ORANGEVILLE HYDRO

Friday, September 28, 2012

**VIA MAIL AND E-MAIL**

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
P.O. Box 2319, 27th Floor
2300 Yonge Street
Toronto, ON M4P 1E4

**Re: Orangeville Hydro Limited**
**Conservation and Demand Management Annual Report**
**EB-2010-0215**

Dear Ms Walli:

Please find attached Orangeville Hydro Limited's Annual CDM Report 2011. This report is being filed in accordance with Section 2.2 of the Conservation and Demand Management Code for Electricity Distributors. The report covers the period from January 1, 2011 to December 31, 2011.

The Annual CDM Report for Orangeville Hydro also includes an overview document which relates the experience of the CHEC Member LDCs which Orangeville Hydro worked in collaboration with to deliver CDM programs.

An electronic copy of this report has been filed on the Ontario Energy Board's RESS Filing System and two (2) hard copies have been sent by courier to the Board office to the attention of the Board Secretary.

If you have any further questions, please do not hesitate to contact me.

Yours truly

George Dick
President
ED-2002-0500

# Cornerstone Hydro Electric Concepts (CHEC)

## Combined Conservation and Demand Management Annual Report 2011

## EB-2010-0215

## Collaboration for Conservation


**September 28, 2012**

## Executive Summary:

This represents the first year reporting as required by the CDM Code for the CHEC Association LDCs. The results and comments provided in this section are based on the combined experience of the CHEC LDCs.

The report format contains an overview section relating the combined experience of CHEC LDCs and twelve addendums containing the individual LDC Annual CDM Reports. The overview section provides a summary of the overall target achieved, conditions impacting strategy progress and a revised combined CDM Strategy.

The first year of the Strategy did not account for the amount of time which would be taken to develop initiatives and confirm appropriate delivery channels. Looking back on the plans filed, in many cases, the amount of target to be achieved in the first year was optimistic. Included in the Annual Report of each LDC is a revised CDM Strategy which takes into account the first year performance.

In 2011 all Provincial Programs were not available for launch. While this has had some impact it has not been critical to Strategy completion. The time to market for full delivery reduced the traction gained by previous programs and negatively impacted on program participation.

The lack of OEB Approved Programs will place a challenge on existing Provincial Programs to achieve the full target. Within the first year there was limited time to pursue OEB Approved Programs and to fully understand the requirements of program development.

The percentage of target achieved by each LDC has a high degree of variance. During the preparation of the Annual Report and revision to the Strategy, LDCs remain positive with respect to achieving the targets. In some instances it is recognized that reaching the full target will be a challenge, as noted in the attached LDC Reports. By building on the existing base and addition of resources such as the Roving Energy Manager and industry partners, the goal remains to achieve 100% of target.

## 1.0 Introduction:

Cornerstone Hydro Electric Concepts Association (CHEC) is an association of twelve (12) Local Distribution Companies (LDCs). The CHEC member LDCs have prepared this Conservation and Demand Management (CDM) Annual Report 2011 as required by the Conservation and Demand Management Code for Electricity Distributors. The report is a collaborative initiative of CHEC member LDCs and is consistent with the combined CDM Strategy filed in November 2010.

## 1.1 Distributors Included in CHEC Association CDM Strategy:

CHEC LDCs work collaboratively to meet regulatory and operational requirements. The Association facilitates LDCs' abilities to address initiatives in a cost effective manner, sharing information, expertise and resources. The development of a collaborative CDM Strategy and the subsequent CDM Annual Report is consistent with the CHEC philosophy of working together to meet the needs of the member LDCs and to work effectively for the customers served.

The LDCs, all members of CHEC, covered under this CDM Strategy include:

- Centre Wellington Hydro Ltd.
- COLLUS PowerStream (COLLUS Power)
- Innisfil Hydro Distribution Systems Limited
- Lakefront Utilities Inc.
- Lakeland Power Distribution Ltd.
- Midland Power Utility Corporation
- Orangeville Hydro Limited
- Parry Sound Power
- Rideau St. Lawrence Distribution Inc.
- Wasaga Distribution Inc.
- Wellington North Power Inc.
- West Coast Huron Energy Inc. (Goderich Hydro).

CHEC LDCs have worked collaboratively and as part of the Association since 2000. The CHEC Combined Annual Report includes an overview section and separate addendums for each LDC. The LDC addendum format follows the template developed by Hydro One and shared by the Electricity Distributors Association (EDA) with LDCs.

## 2.0 CDM Targets for Electricity Demand (MW) and Electricity Consumption (GWh):

The CDM target for each LDC has been established by the Ontario Energy Board (OEB) utilizing a methodology developed by the Ontario Power Authority (OPA). The CDM Strategy was based on the initial targets released to LDCs. The targets were later revised and incorporated into the LDC license requirements.

Table 1 illustrates the initial and revised targets for each LDC. The most recent targets have been incorporated into the revised CDM Strategy outlined in section 3.2 of each LDC's Addendum. The combined demand targets for CHEC LDCs increased by 3% while the combined energy targets decreased by 0.5%.

While the combined target remains relatively stable Table 1 illustrates that a number of LDC's experienced significant change regarding the target to achieve. Where the targets have increased significantly the CDM Strategy requires review to determine how best to meet these more aggressive targets.

**Table 1 – OEB Defined Targets**

| | MW | | | GWH | | |
|---|---|---|---|---|---|---|
| LDC | Initial Target | Revised Target | % Change | Initial Target | Revised Target | % Change |
| Centre Wellington Hydro | 2.0 | 1.64 | -18.0% | 8.0 | 7.81 | -2.4% |
| COLLUS Power | 3.0 | 3.14 | 4.7% | 15.0 | 14.97 | -0.2% |
| Innisfil Hydro | 2.0 | 2.50 | 25.0% | 9.0 | 9.20 | 2.2% |
| Lakefront Utilities | 3.0 | 2.77 | -7.7% | 14.0 | 13.59 | -2.9% |
| Lakeland Power | 2.0 | 2.32 | 16.0% | 10.0 | 10.18 | 1.8% |
| Midland Power | 2.0 | 2.39 | 19.5% | 11.0 | 10.82 | -1.6% |
| Orangeville Hydro | 3.0 | 2.78 | -7.3% | 12.0 | 11.82 | -1.5% |
| Parry Sound Power | 1.0 | 0.74 | -26.0% | 4.0 | 4.16 | 4.0% |
| Rideau St. Lawrence | 1.0 | 1.22 | 22.0% | 5.0 | 5.10 | 2.0% |
| Wasaga Distribution | 1.0 | 1.34 | 34.0% | 4.0 | 4.01 | 0.2% |
| Wellington North Power | 1.0 | 0.93 | -7.0% | 5.0 | 4.52 | -9.6% |
| West Coast Huron Energy | 1.0 | 0.88 | -12.0% | 8.0 | 8.28 | 3.5% |
| Total | 22 | 22.65 | 3.0% | 105 | 104.46 | -0.5% |

## 3.0 Progress Toward Achieving Target

Table 2 and Table 3 provide summaries of the progress made by CHEC LDCs in 2011 towards the combined demand target. The combined results are the summation for all member LDCs and represent reporting savings as per the OPA. The individual savings for each LDC are represented in the associated Addendum.

Table 2 Combined Net Demand Savings at End User Level Including DR Contribution

| Implementation Period | Annual (MW) | | | |
|---|---|---|---|---|
| | 2011 | 2012 | 2013 | 2014 |
| 2011 - Verified | 3.906 | | | 3.906 |
| 2012 | | | | |
| 2013 | | | | |
| 2014 | | | | |
| **Verified Net Annual Peak Demand Savings in 2014:** | | | | **3.906** |
| **Combined CHEC 2014 Annual CDM Capacity Target:** | | | | **22.65** |
| **Verified Portion of Peak Demand Savings Target Achieved (%):** | | | | **17.2%** |
| **Combined CHEC Strategy, Milestone submitted for 2011** | | | | **-15.3%** |
| Variance: | | | | 1.9% |

Table 2 includes the contribution from Demand Response (DR) Initiatives as these represent action within the reporting period. The objective is to maintain the DR projects for the duration of the program.

Removal of the DR contribution results in the Peak Demand Savings being reduced to 1,832 kW which represents 8.1% of the 2014 target.

Table 3 Combined Net Energy Savings at End User Level

| Implementation Period | Annual (GWh) | | | | Cumulative (GWh) |
|---|---|---|---|---|---|
| | 2011 | 2012 | 2013 | 2014 | 2011-2014 |
| 2011 - Verified | 8,372 | 8,372 | 8,3712 | 8,372 | 33,488 |
| 2012 | | | | | |
| 2013 | | | | | |
| 2014 | | | | | |
| **Verified Net Cumulative Energy Savings 2011-2014:** | | | | | **33,488** |
| **Combined CHEC 2011-2014 Cumulative CDM Energy Target:** | | | | | **104,460** |
| **Verified Portion of Cumulative Energy Target Achieved (%):** | | | | | **32.1%** |
| **Combined CHEC Strategy, Milestone submitted for 2011** | | | | | **-41.6%** |
| Variance : | | | | | -9.5% |

Contribution towards the peak target progressed well in the first year. The portion of target achieved when the 2010 contribution and 2011 projects including DR are counted, is generally on target.

Removal of the DR component would clearly indicate that the peak target is behind expectations. Within the initial strategies DR was to account for 413 kW versus the 1,602 kW reported. This interest in DR from customers is encouraging as it indicates the capacity within the customer base to adjust for demand response. Further initiative in this area will be an important element to achieving the peak target.

While behind expectations the energy savings achieved in the first year represents a reasonable portion of the total target. The kWh from pre-2011 projects assisted in the 2011 achievement and helped to offset the slower than anticipated start to the 2011 initiatives.

The combined demand and energy performance of the CHEC LDCs are generally in line with the overall performance across the province. LDC performance vary due to local parameters which are addressed in the addendums.

## 4.0 General Conditions Impacting Strategy Performance:

This section outlines issues which have impacted on the progress of Strategies. Early in the first year challenges with "getting going" and the associated impact became a reality. However, it is also fair to say that the work completed at that time, while taking longer than anticipated, set a strong base for conservation. The work completed not only developed a selection of conservation initiatives but also established criteria for the CDM marketplace moving forward.

## 4.1 Design, Release and Operational Delivery:

The CDM Strategy filed in November 2010 noted: "CDM Strategies can be further impacted by the Provincial Programs if the expected program design and release date do not meet the current schedules as set by the OPA." At the time of preparing the CDM Strategy the OPA and LDC representatives were working to design programs and the associated schedules to form the legal agreements to implement the programs. Strategies were developed with an optimistic expectation that the full program suite and delivery would be available in time to allow (in general terms) a full twelve months of program delivery. At the end of 2011 all Provincial Programs Initiatives were not designed and available for inclusion in the marketplace.

While the OPA and the LDC representatives are to be commended on the sheer volume of work completed and the programs designed, the release dates were delayed. Further, the schedules were very detailed, forming a complex working relationship to ensure accountability in the delivery. Reviewing the schedules to fully understand the deliverables and to determine how best to deliver the programs became a key element and time constraint. In those early days of reviewing schedules there were often discussions as to interpretation, which further complicated acceptance and implementation. The initial stage to understand and put in place the delivery of programs was underestimated when preparing the CDM Strategy.

