Frequency: Year round

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

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

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

Delivery: LDCs recruit customers and procure technology

Additional detail is available:

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

Initiative Activities/Progress:

NOW did not actively engage in the *peaksaver* PLUS™ Initiative in 2011. NOW focused on development of processes and resources needed in order to implement this program for the 2012 year.

2.2.2 COMMERCIAL AND INSTITUTIONAL PROGRAM

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

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

Initiative Frequency: Year round

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

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

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

Delivery: LDC delivered.

Additional detail is available:

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

- Saveonenergy website <https://saveonenergy.ca/Business/Program-Overviews/Retrofit-for-Commercial.aspx>

Initiative Activities/Progress:

NOW had two RETROFIT projects completed in 2011 which resulted in 0.05 MW and 278 MWh savings. The cumulative savings for these two projects account for the single largest contribution to the overall MWh four year target.

A brochure, which contained an overview of all Business Programs, was directly mailed to the top 20 General Service customers.

In Market Date:

NOW began actively offering this initiative March, 2011

Lessons Learned:

- 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 experienced through payment delays. The centralized electronic processes were not in place and operable, as required by the Master Agreement. The lack of access to 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' abilities to effectively review and approve applications. Some LDCs (and their third party service providers) have developed parallel systems to monitor their applications.

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

Target Customer Type(s): Small Commercial, Institutional, Agricultural Facilities and Multi-Family Buildings

Initiative Frequency: Year round

Objective: The objective of this Initiative is to offer 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:

NOW had 36 Direct Install Lighting projects installed in 2011. Marketing activities included:

- Direct mailing of a postcard, containing information on the Small Business Lighting Program to all GS < 50kW customers.
- Direct mailing of a brochure, containing an overview of all Business Programs, to the top 20 General Service customers.
- Contractor information session to engage local contractors
- Door to door sales by local contractors to promote the program

In Market Date:

NOW began actively offering this initiative March, 2011.

Based on the Strategy submitted to the Board November 2010, NOW expected to have 92 projects completed with a total savings of 0.02 MW and 139 MWh. These savings were generated from the OPA Conservation Portfolio Development Tool.

Based on finalized 2011 OPA results, 36 project completions resulted in 0.047 MW and 121 MWh savings. Therefore, while less than half of the targeted projects were completed, NOW exceeded the MW Strategy target and nearly met the MWh Strategy target for 2011. The variance of per project savings is a result of the assumptions and variables used in the OPA Conservation Portfolio Development Tool. The tool contained a number of variables and assumptions which represented an average savings per Small Business Lighting Project. The actual savings attributed to NOW was a result of EM&V evaluations which verified, at the measure level, per unit assumptions on actual measures installed in NOWs service territory.

Lessons Learned:

- 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, delays of participant incentive payments from the OPA to the LDC, and therefore to the customer, were commonly experienced.
- 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 (Schedule C-6)

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

Initiative Frequency: Year round

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

Description: This Initiative offers Participants incentives for the following:

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

Targeted End Uses: Chilled water systems for space cooling

Delivery: LDC delivered.

Additional detail is available:

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

Initiative Activities/Progress:

NOW did not receive any applications for the Building Commissioning initiative in 2011. A brochure, containing an overview of all Business Programs, was directly mailed to the top 20 General Service customers. The 2011 year focused on building customer relationships and engaging and educating customers with respect to conservation.

In Market Date:

NOW began actively offering this initiative March, 2011.

Lessons Learned:

- There was no customer uptake for this Initiative. It is suspected that the scope of the Initiative, 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 will be expanded to include broader building improvements, for a more holistic approach to building recommissioning.

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

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

Initiative Frequency: Year round

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

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

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

Delivery: LDC delivers to customers and design decision makers.

Additional detail is available:

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

Initiative Activities/Progress:

NOW did not receive any applications for the HPNC initiative in 2011. A brochure, containing an overview of all Business Programs, was directly mailed to the top 20 General Service customers. The 2011 year focused on building customer relationships and engaging and educating customers with respect to conservation.