The timing for the review stage and the ability to implement delivery channels in short order became problematic. Key initiatives such as Direct Install and ERIP were focused on to take advantage of the familiarity with the programs and the availability of past delivery partners. The previous experience would allow faster "to market" dates. Other initiatives were put on hold at the local level and in some cases by the OPA while initiatives more central to meeting the targets were fine tuned for delivery.

Market partners including delivery agents and electrical contractors were equally frustrated during this initial period. Delivery agents had lost momentum and would require a higher level of retooling than initially anticipated. Contractors who had experience in ERIP and had delivered a number of programs were finding it difficult to move projects forward. The full requirements of the new schedules and program processes were not fully established to support program delivery.

While the time to market was longer than anticipated the initiatives as they went into market were well received as a continuation of existing programs. During that time the OPA continued

to run central initiatives such as the appliance and coupon initiatives. This allowed target to be achieved and maintained some presence in the marketplace. The success of these programs and contribution to target are evident on the details of Annual Reports. In many instances these programs met or exceeded the annual contribution to targets.

### 4.2 CRM:

The initiative to develop a comprehensive CRM system resulted in lost time in the initial stages. While the concept of a comprehensive system was supported, the system was still being developed during the launch, which required time for LDC staff to learn, problem solve and with the next update, relearn. At the same time OPA staff worked to provide the next system upgrade and respond to the questions from LDC staff. It is anticipated that the CRM system once fully implemented will provide a good portal for customers and LDC staff.

The expectation of a functional CRM and the lack of alternate systems forced market participants to utilize a system which did not appear to be ready for general application. The system while frustrating LDCs also frustrated contractors as they worked to initiate programs in the early stages of 2011. This resulted in disenchanted participants as well as the need for work- arounds, which generally involved LDC staff dealing with a paper copy of applications. Contractor engagement suffered during this period.

### 4.3 Pre-2011 Projects Completed in 2011:

Inclusion of pre-2011 projects completed in 2011 in the contribution to target is consistent with the Ministry Directive to capture incremental savings after January 1, 2011 and was welcomed by LDCs. Towards the end of 2010 as programs were said to be reaching their end date, there was an increase in activity with many projects moving forward at the application stage. The need to continue to work with the proponents and to support the application and payment process remained well into 2011.

The pre-2011 projects account for 10 % of the first year kW savings and 25% of the kWh savings. In service territories where there was significant project activity in late 2010 the projects assisted to offset the slow start into the 2011 projects. This rush to get projects complete under the current program (2010) may have consumed projects slated for the following year.

### 4.4 Support Position – Roving Energy Manager:

In 2011 CHEC LDCs applied for a Roving Energy Manager (REM) to assist with larger customers. The more sophisticated systems and processes in these facilities require a detailed review and understanding. Acquiring a REM, for the combined group of LDCs, was the most effective way to increase the resources available. Individually the LDCs would not be eligible for REM support or for Key Account Managers and hence required a combined application.

Application for the REM was made in mid-2011 however final approval was not received until January 2012. A project to hire a REM will be instituted in 2012 to utilize the additional funding and capacity enhancement of the REM position and to better impact on future results. (Position filled September 2012)

### 4.5 Reporting of Results:

The gathering of market information and impact of marketing activities has been difficult to determine. The reporting cycle of Consumer Provincial Programs is extended to three months after the quarter finishes. This extended time period makes it difficult to determine the results any local activity has on the outcome.

Reporting through the CRM has improved and provides some insight to project activity for follow up on the local level. It is anticipated the CRM system will continue to improve and provide useful information for project management.

### 4.6 Return on Investment of Initiatives:

Some indication has been shared with LDCs that the return on investment to fill out applications for the level of incentive available may not be sufficient. The amount of information required, the format and the time required limits the return and hence the interest. This could impact on subsequent applications from participants who have utilized at least one program. The ability to support and problem solve these issues will be required. Incentive levels will also require review to ensure they meet both the TRC and return for the participant.

A further consideration is the ability to make changes to the programs based on input from the field. When delivery issues such as reduced profit margins for contractors due to increasing supply costs become apparent, the time for review and remedial action needs to be reduced. Responsive solutions to field concerns will maintain the interest of delivery agents, partners and customers.

### 4.7 OEB Approved Programs:

OEB Approved Programs were included in 6 of the 12 LDCs Strategies filed in 2010. Initially it was anticipated that OEB Approved Programs would form a part of the results within the Strategy.

In the first year LDCs focused on implementing Provincial Programs with limited attention to developing programs for OEB approval. The ability to fully understand the evaluation, measurement and verification process was not within the scope of CHEC LDCs. Further the need to avoid any duplication with provincial initiatives limited potential program concepts. Further consideration of the options for OEB Approved programs is required.

## 4.8 DR 3 Contribution:

The Annual Reports contain an element of DR 3 within the reporting. Because DR may not persist to December 2014 the OPA has removed any contribution from the 2014 total. However as DR represents an indication of activity level of LDC customers and the industry in general, the impact of DR 3 should be considered in the interim years. As the contributions of DR 3 participants are evaluated it may be in the best interest of the LDC and the industry to work to maintain the participant within the program. For reporting purposes DR has been included in this report.

Demand response programs can be significant in the overall reduction of target. As noted in Section 3 DR represents a significant portion of the savings in the first year. To achieve the overall target LDCs will need to not only focus on promoting the option to customers but help ensure customers remain in the program beyond 2014. LDCs who have achieved well in the peak target in the first year often include some portion of DR. Service territories with limited ability for DR may experience difficulty in meeting the demand target.

## 5.0 Revised CDM Strategy:

The Addendums for each LDC contains a revised CDM Strategy in Section 3.2. The CDM Strategy in Section 3.2 incorporates the revised targets, the actual savings achieved in 2011 and adjustments to future years. To prepare the Revised Strategy the results of 2012, Q1 for Provincial Programs and CRM data were utilized to inform the development of the revision. The combined strategy for the 12 CHEC LDCs is summarized in Table 4.

The revised Strategies anticipate a total of 23.1 MW and 113.1 GWh to be saved over the four year period. These results are just above the target set for the LDCs.

Within this envelop 8 of the 12 LDCs expect to meet the requirements of both demand and energy targets while 2 of the 12 LDCs anticipate challenges to meet one of the targets and 2 LDCs have concerns about meeting either of the targets.

The ability to meet the proposed targets will be facilitated by a number of activities over the future years including:

- Roving Energy Manager to assist with larger industrial customers
- Peak Saver Plus to focus on residential demand
- Enhanced focus on support of Provincial Initiatives to help offset the lack of OEB Approved Programs.

The specific of activities associated with each LDC is outlined in the Addendums.

## Table 4 – CHEC CDM Combined Strategy:

**CDM Strategy - Setpember 2012 Revision**

*CHEC Summary*

| Category - Consumer | Focus (kW or kWh) | 2011 Original Strategy kW | 2011 Original Strategy kWh | Actual 2011 kW | Actual 2011 kWh | 2012 Original kW | 2012 Original kWh | 2012 Revissed kW | 2012 Revissed kWh | 2013 Original kW | 2013 Original kWh | 2013 Revised kW | 2013 Revised kWh | 2014 Original kW | 2014 Original kWh | 2014 Revised kW | 2014 Revised kWh | Original Total Projected Reduction kW | Original Total Projected Reduction kWh | Revised Total Projected Reduction kW | Revised Total Projected Reduction kWh |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Provincial Programs** | | | | | | | | | | | | | | | | | | | | | |
| Appliance Retirement | | 92 | 2,124,284 | 73 | 2,101,386 | 89 | 1,521,717 | 77 | 1,124,617 | 65 | 665,998 | 62 | 658,469 | 59 | 291,982 | 57 | 291,280 | 305 | 4,603,981 | 269 | 4,175,752 |
| Instant Discounts (Rebates) | | 28 | 2,893,444 | 58 | 3,942,107 | 19 | 1,317,962 | 28 | 1,787,544 | 19 | 878,641 | 20 | 928,510 | 19 | 439,321 | 20 | 464,255 | 85 | 5,529,367 | 126 | 7,122,416 |
| HVAC Discounts (Rebates) | | 205 | 1,286,118 | 410 | 3,173,722 | 216 | 1,014,084 | 336 | 1,588,507 | 226 | 707,111 | 228 | 712,106 | 238 | 372,173 | 239 | 372,813 | 886 | 3,379,486 | 1,213 | 5,847,148 |
| Demand Response | | 606 | 3,828,788 | 130 | 338 | 899 | 4,561,257 | 130 | 338 | 1,019 | 3,458,061 | 1,667 | 5,587,451 | 1,048 | 1,776,713 | 1,690 | 2,876,633 | 3,573 | 13,624,819 | 3,617 | 8,464,760 |
| Midstream Incentives | | 3 | 82,243 | 0 | 0 | 4 | 63,859 | 0 | 0 | 4 | 42,572 | 3 | 27,596 | 4 | 21,286 | 3 | 16,298 | 15 | 209,960 | 6 | 43,895 |
| New Construction | | 24 | 250,419 | 0 | 0 | 26 | 207,904 | 1 | 6,486 | 41 | 187,069 | 36 | 165,305 | 44 | 106,109 | 38 | 93,709 | 134 | 751,502 | 75 | 265,500 |
| Low Income | | 0 | 0 | 3 | 56,115 | 0 | 0 | 8 | 130,230 | 0 | 0 | 160 | 1,687,323 | 0 | 0 | 157 | 780,563 | 0 | 0 | 328 | 2,654,231 |
| Provincial Consumer Total | | 960 | 10,465,296 | 674 | 9,273,668 | 1,253 | 8,686,783 | 580 | 4,637,722 | 1,373 | 5,939,454 | 2,176 | 9,766,760 | 1,412 | 3,007,584 | 2,204 | 4,895,552 | 4,998 | 28,099,116 | 5,634 | 28,573,702 |
| **OEB Approved Programs** | | | | | | | | | | | | | | | | | | | | | |
| General Consumer | | 81 | 11,665 | 0 | 0 | 181 | 616,650 | 0 | 0 | 195 | 341,650 | 185 | 341,650 | 211 | 191,650 | 201 | 191,650 | 667 | 1,161,615 | 386 | 533,300 |
| Low Income | | 25 | 4,995 | 0 | 0 | 45 | 204,995 | 0 | 0 | 55 | 154,995 | 50 | 154,995 | 65 | 104,995 | 60 | 104,995 | 190 | 469,980 | 110 | 259,990 |
| **OEB Approved Programs Total** | | 106 | 16,660 | 0 | 0 | 226 | 821,645 | 0 | 0 | 250 | 496,645 | 235 | 496,645 | 276 | 296,645 | 261 | 296,645 | 857 | 1,631,595 | 496 | 793,290 |
| **Consumer Program Total** | | 1,066 | 10,481,956 | 674 | 9,273,668 | 1,479 | 9,508,428 | 580 | 4,637,722 | 1,623 | 6,436,099 | 2,410 | 10,263,405 | 1,688 | 3,304,229 | 2,465 | 5,192,197 | 5,856 | 29,730,711 | 6,129 | 29,366,992 |

| OEB Projected Dollars kW | kWh | Total | |
|---|---|---|---|
| $ 1,028,880 | $ 146,844 | $ 1,175,724 | Original |
| $ 595,080 | $ 71,396 | $ 666,476 | Revised |

*CHEC Summary*

| Category - Commercial & Institutional | Focus (kW or kWh) | 2011 Original Strategy kW | 2011 Original Strategy kWh | Actual 2011 kW | Actual 2011 kWh | 2012 Original kW | 2012 Original kWh | 2012 Revissed kW | 2012 Revissed kWh | 2013 Original kW | 2013 Original kWh | 2013 Revised kW | 2013 Revised kWh | 2014 Original kW | 2014 Original kWh | 2014 Revised kW | 2014 Revised kWh | Original Total Projected Reduction kW | Original Total Projected Reduction kWh | Revised Total Projected Reduction kW | Revised Total Projected Reduction kWh |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Provincial Programs** | | | | | | | | | | | | | | | | | | | | | |
| Existing Building Retrofits – Medium and Large Buildings | | 987 | 7,342,065 | 246 | 6,323,382 | 1,508 | 8,197,279 | 1,712 | 9,875,529 | 1,936 | 6,223,598 | 1,971 | 7,092,339 | 1,616 | 2,720,352 | 1,616 | 3,147,875 | 6,047 | 24,483,294 | 5,547 | 26,439,124 |
| Existing Building Retrofits – Small Buildings | | 826 | 16,203,293 | 400 | 6,058,102 | 1,153 | 15,599,305 | 576 | 7,733,791 | 1,569 | 9,103,589 | 1,568 | 9,080,242 | 1,621 | 3,902,741 | 1,630 | 3,895,301 | 5,169 | 44,808,929 | 4,174 | 26,767,435 |
| Small Commercial Demand Response | | 23 | 39,978 | 53 | 559,000 | 37 | 76,344 | 19 | 1,070 | 50 | 69,062 | 85 | 312,401 | 49 | 35,069 | 62 | 154,884 | 159 | 220,452 | 219 | 1,027,356 |
| Demand Response 1 | | 0 | 439 | 0 | 2,757 | 0 | 8 | 0 | 162 | 0 | 12 | 0 | 8 | 1 | 9 | 1 | 9 | 1 | 468 | 1 | 2,936 |
| Demand Response 3 | | 0 | 37 | 525 | 7,522 | 0 | 56 | 91 | 15,376 | 0 | 75 | 370 | 1,875 | 6 | 190 | 433 | 4,690 | 6 | 359 | 1,419 | 29,462 |
| Provincial Commercial & Inst. Total | | 1,835 | 23,585,812 | 1,224 | 12,950,763 | 2,698 | 23,872,993 | 2,398 | 17,625,927 | 3,555 | 15,396,336 | 3,394 | 16,486,865 | 3,294 | 6,658,361 | 3,763 | 7,202,759 | 11,382 | 69,513,501 | 11,359 | 54,266,313 |
| **OEB Approved Programs** | | | | | | | | | | | | | | | | | | | | | |
| Retrofits | | 133 | 4,995 | 0 | 0 | 317 | 724,995 | 0 | 0 | 364 | 459,995 | 289 | 459,995 | 369 | 214,995 | 313 | 214,995 | 1,183 | 1,404,980 | 601 | 674,990 |
| New Construction | | 27 | 4,995 | 0 | 0 | 63 | 34,995 | 0 | 0 | 85 | 22,495 | 50 | 322,495 | 69 | 12,495 | 49 | 12,495 | 244 | 74,980 | 98 | 334,990 |
| **OEB Approved Programs Total** | | 160 | 9,990 | 0 | 0 | 381 | 759,990 | 0 | 0 | 448 | 482,490 | 338 | 782,490 | 437 | 227,490 | 361 | 227,490 | 1,426 | 1,479,960 | 699 | 1,009,980 |
| **Commercial & Inst. Total** | | 1,996 | 23,595,802 | 1,224 | 12,950,763 | 3,078 | 24,632,983 | 2,398 | 17,625,927 | 4,004 | 15,878,826 | 4,332 | 17,269,355 | 3,731 | 6,885,851 | 4,104 | 7,430,249 | 12,808 | 70,993,461 | 12,058 | 55,276,293 |

| OEB Projected Dollars kW | kWh | Total | |
|---|---|---|---|
| $ 1,711,320 | $ 133,196 | $ 1,844,516 | Original |
| $ 839,220 | $ 90,898 | $ 930,118 | Revised |

**CDM Strategy - Setpember 2012 Revision**

***CHEC Summary***

| | Annual Milestone - Contribution to 2014 Target | | | | | | | | | | | | | | | | Original Total Projected Reduction | | Revised Total Projected Reduction | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2011 Original Strategy | | Actual 2011 | | 2012 Original | | 2012 Revissed | | 2013 Original | | 2013 Revised | | 2014 Original | | 2014 Revised | | | | | |
| **Category - Industrial** | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh |
| **Program Name** | | | | | | | | | | | | | | | | | | | | |
| Industrial Accelerator | 55 | 1,285,027 | 0 | 0 | 256 | 4,661,504 | 0 | 0 | 24 | 262,238 | 24 | 262,238 | 256 | 1,553,835 | 256 | 1,553,835 | 592 | 7,762,604 | 281 | 1,816,073 |
| Industrial Equipment Replacement | 346 | 8,040,997 | 53 | 2,938,736 | 700 | 12,311,683 | 436 | 5,576,430 | 490 | 5,670,891 | 554 | 5,590,689 | 772 | 4,570,417 | 672 | 3,964,858 | 2,308 | 30,593,988 | 1,715 | 18,070,712 |
| Demand Response 1 | 0 | 8 | 0 | 0 | 0 | 301 | 0 | 54 | 0 | 155 | 0 | 152 | 49 | 178 | 3 | 8 | 49 | 641 | 3 | 214 |
| Demand Response 3 | 0 | 19 | 1,549 | 90,925 | 0 | 1,356 | 10 | 39,912 | 0 | 1,356 | 410 | 1,344 | 151 | 1,566 | 450 | 1,553 | 151 | 4,297 | 2,419 | 133,733 |
| Provincial Industrial Total | 401 | 9,326,051 | 1,602 | 3,029,661 | 956 | 16,974,845 | 446 | 5,616,395 | 515 | 5,934,639 | 988 | 5,854,422 | 1,229 | 6,125,994 | 1,381 | 5,520,254 | 3,101 | 38,361,531 | 4,417 | 20,020,732 |
| **OEB Approved Programs** | | | | | | | | | | | | | | | | | | | | |
| A | 11 | 0 | 0 | 0 | 33 | 200,000 | 0 | 0 | 36 | 150,000 | 36 | 150,000 | 42 | 50,000 | 42 | 50,000 | 122 | 400,000 | 78 | 200,000 |
| B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **EB Approved Programs Total** | 11 | 0 | 0 | 0 | 33 | 200,000 | 0 | 0 | 36 | 150,000 | 36 | 150,000 | 42 | 50,000 | 42 | 50,000 | 122 | 400,000 | 78 | 200,000 |
| **Industrial Total** | 413 | 9,326,051 | 1,602 | 3,029,661 | 988 | 17,174,845 | 446 | 5,616,395 | 551 | 6,084,639 | 1,024 | 6,004,422 | 1,271 | 6,175,994 | 1,423 | 5,570,254 | 3,223 | 38,761,531 | 4,495 | 20,220,732 |
| **2010 Contribution** | 0 | 0 | 406 | 8,233,450 | 0 | 0 | 9 | 45010 | | | | | | | | | 0 | 0 | 415 | 8,278,460 |

| OEB Projected Dollars | | | |
|---|---|---|---|
| kW | kWh | Total | |
| $ 145,800 | $ 36,000 | $ 181,800 | Original |
| $ 93,300 | $ 18,000 | $ 111,300 | Revised |

| **Revised Target** | 2011 Original | | Actual 2011 | | 2012 Original | | 2012 Revised | | 2013 Original | | 2013 Revised | | 2014 Original | | 2014 Revised | | Original Total Projected Reduction | | Revised Total Projected Reduction | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh |
| **CDM Strategy Total** | 3,474 | 43,403,810 | 3,906 | 33,487,541 | 5,546 | 51,316,255 | 3,433 | 27,925,054 | 6,177 | 28,399,564 | 7,767 | 33,537,182 | 6,690 | 16,366,074 | 7,992 | 18,192,699 | 21,886 | 139,485,702 | 23,097 | 113,142,476 |
| | | | | | | | | | | | | | | | **Target to Achieve** | | 22,650 | 104,460,000 | | |
| | | | | | | | | | | | | | | | | | 96.6% | 133.5% | 102.0% | 108.3% |

| % of Target | 2011 Original | | 2011 Actual | | 2012 Original | | 2012 Revised | | 2013 Original | | 2013 Revised | | 2014 Original | | 2014 Revised | | Total Projected Reduction | | Total Projected Reduction | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 15.3% | 41.6% | 17.2% | 32.1% | 24.5% | 49.1% | 15.2% | 26.7% | 27.3% | 27.2% | 34.3% | 32.1% | 29.5% | 15.7% | 35.3% | 17.4% | 96.6% | 133.5% | 102.0% | 108.3% |

| Total OEB Projected Dollars | | | |
|---|---|---|---|
| kW | kWh | Total | |
| $ 2,886,000 | $ 316,040 | $ 3,202,040 | Original |
| $ 1,527,600 | $ 180,294 | $ 1,707,894 | Revised |

## 6.0 Addendums:

Centre Wellington Hydro ..... Addendum 1
COLLUS Power..... Addendum 2
Innisfil Hydro Distribution Systems ..... Addendum 3
Lakefront Utilities ..... Addendum 4
Lakeland Power Distribution ..... Addendum 5
Midland Power Utility ..... Addendum 6
Orangeville Hydro ..... Addendum 7
Parry Sound Power ..... Addendum 8
Rideau St. Lawrence Distribution ..... Addendum 9
Wasaga Distribution Ltd ..... Addendum 10
Wellington North Power ..... Addendum 11
West Coast Huron Energy ..... Addendum 12

# Orangeville Hydro Limited

**Addendum 7 – CHEC CDM Combined Annual Report 2011**

## Conservation and Demand Management

# 2011 Annual Report

**Submitted to:**

**Ontario Energy Board**

**Submitted on September 28, 2012**

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# Executive Summary

Ontario has a diverse energy supply mix that is in the process of incorporating increasing amounts of renewable forms of energy. There is 34,079 MW of installed generation in Ontario's electricity market. The amount of generation actually available at any one time is dependent on outages and the capacity factor of certain forms of supply which include: Nuclear, Gas, Coal, Hydro, Wind, Biomass.

Conservation also has an important role to play in meeting our power needs. Conservation reduces our environmental footprint by reducing the use of fossil fuels. It lowers energy costs and creates jobs in delivering related products and services. Conservation is also generally less expensive than building new generation. By using electricity wisely, we can all better manage our electricity bills and help the environment at the same time.

The Green Energy and Green Economy Act along with Ministerial Directives issued to the Ontario Power Authority (OPA) and the Ontario Energy Board (OEB) several policy objectives to realize Ontario's economic energy conservation and demand management potential. These include objectives that strive for deep and sustainable reductions in energy consumption in Ontario homes and businesses, and result in future homes and businesses to be efficient, smart and integrated. The OPA in collaboration with local distribution companies (LDCs) designed province-wide conservation programs to help achieve provincial targets set by the province. These programs will contribute towards Orangeville Hydro meeting its specific demand and energy savings targets established by the OEB utilizing a methodology developed by the Ontario Power Authority (OPA) during the period of 2011 – 2014. Orangeville Hydro has been assigned two targets: 2.78 MW in demand savings and 11.82MWh in energy savings. It is anticipated that Orangeville Hydro will combine the province-wide programs with OEB Board Approved, regional and local programs to achieve its targets.