In Market Date:

NOW began actively offering this initiative March, 2011.

Lessons Learned:

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

2.2.2.5 ENERGY AUDIT INITIATIVE (Schedule C-1)**Target Customer Type(s):** Commercial, Institutional, Agricultural and Industrial Customers**Initiative Frequency:** Year round**Objective:** The objective of this Initiative is to offer incentives to owners and lessees of commercial, institutional, multi-family buildings and agricultural facilities, for the purpose of undertaking assessments to identify all possible opportunities to reduce electricity demand and consumption within their buildings or premises.**Description:** This Initiative provides participants with 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:

NOW did not receive any applications for Energy Audits in 2011. A brochure, containing an overview of all Business Programs, was directly mailed to the top 20 General Service customers. The 2011 year

focused on building customer relationships and engaging and educating customers with respect to conservation.

In Market Date:

NOW began actively offering this initiative March, 2011.

Lessons Learned:

- Customer uptake in the beginning of 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.

2.2.3 INDUSTRIAL PROGRAM

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

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

Initiative Frequency: Year round

Objectives: The objectives of this Initiative are to:

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

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

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

Targeted End Uses: Process and systems

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

Additional detail is available:

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

Initiative Activities/Progress:

While this Initiative was available to customers, NOW did not actively engage in marketing this Initiative. Rather, NOW focused on development of processes and resources needed in order to implement this program for the 2012 year.

Lessons Learned:

- 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.

2.2.3.2 MONITORING & TARGETING INITIATIVE (Schedule D-2)

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

Initiative Frequency: Year round

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

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

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

Additional detail is available:

- Schedule D-2
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_e

[lectricity_contracts/pdfs/Schedule%20D-2%20Monitoring%20and%20Targeting%20Initiative.pdf](#)
and

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

Initiative Activities/Progress:

While this Initiative was available to customers, NOW did not actively engage in marketing this Initiative. Rather, NOW focused on development of processes and resources needed in order to implement this program for the 2012 year.

Lessons Learned:

- The M&T initiative was originally targeted at larger customers with the capacity to review the M&T data. This review requires the customer facility to employ an Energy Manager, or a person with equivalent qualifications; this 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 ERIL, to allow smaller facilities to employ M&T systems.

2.2.3.3 ENERGY MANAGER INITIATIVE (Schedule D-3)

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

Initiative Frequency: Year round

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

Description: This Initiative provides customers the opportunity to access funding to engage an on-site, full time embedded energy manager, or an off-site roving energy manager who is engaged by the LDC. The role of the energy manager is to take control of the facility's energy use by monitoring performance, leading awareness programs, 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 to achieve 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 with Key Account Management support, in some cases.

Additional detail is available:

- Schedule D-3
http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_e

[lectricity_contracts/pdfs/Schedule%20D-3%20Energy%20Manager%20Initiative%202011-2014.pdf](#) and

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

Initiative Activities/Progress:

While this Initiative was available to customers, NOW did not actively engage in marketing this Initiative. Rather, NOW focused on development of processes and resources needed in order to implement this program for the 2012 year.

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

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

Initiative Frequency: Year round

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

Additional detail is available:

- Schedule D-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:

While this Initiative was available to customers, NOW did not actively engage in marketing this Initiative. Rather, NOW focused on development of processes and resources needed in order to implement this program for the 2012 year.

2.2.3.5 DEMAND RESPONSE 3 (Schedule D-6)

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

Initiative Frequency: Year round

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

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

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:

While this Initiative was available to customers, NOW did not actively engage in marketing this Initiative. Rather, NOW focused on development of processes and resources needed in order to implement this program for the 2012 year.

2.2.4 LOW INCOME INITIATIVE (HOME ASSISTANCE PROGRAM) (Schedule E)

Target Customer Type(s): Income Qualified Residential Customers

Initiative Frequency: Year Round

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

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

NOW did not actively engage in the Home Assistance Program in 2011. NOW focused on development of processes and resources needed in order to implement this program for the 2012 year.