Orangeville Hydro has a large suite of programs across its portfolio to help it achieve its targets in the residential, low income, business, and industrial sector and is currently investigating an educational component to help foster a culture of conservation among the youth.

Looking back on its conservation achievements in 2011, Orangeville Hydro has met or exceeded its target in 8 programs. This strategy included marketing at 6 local events, promoting the programs in the local newspaper, providing program information in our front foyer, on our website and utilizing Orangeville Transit to promote the saveONenergy suite of programs. Looking forward to 2012 and beyond, marketing tactics will be intensified and alternative strategies will be examined to help achieve expected targets.

This report contains the first year reporting on required by the CDM Code. The results and comments provided in this section are based on the experience of Orangeville Hydro Limited and forms the required regulatory reporting.

The report generally follows the template as prepared by Hydro One and shared with LDCs through the EDA. In addition a combined report prepared by CHEC is also included in this document. The combined report summarizes the efforts of Orangeville Hydro Limited and other CHEC members in working collaboratively to meet the CDM targets set for member LDCs.

The activity over the first year resulted in 894 kW and 4,511,946 kWh savings as identified by the OPA for Provincial Programs. For 2011, Orangeville Hydro did not apply for any OEB Board Approved Programs, however, work was started on investigating an educational program called Generation Conservation to help foster a culture of conservation among our youth. Under *Generation Conservation*, teachers' in the Catholic and Upper Grand School Boards were provided with guides, workshops, student workbooks, and classroom materials, free of charge to students and their families to test the viability and interest of the program. The *Generation Conservation* model is to empower youth to develop conservation demand management habits and understand the importance of electricity and how it works. The ten student activities outlined in the books are an interactive and fun way to introduce *Generation Conservation* to the class rooms*. S*tudents also have an opportunity to work together as a class to estimate how much energy they have conserved through their own actions. As of December 31, 2011, $346.75 has been spent and is currently sitting in variance account 1567.

The savings achieved over the first year represent 32.2 % of the kW target and 38.2% of the kWh target. These numbers include persistence up to and including 2014. These are compared to 23.1% and 45.1% respectively, identified in the CDM Strategy filed with the OEB.

The kW and kWh identified in the CDM Strategy are close to or have exceeded the annual contributions identified in the first year of the CDM Strategy. Assuming participation levels increase or remain constant, Orangeville Hydro Limited remains confident that the continued performance will allow the targets to be achieved by December 2014.

The results from our first year have been greater than expected. Uptake for these programs is ahead of the first year in the CDM Strategy and will greatly enhance our ability to meet the overall four year targets. Given the exceptional uptake in 2008 - 2010 in the Fridge and Freezer Pick Up and Direct Install Program and the results in these programs in 2011, it is questionable if the capacity remains in our service territory to sustain these, year over year results as numbers indicate we are approaching market saturation in these two programs

The modified targets from the OEB were not included in the CDM Strategy filed with the Board. The Annual Report has been utilized to update the targets and the plan accordingly. The change in the targets decreased) the targets for Orangeville Hydro.

The decreased target has been reflected in the revised CDM Strategy with the reduced target assisting in the ability to achieve success.

The initial year in the Provincial Programs represented a partial year for market delivery. The challenges faced in finalizing the Master Agreements and schedules delayed the launch of programs by several months. Once the schedules were released, reviewed and the contract entered into the LDCs was faced with determining the delivery mechanism.

Initiatives which were provincially delivered allowed the LDC to support with marketing efforts. For the vast majority of programs however service delivery partners and processes were required and took some time to develop. These early delays along with general readiness of the support systems for the programs impacted on the first year uptake by customers. It is anticipated that the systems and traction developed late in the year will move forward to projects and savings in subsequent year.

Given the delays on getting into market – our focus became the programs that we and our customers were already familiar with, ERIP and Direct Install, now the Efficiency: Equipment Replacement program and Direct Installed Lighting. While we recognized that these programs would require less "new" effort, we also were depending on these for substantial amounts of our overall target. Orangeville Hydro also focused on promoting delayed programs to market at local events and in the newspaper to introduce the suite of programs to our customers in anticipation of their launch dates. During the 2011 program year, Orangeville Hydro placed emphasis on the implementation of initiatives that would offer the greatest amount of persisting savings.

The lack of successful applications for OEB Approved Programs may prove problematic in meeting the CDM targets. The CDM Strategy filed included OEB Approved Programs and the lack of programs at this time will required higher levels of success on the Provincial Programs to meet the Strategy results.

# 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 Orangeville Hydro Limited to require Orangeville Hydro, as a condition of its licence, to achieve 11.82 GWh of energy savings and 2.78 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, Orangeville Hydro submitted its CDM Strategy on November 1st 2010 which provided a high level of description of how Orangeville Hydro intended to achieve its CDM targets.

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

# 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 Orangeville Hydro'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 Ontario Power Authority (OPA) for the province, and then allocated to distributors Orangeville Hydro 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 Orangeville Hydro is not able to provide any verified savings related to Orangeville Hydro TOU program at this time.

While results are not currently available for the impact of TOU on the overall strategy some positive result is anticipated. Within the scope of the CDM Strategy no contribution from TOU has been included. Once received the impact on the results of the CDM Strategy and any adjustments which can result in the CDM Strategy will be incorporated.

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

**Initiative Activities/Progress:**

Orangeville Hydro commenced TOU billing on August 26th, 2011. As of December 31, 2011 a total of 11,059 (99.6%) customers were on TOU billing. The remainder of the customers were transferred to TOU billing in early 2012.

## 1.3 ORANGEVILLE HYDRO's Application with the OEB

Orangeville Hydro did not have an application before the board for Board Approved Programs in 2011. The first year of the CDM program was focused on developing the infrastructure to support and deliver the Provincial Programs.

While it is recognized that OEB Approved Programs may be required to meet the targets initial review of potential programs have indicated that there exists issues with ensuring the programs do not duplicate any of the deliverables of the Provincial Programs. The lack of OEB Approved programs places additional pressure on high levels of performance in the Provincially Contracted Programs to meet the CDM Strategy Targets.

# 2 OPA-Contracted Province-Wide CDM Programs

## 2.1 Introduction

Effective January 2, 2011, Orangeville Hydro 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:

| 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* |
| Home Energy Assessment Tool | Schedule B-1, Exhibit F | *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* |
| Midstream Pool Equipment | Schedule B-1 – Exhibit G | *Jan 26 2011* | *All residential rate classes* |
| Midstream Electronics Initiative | Schedule B-1– Exhibit H | *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* |
| Direct Service Space Cooling and Refrigeration Initiative | Schedule C5 | *Jan 26 2011* | *General Service < 50 kW* |
| Existing Building Commissioning Incentive | Schedule C-6 | *Feb2011* | *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 1 (part of the Industrial program schedule) | Schedule D-5 | *May 31, 2011* | *General Service 50 kW & above* |
| 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* |
| Key Account Manager (KAM) | Schedule D-4 | *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* |

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. This approach recognized the resource management at both the OPA and LDC to initiate such a comprehensive suite of initiatives.

The CDM Strategy contained contributions from the Midstream and Residential Demand Response programs. The impact of the Midstream and Demand Response programs not being in market increases the need for the remaining programs to make up the difference. While these programs were not in market, Orangeville Hydro still promoted the programs in anticipation of the immanent launch. Unfortunately this did not come to fruition in 2011.

| Initiative Not in Market in 2011 | Objective | Status |
|---|---|---|
| **Residential Program** | | |
| Midstream Electronics | The objective of this initative is to encourage retailers to promote, and sell, high efficency 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 the 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. As per the OPA, there are no plans to launch this Initiative 2012. |
| Demand Response 1 (DR1) | This Initiative allows distribution customers to voluntarily reduce electricity demand during certain periods of the year pursuant to the DR 1 contract. The Initiative provides DR payment for the actual electricity reduction provided during a demand response event. | No customer uptake for this Initiative |
| **Industrial Program** | | |
| Demand Response 1 (DR1) | 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 (Exhibit D)

**Target Customer Type(s):** Residential Customers

**Initiative Frequency:** Year round

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

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

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

**Delivery**: OPA centrally contracts for the province-wide marketing, call centre, appliance pick-up and decommissioning process. LDC's provide 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.pdfand
- SaveONenergy website - https://saveonenergy.ca/Consumer/Programs/Appliance-Retirement.aspx
- Orangeville Hydro's website - https://saveonenergy.ca/fridgeandfreezer/?ldc=orangevillehydro

**Initiative Activities/Progress:**

The consumer offer includes the pick-up and decommissioning of old refrigerators, freezers, room air conditioners and dehumidifiers. The pick-up, decommissioning and customer care functions are centrally managed.

The continuation of the program allowed for relatively seamless transition from the previous program. The Appliance Program continued to be promoted in local advertising including: Front office displays, local events, the newspaper, website and local transit system. There is an opportunity for integration of municipal pick up services and retail engagement.

**In Market Date: January 2, 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. Based on the first year results the contribution of the appliance retirement program may be overstated in the CDM Strategy filed with the Board.
- This Initiative now faces some competition from independent retailers and municipalities.
- Results are very responsive to province wide advertising.
- Offering weekend pickups would have increased participation levels.

#### 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.

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

**Targeted End Uses**: Window air conditioners and portable dehumidifiers

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

Additional detail is available:

- Schedule B-1, Exhibit C http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf and
- SaveONenergy website - https://saveonenergy.ca/Consumer.aspx
- Orangeville Hydro's website - https://saveonenergy.ca/exchange/?ldc=orangevillehydro

**Initiative Activities/Progress:**

The Appliance Exchange Initiative was promoted in the front office displays, local events, the newspaper, website and local transit system.

The local Canadian Tire in Orangeville Hydro's service area were active in this initiative. Orangeville Hydro however, did not participate in the in-store event

There is an opportunity to participate in in-store events to help drive participation levels in the coming years.

**In Market Date: January 2, 2011.**

**Lessons Learned:**

- 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 type of unit turned in is very dependent upon what is promoted by the retailers.
- Previous experience showed that communication to the local retailer level from the regional level was slow and problematic. Often the local store did not have any understanding of what event was to be held or the coordination with the LDC.
- LDCs were often given minimal space in the store reducing the profile of the display.

### 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. LDCs provide local marketing and encourage local contractors to participate in the Initiative.

Additional detail is available:

- Schedule B-1, Exhibit B http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf and
- SaveONenergy website - https://saveonenergy.ca/Consumer.aspx
- Orangeville Hydro's website - https://saveonenergy.ca/heatingandcooling/?ldc=orangevillehydro

**Initiative Activities/Progress:**

The Heating and Cooling initiative was promoted in local advertising including: Front office displays, local events, the newspaper, website and local transit system. There is an opportunity to promote local contractors to help increase participation levels.

**In Market Date: January 2, 2011**

**Lessons Learned:**

- 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 are not being attributed to any LDC.
- The NRCan program assisted the awareness and participation in the program.

### 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 flourescent 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, clothesline, baseboard programmable thermostats.

**Delivery**: The OPA contracts centrally for the distribution of the coupon booklets across Ontario. LDCs distribute coupons at local events and market the Initiative locally. 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
- Orangeville Hydro's website: https://saveonenergy.ca/couponevent/?ldc=orangevillehydro

**Initiative Activities/Progress:**

Orangeville Hydro began to actively promote the coupons in the newspaper, with point of sale advertising and local distribution of coupons at customer service locations. The downloadable coupons could be obtained at the customer service areas and at local events. Orangeville Hydro will investigate the opportunity of cross promotional distribution with other programs to extend the program reach.

**In Market Date: January 2, 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 vary from retailer to retailer and in some cases has been lengthy. 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.
- The Product list should be distinctive from the Bi-Annual Retailer Event Initiative in order to gain more consumer interest and uptake.
- Program evolution, including new products (for example, LED lighting) and review of incentive pricing for the coupon Initiatives, should be a regular activity to ensure continued consumer interest.

### 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**: As per 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 and market this Initiative locally.

Additional detail is available:

- Schedule B-1, Exhibit C http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20B-1%20Residential%20Program.pdf and
- SaveONenergy website - https://saveonenergy.ca/Consumer.aspx
- Orangeville Hydro's website - https://saveonenergy.ca/couponevent/?ldc=orangevillehydro

**Initiative Activities/Progress:**

The Bi-Annual Retail initiative was promoted in local advertising including: Front office displays, local events, and website.

Orangeville Hydro will look into in-store participation for 2012 and beyond and focus on promoting dehumidifiers instead of air conditioners to help achieve greater savings in this program.

Orangeville Hydro has monitored retailers to make sure that in store coupons have been available.

**In Market Date: January 2, 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.
- The Product list should be distinctive from the Conservation Instant Coupon Booklet Initiative in order to gain more consumer interest and uptake.
- A review conducted by the Residential Working Group in Q4 2011 identified three areas of need for Initiative evolution: 1) introduction of product focused marketing; 2) enhanced product selection and 3) improved training for retailers.

#### 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:** As per the Conservation Instant Coupon Booklet Initiative

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

**Initiative Activities/Progress:**

Due to limited staffing resources Orangeville Hydro did not actively pursue this initiative.

**Sample 2** Co-op advertised the event with the local retailer.

**In Market Date:** Available to the LDC as of May 1, 2012.

**Lessons Learned:**

- 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.
- In service territories where there are multiple LDCs in close proximity coordination of staffing and promotion may be appropriate.

### 2.2.1.7 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
- Orangeville Hydro's website - https://saveonenergy.ca//Consumer/Programs/New-Residential-Construction/?ldc=orangevillehydro

**Initiative Activities/Progress:**

The New Construction initiative was promoted in front office displays, local events, the newspaper, and website.

Orangeville Hydro service territory has been very limited in new building construction limiting the opportunity of this initiative at this time.

Orangeville Hydro will consider alternative go-to-market strategies such as Direct Mail Piece to Home builders who are scheduled to build in our area, present at the Home Builders Association meeting to solicit interest and partner with the Chamber to promote the program more aggressively to increase participation levels.

**In Market Date: June 1,2011**

**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 multiple homes in a single phase would have to submit single applications to qualify for incentives. This administrative challenge has deterred tract builders from participating in the program to date.
- Single unit contractors stated the incentives were not significant enough to justify the time spent on the application process.
- Administrative requirements must align with perceived stakeholder payback. Changes are being processed through change management for 2012.
- Opportunities are being sought to ensure that whatever limited building does occur they are aware of the opportunity and assistance to apply.

### 2.2.1.8 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 new IHD product were available.

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

**Delivery**: LDC's 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
- Orangeville Hydro's website: http://www.orangevillehydro.on.ca/Conservation/conserve_peak.html

**Initiative Activities/Progress:**

The ***peaksaver®***initiative was promoted at local events and on our website

**Initiative Activities/Progress:**

Orangeville Hydro is actively reviewing delivery models and technology. LDC staff attended OPA PeakSaver specific events as well as manufacture tradeshows. Orangeville Hydro is working as part of the CHEC Association to determine appropriate technologies and delivery agents. To date concern has existed with the in home device functionality and the negative impact it could have on customer relations. Orangeville Hydro has promoted this program at local events and has started a waiting list of interested customers in the program.

**In Market Date: Not in market for 2011**

**Lessons Learned:**

- 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.
- 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.
- In evaluation of in home devices on the market it became apparent they were not customer focused in that many required the reprogramming by the customer of the rate schedule. The interface between customer and device should be simplified to avoid customer questions and frustration with the in-home device.

### 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
- Orangeville Hydro's website - https://saveonenergy.ca/retrofit/?ldc=orangevillehydro

**Initiative Activities/Progress:**

- Promotion of the program through various marketing initiatives has been on-going. These initiatives include promoting the program through front office displays, local events, the newspaper, website, combined advertising with Commercial/Industrial programs and transit system.

**Initiative Activities/Progress:**

Direct customer contact, and promotion at local events have been the used. Consumer understanding and uptake has been higher as this is viewed by consumers as a refinement of the previously offered ERIP program.

**In Market Date: June 1, 2011.**

**Lessons Learned:**

- ERII (previously Equipment Replacement Incentive Program – ERIP) has been offered for many years. It is a high performing, cost-effective program, and there were many pre-2011 projects completing in 2011 (via ERIP).

- Customers appeared most interested in moving forward limited capital projects with a less than 2 year payback. Longer term projects have been difficult to get customer uptake.

- 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 new CRM 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.

#### 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 a free installation of eligible lighting and water heating measures of up to $1,000 to eligible owners and tenants of commercial, institutional, agricultural and multi-family facilities, for the purpose of achieving electricity and peak demand savings.

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

**Target End Uses:** Lighting and electric water heating measures

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

Additional detail 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
- Orangeville Hydro's website - https://saveonenergy.ca/smallbusinesslighting/?ldc=orangevillehydro

**Initiative Activities/Progress:**

The Direct Install initiative was promoted in local advertising including: Front office displays, local events, the newspaper, website and local transit system.

**Initiative Activities/Progress:**

A contractor meeting was held to reintroduce and inform the delivery partners of the key aspects of the 2011 program. Follow up with qualifying customers were initiated to drive interest in the program and encourage registration for the install. It is recognized that saturation of this program will occur.

**In Market Date: May 6, 2011.**

**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.

- Will investigate other delivery models such as actively engaging local contractors and go to market strategies

- The inclusion of a standard incentive for additional measures increased project size and drove higher energy and demand savings results in some situations.

- 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 payments from the OPA to the LDC were delayed. LDCs chose to cash flow the program to avoid delays in payments to contractors to ensure they remained engaged in the program.

- 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 looking at options to re-engage the existing participation base with the OPA
- 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.pdfand
- SaveONenergy website https://saveonenergy.ca/Business/Program-Overviews/Existing-Building-Commissioning.aspx

**Initiative Activities/Progress:**

Contract signed late in 2011. No activity to date

**In Market Date: December 15, 2011**

**Lessons Learned:**

- There was no customer uptake for this Initiative. It is suspected that the lack of participation in the program is a result of the Initiative being limited to space cooling. 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 range of measures 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-4NewContructionInitiativeV2.pdf and
- SaveONenergy website - https://saveonenergy.ca/Business/Program-Overviews/New-Construction.aspx
- Orangeville Hydro's website - https://saveonenergy.ca/newconstruction/?ldc=orangevillehydro

**Initiative Activities/Progress:**

The HPNC initiative was promoted in the Front office displays and at local events

**Initiative Activities/Progress:** This type of program is dependent upon the types of development and renovations being proposed in the service territory. The expectation is that we will be able to work with project proponents as those projects are identified.

**In Market Date: June 1, 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 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
- Orangeville Hydro's website - https://saveonenergy.ca/audit/?ldc=orangevillehydro

**Initiative Activities/Progress:**

The Audit initiative was promoted in local advertising including: front office displays, local events, the newspaper, website and local transit system.

**Initiative Activities/Progress:**

General promotion of this initiative along with similar programs was utilized. To date no applications have been received however it is realized that the planning window may take some time for the customer to implement.

**In Market Date: April 12 2011**

**Lessons Learned:**

- Customer uptake in the beginning of 2011 was slow, and increased provincially later in the year.
- 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 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 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
- Orangeville Hydro's website -https://saveonenergy.ca/processandsystems/?ldc=orangevillehydro

**Initiative Activities/Progress:**

Promoted to larger customers at local events.

**In Market Date: April 12 2011**

**Lessons Learned:**

- The PSUI program targets large customers that are undertaking large capital projects. There is typically a long sales cycle for these projects, and then a long project development cycle. As such, results 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.
- The OPA retained Technical Reviewer, an integral component of this Initiative, was not in place until late Q4 2011, thereby limited 2011 program uptake. In 2012, the Technical Reviewer has successfully worked through the project backlog and provided timely project reviews and recommendations.
- 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.
- In smaller service areas limited customer base to take advantage of program.

### 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 sustained for the term of the M&T Agreement.

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

**Targeted End Uses:** Process and systems

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

Additional detail is available:

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

**Initiative Activities/Progress:**

No activity to date

The program was specifically noted to larger customers who may qualify. Follow up to monitor interest is ongoing. The hiring of a Roving Energy Manager may assist with this intiative.

**In Market Date:** Not currently in market

**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, 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 (Schedule D-3)

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

**Initiative Frequency:** Year round

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

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

**Targeted End Uses:** Process and systems

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

Additional detail is available:

- Schedule D-3 http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20D-3%20Energy%20Manager%20Initiative%202011-2014.pdf and
- SaveONenergy website - https://saveonenergy.ca/Business.aspx
- Orangeville Hydro's website - http://www.orangevillehydro.on.ca/Conservation/conserve_Process.html

**Initiative Activities/Progress:**

As part of the CHEC Association an application for a REM was made to the OPA on June 6th 2011 approval of the application was postponed until December 1, 2011. The OPA indicated the delay was because CHEC did not meet the threshold of share of provincial target. December 1, 2011 – CHEC's REM application was reviewed and (unofficially) approved by the OPA.

Official approval was received by the OPA to proceed with the REM initiative. January 23, 2012

**In Market Date: Not in Market in 2011**

**Lessons Learned:**

- At the beginning, it took longer than expected to set up the energy manager application process.
- Concern exists with the need to hire an individual vs. a company to meet the Roving Energy Manager position. The outcome of the REM will be based on the skills of one individual vs. the resources of a company with varied resources and support.
- Concern exists with opportunity to hire a capable Roving Energy Managers (REM).

- CHEC Association made application for REM to qualify and determine sufficient projects to support the REM position.

### 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 help them achieve savings since the KAM can build relationships and become a significant resource of knowledge to the customer.

**Description:** LDC delivered

**Targeted End Uses:** Process and systems

**Delivery:**

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:**

Do not qualify for a Key Account Manager placing additional pressure on other programs.

**In Market Date:** n/a

**Lessons Learned:** n/a

- Larger accounts not contained within service territory.

### 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) payments to contracted participants to compensate them for reducing their electricity consumption by a pre-defined amount 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 payments for the actual electricity reduction provided during a demand response event. Participants are scheduled to be on standby approximately 1,600 hours per calendar year for possible dispatch of up to 100 hours or 200 hours within that year depending on the contract.

**Targeted End Uses:** Commercial and Industrial Operations

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

Additional detail is available:

- Schedule D-6 http://www.powerauthority.on.ca/sites/default/files/new_files/industry_stakeholders/current_electricity_contracts/pdfs/Schedule%20D-6%20Demand%20Response%203%202011-2014.pdf and
- SaveONenergy website - https://saveonenergy.ca/Business.aspx
- Orangeville Hydro's website - https://saveonenergy.ca/DemandResponse/?ldc=orangevillehydro

**Initiative Activities/Progress:**

The Demand Response initiative was promoted in local advertising including: front office displays, local events, the newspaper, website and local transit system.