2.3 Participation

The following is a list of the detailed participation levels for each of the OPA-Contracted Province-Wide CDM Programs that were offered by NOW in 2011.

Table 1: Participation

Participation ¹			
#	Initiative	Unit	Uptake/ Participation Units
Consumer Program			
1	Appliance Retirement	Appliances	66
2	Appliance Exchange	Appliances	5
3	HVAC Incentives	Equipment	1
4	Conservation Instant Coupon Booklet	Products	541
5	Bi-Annual Retailer Event	Products	924
6	Retailer Co-op	Products	0
7	Residential Demand Response	Devices	0
8	Residential New Construction	Houses	0
Business Program			
9	Efficiency: Equipment Replacement	Projects	2
10	Direct Install Lighting	Projects	36
11	Existing Building Commissioning Incentive	Buildings	0
12	New Construction and Major Renovation Incentive	Buildings	0
13	Energy Audit	Audits	0
14	Commercial Demand Response (part of the Residential program schedule)	Devices	0
15	Demand Response 3 (part of the Industrial program schedule)	Facilities	0
Industrial Program			
16	Process & System Upgrades	Projects ²	0
17	Monitoring & Targeting	Projects ³	0
18	Energy Manager	Managers ^{2,3}	0
19	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	Projects	0
20	Demand Response 3	Facilities	0
Home Assistance Program			
21	Home Assistance Program	Homes	0

2.4 Spending

The following is an allocation of funds for each of the following OPA-Contracted Province-Wide CDM Programs over the course of 2011 that were in Market.

Table 2: Spending

#	Initiative	Program Administration Budget (PAB)	Participant Based Funding (PBF)	Participant Incentives (PI)	Capability Building Funding (CBF)	TOTAL
	Consumer Program	\$4,186.47	\$0.00	\$0.00	\$0.00	\$4,186.47
	Business Program	\$15,127.19	\$9,900.00	\$62,314.25	\$0.00	\$87,341.44
	Industrial Program	\$499.98	\$0.00	\$0.00	\$0.00	\$499.98
	TOTAL Province-wide CDM PROGRAMS	\$19,813.64	\$9,900.00	\$62,314.25	\$0.00	\$92,027.89

The following is an allocation of funds for 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	\$142.86

2.5 Evaluation

2.5.1 EVALUATION FINDINGS

The following table provides a summary of the Province-Wide evaluation findings for each initiative and highlights which initiatives were not evaluated.

Table 3: Evaluation Findings

OPA Province-Wide Evaluation Findings		
#	Initiative	OPA Province-Wide Key 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) * 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 * Furnaces accounted for over 91% of energy savings achieved for this initiative * Net-to-Gross ratio for the initiative was 17% higher than 2010 (from 43% in 2010 to 60% in 2011) * 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	<ul style="list-style-type: none"> * Initiative was not evaluated in 2011 due to low uptake. Verified Bi-Annual Retailer Event per unit assumptions and free-ridership rates were used to calculate net resource savings

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
8	Residential New Construction	<ul style="list-style-type: none"> * Initiative was not evaluated in 2011 due to limited uptake * Business case assumptions were used to calculate savings
Business Program		
9	Efficiency: Equipment Replacement	<ul style="list-style-type: none"> * Gross verified energy savings were boosted by lighting projects in the prescriptive and custom measure tracks * Lighting projects overall were determined to have a realization rate of 112%; 116% when including interactive energy changes <ul style="list-style-type: none"> * On average, the evaluation found high realization rates as a result of both longer operating hours and larger wattage reductions than initial assumptions * Low realization rates for engineered lighting projects due to overstated operating hour assumptions * Custom non-lighting projects suffered from process issues such as: the absence of required M&V plans, the use of inappropriate assumptions, and the lack of adherence to the M&V plan * The final realization rate for summer peak demand was 94% <ul style="list-style-type: none"> * 84% was a result of different methodologies used to calculate peak demand savings * 10% due to the benefits from reduced air conditioning load in lighting retrofits * Overall net-to-gross ratios in the low 70's represent an improvement over the 2009 and 2010 ERIP program where net-to-gross ratios were in the low 60's and low 50's, respectively. Strict eligibility requirements and improvements in the pre-approval process contributed to the improvement in net-to-gross ratios

10	Direct Install 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
11	Existing Building Commissioning Incentive	<ul style="list-style-type: none"> * Initiative was not evaluated in 2011, no completed projects in 2011
12	New Construction and Major Renovation Incentive	<ul style="list-style-type: none"> * Initiative was not evaluated in 2011 due to low uptake Assumptions used are consistent with preliminary reporting based on the 2010 Evaluation findings and consultation with the C&I Work Group (100% realization rate and 50% net-to-gross ratio)
13	Energy Audit	<ul style="list-style-type: none"> * The evaluation is ongoing. The sample size for 2011 was too small to draw reliable conclusions.
14	Commercial Demand Response (part of the Residential program schedule)	<ul style="list-style-type: none"> * See residential demand response (#7)
15	Demand Response 3 (part of the Industrial program schedule)	<ul style="list-style-type: none"> * See Demand Response 3 (#20)

Industrial Program		
16	Process & System Upgrades	* Initiative was not evaluated in 2011, no completed projects in 2011
17	Monitoring & Targeting	* Initiative was not evaluated in 2011, no completed projects in 2011
18	Energy Manager	* Initiative was not evaluated in 2011, no completed projects in 2011
19	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	* See Efficiency: Equipment Replacement (#9)
20	Demand Response 3	<ul style="list-style-type: none"> * Program performance for Tier 1 customers increased with DR-3 participants providing 75% of contracted MW for both sectors * Industrial customers outperform commercial customers by provide 84% and 76% of contracted MW, respectively * Program continues to diversify but still remains heavily concentrated with less than 5% of the contributors accounting for the majority (~60%) of the load reductions * By increasing the number of contributors in each settlement account and implementation of the new baseline methodology the performance of the program is expected to increase

2.5.2 EVALUATION RESULTS

The following table provides a detailed look at the Evaluation Results, by Initiative, offered by NOW for the 2011 year.

Table 4: Evaluation Results

#	Initiative	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							
1	Appliance Retirement	8	54,787	4	28,618	4	114,373
2	Appliance Exchange	1	1,600	1	824	0	3,063
3	HVAC Incentives	1	1,370	0	819	0	3,275
4	Conservation Instant Coupon Booklet	1	18,411	1	20,258	1	81,033
5	Bi-Annual Retailer Event	2	28,551	2	31,192	2	124,768
6	Retailer Co-op	0	0	0	0	0	0
7	Residential Demand Response	0	0	0	0	0	0
8	Residential New Construction	0	0	0	0	0	0
Business Program							
9	Efficiency: Equipment Replacement	62	364,205	46	278,297	46	1,113,188
10	Direct Install Lighting	44	130,696	47	121,356	30	435,461
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	0	0	0	0	0	0
15	Demand Response 3	0	0	0	0	0	0
Industrial Program							
16	Process & System Upgrades	0	0	0	0	0	0
17	Monitoring & Targeting	0	0	0	0	0	0
18	Energy Manager	0	0	0	0	0	0
19	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	0	0	0	0	0	0
20	Demand Response 3	0	0	0	0	0	0
Home Assistance Program							
21	Home Assistance Program	0	0	0	0	0	0
Pre-2011 Programs completed in 2011							
22	Electricity Retrofit Incentive Program	0	0	0	0	0	0
23	High Performance New Construction	0	680	0	340	0	1,361
24	Toronto Comprehensive	0	0	0	0	0	0
25	Multifamily Energy Efficiency Rebates	0	0	0	0	0	0
26	Data Centre Incentive Program	0	0	0	0	0	0
27	EnWin Green Suites	0	0	0	0	0	0

The following table provides a summary look at the Evaluation Results, by Program, offered by NOW for the 2011 year.