Marketing has been limited. DR3 noted with other industrial program in literature and websites. Evaluation and discussion with aggregators held however no exclusive arrangements entered into by LDC to support any one aggregator.

We will look at direct mail pieces in 2012 and partner with the Chamber to offer an information session.

**In Market Date: April 12, 2011**

**Lessons Learned:**

- 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.
- Lack of information sharing removes the ability of the LDC to ensure that the customer is satisfied with the services provided by the aggregator. This could impact on ability to maintain in the program until December 2014.

### 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 Weatherization Audit. The Initiative is designed to coordinate efforts with gas utilities.

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

**Delivery:** LDC delivered.

Additional detail is available:

- Schedule E http://www.powerauthority.on.ca/sites/default/files/page/Low%20Income%20Schedule%20-%20redacted%20version.pdf
- Orangeville Hydro's website - https://saveonenergy.ca/homeassistance/?ldc=orangevillehydro GreenSaver's website - http://www.greensaver.org/programs/current-programs/home-assistance-program/

**Initiative Activities/Progress:** Procurement process undertaken in late 2011. Contractor determined and infrastructure prepared for delivery in early 2012.

**In Market Date: Not in market in 2011**

**Lessons Learned:**

- This Initiative Schedule was finalized later (May 2011) than the rest of the OPA Initiatives and as a result, in 2011 only 2 LDCs were in market.
- The manner in which the PAB was assigned resulted in some LDCs (with primarily residential load) to have lower PAB than anticipated based on customer count.
- 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.

### 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

**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:** Refer to section 2.2.2.1

**Targeted End Uses**: Lighting, space cooling, ventilation and other measures

**Delivery**: Carry forward

**Additional detail is available:** n/a

**Initiative Activities/Progress:** This is the recognition of work undertaken under the ERIP program that has been completed in 2011. Work in this area was to continue to encourage and assist applicants with the completion of previously approved projects. The retrofit program was heavily promoted throughout 2010 to spark interest in the business community through the newspaper and local events.

**In Market Date: 2010**

**Lessons Learned:**

- The rush of application at the end of 2010 highlighted the interest in the program.
- The 2010 projects created additional work in the early stages of 2010 to finalize the projects and ensure proper follow up and payment

.

### 2.2.5.2 HIGH PERFORMANCE NEW CONSTRUCTION

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

**Initiative Frequency:** Year round

**Objective:** n/a

**Description:** Refer to section 2.2.2.5

**Targeted End Uses**: n/a

**Delivery**: n/a

**Initiative Activities/Progress:** Carry forward

**In Market Date: 2010**

**Lesson Learned:** n/a

### 2.2.5.4 MULTIFAMILY ENERGY EFFICIENCY REBATES

**Target Customer Type(s):** n/a

**Initiative Frequency:** Year round

**Objective:** n/a

**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**: n/a

**Delivery**: n/a

**Initiative Activities/Progress:** Not in progress

**In Market Date:** No outstanding projects carried forward.

**Lesson Learned:** n/a

## 2.3 Participation

**Table 1: Participation**

| Initiative | Activity Unit | Uptake/ Participation Units |
|---|---|---|
| **Residential Program** | | |
| Appliance Retirement | Appliances | 97 |
| Appliance Exchange | Appliances | 5 |
| HVAC Incentives | Equipment | 245 |
| Conservation Instant Coupon Booklet | Coupons | 1,092 |
| Bi-Annual Retailer Event | Coupons | 1,845 |
| Retailer Co-op | Items | 0 |
| Residential Demand Response | Devices | 0 |
| New Construction Program | Houses | 0 |
| **Business Program** | | |
| Efficiency: Equipment Replacement | Projects | 6 |
| Direct Installed Lighting | Projects | 23 |
| Existing Building Commissioning Incentive | Buildings | 0 |
| New Construction and Major Renovation Incentive | Buildings | 0 |
| Energy Audit | Audits | 0 |
| Commercial Demand Response (part of the Residential program schedule) | Devices | 0 |
| Demand Response 3 (part of the Industrial program schedule) | Facilities | 3 |
| **Industrial Program** | | |
| Process & System Upgrades* | Projects | 0 |
| a) preliminary engineering study | | 0 |
| b) detailed engineering study | | 0 |

| | | |
|---|---|---|
| c) project incentive | | 0 |
| Monitoring & Targeting | Projects | 0 |
| Energy Manager | Managers | 0 |
| Key Account Manager (KAM) | Managers | 0 |
| Efficiency: Equipment Replacement Incentive (part of the C&I program schedule) | Projects | 2 |
| Demand Response 3 | Facilities | 1 |
| **Home Assistance Program** | | |
| Home Assistance Program | Units | 0 |
| **Pre 2011 Programs Completed in 2011** | | |
| Electricity Retrofit Incentive Program | Projects | 8 |
| High Performance New Construction | Projects | 0 |

## 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** | $37,435.55 | | | | **$37,435.55** |
| **Business Program** | $46,047.47 | $5,750 | $ 31,410.85 | | **$83,208.32** |
| **Industrial Program** | $7,518.59 | | | | **$7,518.59** |
| **Home Assistance Program** | $2,688.48 | | | | **$2,688.48** |
| **Pre 2011 Programs Completed in 2011** | | | | | |
| **TOTAL Province-wide CDM PROGRAMS** | **$93,690.09** | **$5,750** | **$31,410.85** | | **$130,850.94** |

Table 2a: Initiatives Not In Market and Associated Program:

| CDM Initiatives Not In Market | Provincial Program |
|---|---|
| Midstream Electronics | Residential Program |
| Midstream Pool Equipment | Residential Program |
| Demand Service Space Cooling | Commercial & Institutional Program |
| Demand Response 1 (Commercial) | Commercial & Institutional Program |
| Demand Response 1 (Industrial) | Industrial Program |
| Home Energy Audit Tool | Residential Program. |
| | |

Within the strategy the impact of these programs and the associated target contributions will need to be adjusted for by other programs.

## 2.5 Evaluation

### 2.5.1 EVALUATION FINDINGS

**Table 3: Evaluation Findings**

| Initiative | Evaluation Findings |
|---|---|
| **Consumer Program** | |
| Appliance Retirement | * Overall participation continues to decline year over year<br>  * Participation declined 17% from 2010 (from over 67,000 units in 2010 to over 56,000 units in 2011)<br>* 97% of net resource savings achieved through the home pick-up stream<br>  * Measure Breakdown: 66% refrigerators, 30% freezers, 4% Dehumidifiers and window air conditioners<br>* 3% of net resource savings achieved through the Retailer pick-up stream<br>  * Measure Breakdown: 90% refrigerators, 10% freezers<br>* Net-to-Gross ratio for the initiative was 50%<br>  * Measure-level free ridership ranges from 82% for the retailer pick-up stream to 49% for the home pick-up stream<br>  * Measure-level spillover ranges from 3.7% for the retailer pick-up stream to 1.7% for the home pick-up stream |
| Appliance Exchange | * Overall eligible units exchanged declined by 36% from 2010 (from over 5,700 units in 2010 to over 3,600 units in 2011)<br>  * Measure Breakdown: 75% window air conditioners, 25% dehumidifiers<br>* Dehumidifiers and window air conditioners contributed almost equally to the net energy savings achieved<br>  * Dehumidifiers provide more than three times the energy savings per unit than window air conditioners<br>* 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)<br>* Net-to-Gross ratio for the initiative is consistent with previous evaluations (51.5%) |
| HVAC Incentives | * Total air conditioner and furnace installations increased by 14% (from over 95,800 units in 2010 to over 111,500 units in 2011)<br>  * Measure Breakdown: 64% furnaces, 10% tier 1 air conditioners (SEER 14.5) and 26% tier 2 air conditioners (SEER 15)<br>  * Measure breakdown did not change from 2010 to 2011<br>* The HVAC Incentives initiative continues to deliver the majority of both the energy (45%) and demand (83%) savings in the consumer program<br>  * Furnaces accounted for over 91% of energy savings achieved for this initiative<br>* Net-to-Gross ratio for the initiative was 17% higher than 2010 (from 43% in 2010 to 60% in 2011)<br>  * 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) |
| Conservation Instant Coupon Booklet | * Customers redeemed nearly 210,000 coupons, translating to nearly 560,000 products<br>  * Majority of coupons redeemed were downloadable (~40%) or LDC-branded (~35%)<br>  * Majority of coupons redeemed were for multi-packs of standard spiral CFLs (37%), followed by multi-packs of specialty CFLs (17%)<br>* Per unit savings estimates and net-to-gross ratios for 2011 are based on a weighted average of 2009 and 2010 evaluation findings<br>* Careful attention in the 2012 evaluation will be made for standard CFLs since it is believed that the market has largely been transformed<br>* Customers redeemed nearly 370,000 coupons, translating to over 870,000 products<br>  * Majority of coupons redeemed were for multi-packs of standard spiral CFLs (49%), followed by multi-packs of specialty CFLs (16%) |
| Bi-Annual Retailer Event | * 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<br>* 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<br>* Careful attention in the 2012 evaluation will be made for standard CFLs since it is believed that the market has largely been transformed. |
| 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 |
| Residential Demand Response | * Approximately 20,000 new devices were installed in 2011<br>* 99% of the new devices enrolled controlled residential central AC (CAC)<br>* 2011 only saw 1 atypical event (in both weather and timing) that had limited participation across the province<br>* 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 |
| New Construction Initiative | * Initiative was not evaluated in 2011 due to limited uptake<br>* Business case assumptions were used to calculate savings |

| | |
|---|---|
| | |
| **Business Program** | |
| Efficiency: Equipment Replacement | * Gross verified energy savings were boosted by lighting projects in the prescriptive and custom measure tracks<br>* Lighting projects overall were determined to have a realization rate of 112%; 116% when including interactive energy changes<br>  * On average, the evaluation found high realization rates as a result of both longer operating hours and larger wattage reductions than initial assumptions<br>  * Low realization rates for engineered lighting projects due to overstated operating hour assumptions<br>* 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<br>* The final realization rate for summer peak demand was 94%<br>  * 84% was a result of different methodologies used to calculate peak demand savings<br>  * 10% due to the benefits from reduced air conditioning load in lighting retrofits<br>* 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.<br>Strict eligibility requirements and improvements in the pre-approval process contributed to the improvement in net-to-gross ratios |
| Direct Installed Lighting | * Though overall performance is above expectations, participation continues to decline year over year as the initiative reaches maturity<br>* 70% of province-wide resource savings persist to 2014 |

| | |
|---|---|
| | * Over 35% of the projects for 2011 included at least one CFL measure<br>* Resource savings from CFLs in the commercial sector only persist for the industry standard of 3 years<br>* Since 2009 the overall realization rate for this program has improved<br>* 2011 evaluation recorded the highest energy realization rate to date at 89.5%<br>* The hours of use values were held constant from the 2010 evaluation and continue to be the main driver of energy realization rate<br>* 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 |
| Existing Building Commissioning Incentive | * Initiative was not evaluated in 2011, no completed projects in 2011 |
| New Construction and Major Renovation Initiative | * Initiative was not evaluated in 2011 due to low uptake<br>* 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) |
| Energy Audit | * The evaluation is ongoing. The sample size for 2011 was too small to draw reliable conclusions. |
| Commercial Demand Response (part of the Residential program schedule) | * Approximately 20,000 new devices were installed in 2011<br>* 99% of the new devices enrolled controlled residential central AC (CAC)<br>* 2011 only saw 1 atypical event (in both weather and timing) that had limited participation across the province<br>* 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 |