Table 5: Summarized Program Results

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	12	104,719	8	81,712	8	326,512
Business Program Total	106	494,901	93	399,653	76	1,548,648
Industrial Program Total	0	0	0	0	0	0
Home Assistance Program Total	0	0	0	0	0	0
Pre-2011 Programs completed in 2011 Total	0	680	0	340	0	1,361
Total OPA Contracted Province-Wide CDM Programs	118	600,301	101	481,705	84	1,876,522

2.6 Additional Comments

In its original strategy submission to the OEB in November 2010, NOW projected a total savings for 2011 of 0.748 MW and 1,667 MWh. The finalized 2011 results reveal that NOW's actual results for 2011 were 0.101 MW and 482 MWh of savings. This represents a 14% achievement of the 2011 Strategy target in terms of MW, and 29% achievement of 2011 Strategy target for MWh.

The 2011 year represented the first year NOW offered these conservation programs to its customers. The rollout of programs was delayed for many reasons including, but not limited to, the delay in the release of the finalized OPA Schedules, development of processes and procedures, and procurement for services and resources. Much of the year was spent researching, preparing and establishing resources and processes to ensure an efficient and effective rollout of the portfolio.

The strategy will be reviewed again following one full year of programming.

3 Combined CDM Reporting Elements

3.1 Progress Towards CDM Targets

NOW achieved 14% of its MW Strategy total and 29% of its MWh Strategy total. As previously mentioned a number of delays existed in the rollout of the portfolio. With the overall target achievement at 9.5% Demand savings and 31.9% Energy savings, NOW feels that, with a full year of participation in 2012, the strategy should be back on track and well on its way to achieving the four year target.

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

Net Peak Demand Savings at the End User Level (MW)				
Implementation Period	Annual			
	2011	2012	2013	2014
2011 - Verified	0.10	0.10	0.10	0.08
2012				
2013				
2014				0.00
Verified Net Annual Peak Demand Savings Persisting in 2014:				0.08
Northern Ontario Wires Inc. 2014 Annual CDM Capacity Target:				1.06
Verified Portion of Peak Demand Savings Target Achieved in 2014(%):				7.93%
LDC Milestone submitted for 2011				0.748
Variance				-0.65

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

Net Energy Savings at the End User Level (GWh)					
Implementation Period	Annual				Cumulative
	2011	2012	2013	2014	2011-2014
2011 - Verified	0.48	0.48	0.48	0.43	1.88
2012					
2013					
2014					
Verified Net Cumulative Energy Savings 2011-2014:					1.88
Northern Ontario Wires Inc. 2011-2014 Cumulative CDM Energy Target:					5.88
Verified Portion of Cumulative Energy Target Achieved (%):					31.91%
LDC Milestone submitted for 2011					1.667
Variance					-1.19

3.2 CDM Strategy Modifications

NOW's 2010 projection for 2011 specified targets of 0.75 MW and 1,667 MWh. The finalized 2011 results reveal that NOW's actual results were 0.10 MW and 482 MWh of savings. This represents a 13% achievement of Strategy target in terms of MW, and 29% achievement of Strategy target for MWh.

However, based on the relative infancy of the delivery of programs in the NOW's area, and the need to gather historical reference/perspective, at this time, there are no changes in Strategy for 2012. Should the 2012 report reveal any obstacles to achieving target reductions, Strategy change will be implemented at that time.

It is expected that targets will be met as anticipated, given the observation that NOW customers are in the early stages of their conservation processes. Customers are now beginning to participate in programs, as a result of greater awareness building on the part of the LDC by both the LDC and its agent, Burman Energy Group Consultants Inc. As uptake of existing programs increases, goals are expected to be met.