| | |
|---|---|
| Demand Response 3 (part of the Industrial program schedule) | * Program performance for Tier 1 customers increased with DR-3 participants providing 75% of contracted MW for both sectors<br>  * Industrial customers outperform commercial customers by provide 84% and 76% of contracted MW, respectively<br>* 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.<br>* 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 |
| **Industrial Program** | |
| Process & System Upgrades | * Initiative was not evaluated in 2011, no completed projects in 2011 |
| Monitoring & Targeting | * Initiative was not evaluated in 2011, no completed projects in 2011 |
| Energy Manager | * Initiative was not evaluated in 2011, no completed projects in 2011 |
| Key Account Manager (KAM) | n/a |
| Efficiency: Equipment Replacement Incentive (part of the C&I program schedule) | * Gross verified energy savings were boosted by lighting projects in the prescriptive and custom measure tracks<br>* Lighting projects overall were determined to have a realization rate of 112%; 116% when including interactive energy changes<br>  * On average, the evaluation found high realization rates as a result of both longer operating hours and larger wattage reductions than initial assumptions<br>  * Low realization rates for engineered lighting projects due to overstated operating hour assumptions<br>* 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%<br>  * 84% was a result of different methodologies used to calculate peak demand savings<br>  * 10% due to the benefits from reduced air conditioning load in lighting retrofits<br>* 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.<br>Strict eligibility requirements and improvements in the pre-approval process contributed to the improvement in net-to-gross ratios |
| Demand Response 3 | * Program performance for Tier 1 customers increased with DR-3 participants providing 75% of contracted MW for both sectors<br>  * Industrial customers outperform commercial customers by provide 84% and 76% of contracted MW, respectively<br>* 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.<br>* 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 |
| **Home Assistance Program** | |
| Home Assistance Program | * Initiative was not evaluated in 2011 due to low uptake<br>* Business Case assumptions were used to calculate savings |
| **Pre-2011 Programs completed in 2011** | |
| Electricity Retrofit Incentive Program | *2010 ERIP programs accounted for 47% of my final retrofit numbers for 2011 |
| High Performance New Construction | n/a |

### 2.5.2 EVALUATION RESULTS

**Table 4: Evaluation Results**

| Initiative | | Gross Savings | | Net Savings | | Contribution to Targets | |
|---|---|---|---|---|---|---|---|
| | NTG | 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** | | | | | | | |
| Appliance Retirement | | 11 | 79,360 | 5 | 39,565 | 5 | 158,056 |
| Appliance Exchange | | 1 | 1,581 | 1 | 815 | 0 | 3,094 |
| HVAC Incentives | | 133 | 259,453 | 80 | 154,791 | 80 | 619,163 |
| Conservation Instant Coupon Booklet | | 2 | 37,201 | 3 | 41,018 | 3 | 164,072 |
| Bi-Annual Retailer Event | | 3 | 57,030 | 4 | 62,306 | 4 | 249,222 |
| Retailer Co-op | | 0 | 0 | 0 | 0 | 0 | 0 |
| Residential Demand Response | | 0 | 0 | 0 | 0 | 0 | 0 |
| New Construction Program | | 0 | 0 | 0 | 0 | 0 | 0 |
| **Business Program** | | | | | | | |
| Efficiency: Equipment Replacement | | 94 | 514,982 | 65 | 361,262 | 65 | 1,445,047 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Direct Installed Lighting | | 20 | 60,151 | 22 | 55,853 | 18 | 211,368 |
| Existing Building Commissioning Incentive | | 0 | 0 | 0 | 0 | 0 | 0 |
| New Construction and Major Renovation Incentive | | 0 | 0 | 0 | 0 | 0 | 0 |
| Energy Audit | | 0 | 0 | 0 | 0 | 0 | 0 |
| Commercial Demand Response (part of the Residential program schedule) | | 0 | 0 | 0 | 0 | 0 | 0 |
| Demand Response 3 (part of the Industrial program schedule) | | 529 | 15,665 | 400 | 15,665 | 0 | 15,665 |
| **Industrial Program** | | | | | | | |
| Process & System Upgrades | | 0 | 0 | 0 | 0 | 0 | 0 |
| Monitoring & Targeting | | 0 | 0 | 0 | 0 | 0 | 0 |
| Energy Manager | | 0 | 0 | 0 | 0 | 0 | 0 |
| Key Account Manager (KAM) | | | | | | | |
| Efficiency: Equipment Replacement Incentive (part of the C&I program schedule) | | 11 | 74,021 | 8 | 56,536 | 8 | 226,144 |
| Demand Response 3 | | 285 | 14,099 | 240 | 14,099 | 0 | 14,099 |
| **Home Assistance Program** | | | | | | | |
| Home Assistance Program | | 0 | 0 | 0 | 0 | 0 | 0 |
| **Pre-2011 Programs completed in 2011** | | | | | | | |
| Electricity Retrofit Incentive Program | | 138 | 682,177 | 72 | 354,732 | 72 | 1,418,929 |
| High Performance New Construction | | 0 | 1,377 | 0 | 688 | 0 | 2,753 |

**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) |
| Residential Program Total | 150 | 434,625 | 92 | 298,493 | 91 | 1,193,607 |
| Commercial & Institutional Program Total | 644 | 590,799 | 487 | 432,780 | 83 | 1,672,080 |
| Industrial Program Total | 296 | 88,120 | 248 | 70,635 | 8 | 240,243 |
| Home Assistance Program Total | 0 | 0 | 0 | 0 | 0 | 0 |
| Pre-2011 Programs completed in 2011 Total | 138 | 683,554 | 72 | 355,421 | 72 | 1,421,682 |
| **Total OPA Contracted Province-Wide CDM Programs** | **1,228** | **1,797,098** | **898** | **1,157,328** | **254** | **4,527,612** |

## 2.6 Additional Comments

The transition from 2010 to 2011 programming was not seamless and impacted on the delivery of the programs throughout 2011. The transition and difficulty with the support systems also frustrated the delivery network, channel partners and end use customers. In retrospect, when the sheer size of the initiative, the design and launch of 16 initiatives, is considered it is reasonable to expect some significant challenges and impact.

The time taken to finalize the schedules presented a delay in LDCs preparing to launch programs. The ability to confirm infrastructure to deliver the program required the details of the schedule to be finalized prior to moving forward with delivery contracts. Even once the schedules were released, the number of schedules and the details within each became a significant task for LDCs, even when working in conjunction with other LDCs, to review, seek clarification and fully understand the requirements of each initiative and how one may relate to another.

Once the schedules were finalized and made available to the LDCs central marketing of the programs commenced. This created issues as delivery systems and even information systems were not set up to support such central marketing. At the local level, early marketing was kept to a minimum pending the confirmation of the infrastructure to affect appropriate program delivery. The ability to focus on acquiring the infrastructure was complicated in part in trying to answer questions from customer who wished to participate in the programs. The needs to both operate programs and gear up for programs became problematic.

Adding to the issues associated with the program initiation was the launch of the CRM System. The one stop shop for customer access and applications is supported however the launch of such a comprehensive system into the live market placed innumerable challenges in the field and undoubtedly with the OPA. In the early stages the system which was designed to save time was causing more time to be spent on problem solving and dealing with frustrated clients. In many cases those frustrated were past participants & contractors who would be key to meeting targets. The additional work in managing these outcomes impacted on the ability to focus on the infrastructure development of the delivery of programs.

Over the first year the overall appetite for conservation within the customer base has been difficult to determine. In areas where there had been good interest in the past there has been some difficulty in engaging the customer. It may be that the rush to end the 2010 programs picked off many of the projects which were in the supply pipe creating a lack of new projects in the early stages of marketing.

With the maturing of the support and delivery systems many of the issues faced in the first year have been resolved. This should allow for a more focused and organized approach moving forward.

# 3 Combined CDM Reporting Elements

## 3.1 Progress Towards CDM Targets

Table 6 and Table 7 outlines an overview of the progress made against the MW target and GWh target as set out in the LDCs license. From the summary below it can be seen there are positive variance for MW and negative variance for GWh.

Based on the results to date and review of the CDM Strategy and targets it is anticipated that Orangeville Hydro remains optimistic to achieve the targets by December 2014 if persistence remains in the programs until 2014. Persistence however, is not reflected in the chart below. More customer engagement and activity is required to maintain and meet targets for the coming years.

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

| Implementation Period | Annual (MW) | | | |
|---|---|---|---|---|
| | 2011 | 2012 | 2013 | 2014 |
| 2011 - Verified | 0.90 | 0.26 | 0.26 | 0.25 |
| 2012 | | | | |
| 2013 | | | | |
| 2014 | | | | |
| **Verified Net Annual Peak Demand Savings in 2014:** | | | | **0.25** |
| **Orangeville Hydro 2014 Annual CDM Capacity Target:** | | | | **2.78** |
| **Verified Portion of Peak Demand Savings Target Achieved (%):** | | | | **9.13%** |
| **Orangeville Hydro Strategy, Milestone submitted for 2011** | | | | **23.1%** |
| **Variance** | | | | **-13.97** |

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

| Implementation Period | Annual (GWh) | | | | Cumulative (GWh) |
|---|---|---|---|---|---|
| | 2011 | 2012 | 2013 | 2014 | 2011-2014 |
| 2011 - Verified | 1.16 | 1.13 | 1.13 | 1.12 | 4.53 |
| 2012 | | | | | |
| 2013 | | | | | |
| 2014 | | | | | |
| **Verified Net Cumulative Energy Savings 2011-2014:** | | | | | **4.53** |
| **Orangeville Hydro 2011-2014 Cumulative CDM Energy Target:** | | | | | **11.82** |
| **Verified Portion of Cumulative Energy Target Achieved (%):** | | | | | **38.30%** |
| **Orangeville Hydro Strategy, Milestone submitted for 2011** | | | | | **45.1%** |
| **Variance** | | | | | **-6.8%** |

## 3.2 CDM Strategy Modifications

The CDM Strategy filed with the OEB included the initial CDM targets as communicated to the LDCs. As such the LDC Strategy is provided below with the revised targets included. The CDM Strategy has also been revised to reflect the first year performance.

To illustrate the changes between the previous Strategy and the revised Strategy both CDM Strategies are presented on the same chart. In addition the actual targets achieved for 2011 are included to update the CDM Strategy accordingly.

**Indicators from 2011:**

The 2011 results are quite encouraging considering that all the initiatives were not in market for the entire year. The kWh's while not meeting the expected level are approaching the 40% level for the four year program. It is anticipated that the remaining kWh's will be achieved over the course of the program. The kW's is ahead of target if demand response is included in the results and is showing good customer engagement and should meet target provided persistence remains until 2014 and participation levels are maintained.

The outcome for 2011 was improved by the inclusion of the incremental peak and energy from the pre-2011 programs implemented in 2011. These savings which clearly indicates the activity with Orangeville Hydro's service territory indicates the capacity and interest in the programs by customers.

The original CDM Strategy recognized that all savings could not be achieved through Provincial Programs and anticipated contribution from OEB Approved Programs. The contribution of OEB Approved Programs remain in the Strategy recognizing that if programs are not developed the activity and success in the Provincial Programs will need to make up for any shortfall.

**Ability to Meet Target:**

As stated previously in this report kW and kWh targets for Orangeville Hydro are expected to be achieved. The addition of OEB Approved Programs and or modifications to the Provincial Programs to better meet customer interests and needs will assist in ensuring the targets are achieved.

To further assist with achieving targets the CHEC group of LDCs has been successful in its application to the OPA for a REM resource. The process has taken longer than first planned however the resource will join our LDCs in September 2012. The addition of the REM resource is expected to give the CHEC LDC's the ability to provide support to larger customers' with a review of their operations and processes and the identification of meaningful energy savings tailored to their industry. Currently, Orangeville Hydro and others in CHEC see a void in the LDC's expertise to be able to work with the larger customers' to identify and implement industry specific energy reduction solutions. The REM will assist to fill this gap.

The achievement of the aggressive targets given to LDC's for the reduction in Peak Demand requires significant participation by the larger customers in kW savings. The REM and continued improvements to programs and program support will help to deliver the required savings.

**CDM Strategy - Setpember 2012 Revision**

*Orangeville*

| | | Annual Milestone - Contribution to 2014 Target | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2011 Original Strategy | | Actual 2011 | | 2012 Original | | 2012 Revissed | | 2013 Original | | 2013 Revised | | 2014 Original | | 2014 Revised | | Original Total Projected Reduction | | Revised Total Projected Reduction | |
| **Category - Consumer** | Focus (kW or kWh) | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh |
| **Provincial Programs** | | | | | | | | | | | | | | | | | | | | | |
| Appliance Retirement | | 10 | 255,607 | 6 | 161,150 | 9 | 182,518 | 8 | 111,288 | 7 | 85,894 | 7 | 85,894 | 7 | 40,877 | 7 | 40,877 | 33 | 564,897 | 27 | 399,210 |
| Instant Discounts (Rebates) | | 0 | 29,293 | 6 | 413,294 | 0 | 13,401 | 2 | 101,848 | 0 | 8,934 | 0 | 8,934 | 0 | 4,467 | 0 | 4,467 | 1 | 56,096 | 8 | 528,544 |
| HVAC Discounts (Rebates) | | 2 | 10,730 | 80 | 619,163 | 2 | 8,445 | 45 | 217,890 | 2 | 5,896 | 2 | 5,896 | 2 | 3,098 | 2 | 3,098 | 8 | 28,170 | 129 | 846,047 |
| Demand Response | | 1 | 4,972 | 0 | 0 | 4 | 17,810 | 0 | 0 | 9 | 29,684 | 9 | 29,684 | 14 | 23,005 | 14 | 23,005 | 27 | 75,471 | 22 | 52,689 |
| Midstream Incentives | | 0 | 0 | 0 | 0 | 0 | 1,110 | 0 | 0 | 0 | 740 | 0 | 740 | 0 | 370 | 0 | 370 | 0 | 2,221 | 0 | 1,110 |
| New Construction | | 2 | 15,376 | 0 | 0 | 2 | 12,867 | 0 | 0 | 2 | 11,473 | 2 | 11,473 | 3 | 6,207 | 3 | 6,207 | 8 | 45,923 | 5 | 17,680 |
| Low Income | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 178,000 | 0 | 0 | 19 | 89,000 | 0 | 0 | 38 | 267,000 |
| Provincial Consumer Total | | 15 | 315,978 | 91 | 1,193,607 | 17 | 236,152 | 55 | 431,026 | 21 | 142,621 | 40 | 320,621 | 25 | 78,025 | 44 | 167,025 | 77 | 772,777 | 230 | 2,112,280 |
| **OEB Approved Programs** | | | | | | | | | | | | | | | | | | | | | |
| General Consumer | | 26 | 0 | 0 | 0 | 51 | 0 | 0 | 0 | 60 | 0 | 60 | 0 | 71 | 0 | 71 | 0 | 207 | 0 | 131 | 0 |
| Low Income | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **OEB Approved Programs Total** | | 26 | 0 | 0 | 0 | 51 | 0 | 0 | 0 | 60 | 0 | 60 | 0 | 71 | 0 | 71 | 0 | 207 | 0 | 131 | 0 |
| | | | | | | | | | | | | | | | | | | | | | |
| **Consumer Program Total** | | 40 | 315,978 | 91 | 1,193,607 | 68 | 236,152 | 55 | 431,026 | 80 | 142,621 | 99 | 320,621 | 97 | 78,025 | 116 | 167,025 | 285 | 772,777 | 361 | 2,112,280 |

| OEB Projected Dollars | | | |
|---|---|---|---|
| kW | kWh | Total | |
| $ 248,880 | $ - | $ 248,880 | Original |
| $ 157,080 | $ - | $ 157,080 | Revised |

*Orangeville*

| | | Annual Milestone - Contribution to 2014 Target | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2011 Original Strategy | | Actual 2011 | | 2012 Original | | 2012 Revissed | | 2013 Original | | 2013 Revised | | 2014 Original | | 2014 Revised | | Original Total Projected Reduction | | Revised Total Projected Reduction | |
| **Category - Commercial & Institutional** | Focus (kW or kWh) | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh |
| **Provincial Programs** | | | | | | | | | | | | | | | | | | | | | |
| Existing Building Retrofits – Medium and Large Buildings | | 444 | 2,295,793 | 65 | 1,445,047 | 444 | 1,749,336 | 444 | 1,749,336 | 451 | 1,202,879 | 451 | 1,202,879 | 451 | 601,439 | 451 | 601,439 | 1,791 | 5,849,446 | 1,412 | 4,998,700 |
| Existing Building Retrofits – Small Buildings | | 22 | 627,194 | 18 | 211,368 | 22 | 497,662 | 22 | 497,662 | 28 | 217,861 | 28 | 217,861 | 26 | 75,679 | 26 | 75,679 | 99 | 1,418,396 | 94 | 1,002,570 |
| Small Commercial Demand Response | | 1 | 1,996 | 0 | 0 | 3 | 5,968 | 1 | 998 | 3 | 4,101 | 3 | 4,101 | 5 | 2,802 | 5 | 2,802 | 12 | 14,867 | 9 | 7,901 |
| Demand Response 1 | | 0 | 4 | 0 | 0 | 0 | 4 | 0 | 162 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 16 | 0 | 170 |
| Demand Response 3 | | 0 | 0 | 400 | 0 | 0 | 0 | 10 | 377 | 0 | 19 | 0 | 19 | 1 | 28 | 1 | 28 | 1 | 47 | 410 | 423 |
| Provincial Commercial & Inst. Total | | 467 | 2,924,986 | 483 | 1,656,414 | 470 | 2,252,969 | 477 | 2,248,534 | 483 | 1,424,864 | 483 | 1,424,864 | 483 | 679,952 | 483 | 679,952 | 1,903 | 7,282,772 | 1,926 | 6,009,765 |
| **OEB Approved Programs** | | | | | | | | | | | | | | | | | | | | | |
| Retrofits | | 29 | 0 | 0 | 0 | 53 | 0 | 0 | 0 | 65 | 0 | 65 | 0 | 79 | 0 | 79 | 0 | 226 | 0 | 143 | 0 |
| New Construction | | 9 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 25 | 0 | 25 | 0 | 29 | 0 | 29 | 0 | 86 | 0 | 53 | 0 |
| **OEB Approved Programs Total** | | 38 | 0 | 0 | 0 | 77 | 0 | 0 | 0 | 89 | 0 | 89 | 0 | 107 | 0 | 107 | 0 | 311 | 0 | 196 | 0 |
| | | | | | | | | | | | | | | | | | | | | | |
| **Commercial & Inst. Total** | | 505 | 2,924,986 | 483 | 1,656,414 | 546 | 2,252,969 | 477 | 2,248,534 | 572 | 1,424,864 | 572 | 1,424,864 | 590 | 679,952 | 590 | 679,952 | 2,214 | 7,282,772 | 2,122 | 6,009,765 |

| OEB Projected Dollars | | | |
|---|---|---|---|
| kW | kWh | Total | |
| $ 373,320 | $ - | $ 373,320 | Original |
| $ 235,620 | $ - | $ 235,620 | Revised |

**CDM Strategy - Setpember 2012 Revision**

*Orangeville*

| | | Annual Milestone - Contribution to 2014 Target | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2011 Original Strategy | | Actual 2011 | | 2012 Original | | 2012 Revissed | | 2013 Original | | 2013 Revised | | 2014 Original | | 2014 Revised | | Original Total Projected Reduction | | Revised Total Projected Reduction | |
| **Category - Industrial** | Focus (kW or kWh) | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh |
| **Program Name** | | | | | | | | | | | | | | | | | | | | | |
| Industrial Accelerator | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Industrial Equipment Replacement | | 85 | 2,084,880 | 8 | 226,144 | 109 | 1,957,017 | 109 | 1,957,017 | 109 | 1,304,678 | 109 | 1,304,678 | 109 | 652,339 | 109 | 652,339 | 413 | 5,998,914 | 336 | 4,140,178 |
| Demand Response 1 | | 0 | 1 | 0 | 0 | 0 | 3 | 0 | 54 | 0 | 3 | 0 | 3 | 1 | 3 | 1 | 3 | 1 | 10 | 1 | 59 |
| Demand Response 3 | | 0 | 0 | 240 | 14,099 | 0 | 0 | 10 | 126 | 0 | 6 | 0 | 6 | 1 | 9 | 1 | 9 | 1 | 16 | 250 | 14,240 |
| Provincial Industrial Total | | 85 | 2,084,881 | 248 | 240,243 | 109 | 1,957,020 | 119 | 1,957,196 | 109 | 1,304,687 | 109 | 1,304,687 | 111 | 652,351 | 111 | 652,351 | 415 | 5,998,939 | 587 | 4,154,477 |
| **OEB Approved Programs** | | | | | | | | | | | | | | | | | | | | | |
| A | | 11 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 26 | 0 | 26 | 0 | 32 | 0 | 32 | 0 | 92 | 0 | 58 | 0 |
| B | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **EB Approved Programs Total** | | 11 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 26 | 0 | 26 | 0 | 32 | 0 | 32 | 0 | 92 | 0 | 58 | 0 |
| **Industrial Total** | | 96 | 2,084,881 | 248 | 240,243 | 132 | 1,957,020 | 119 | 1,957,196 | 136 | 1,304,687 | 136 | 1,304,687 | 142 | 652,351 | 142 | 652,351 | 506 | 5,998,939 | 645 | 4,154,477 |
| **2010 Contribution** | | 0 | 0 | 72 | 1,421,682 | | | | | | | | | | | | | | | 72 | 1,421,682 |

| OEB Projected Dollars | | | |
|---|---|---|---|
| kW | kWh | Total | |
| $ 109,800 | $ - | $ 109,800 | Original |
| $ 69,300 | $ - | $ 69,300 | Revised |

| **Revised Target** | 2011 Original | | Actual 2011 | | 2012 Original | | 2012 Revised | | 2013 Original | | 2013 Revised | | 2014 Original | | 2014 Revised | | Original Total Projected Reduction | | Revised Total Projected Reduction | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh | kW | kWh |
| **CDM Strategy Total** | 642 | 5,325,846 | 894 | 4,511,946 | 746 | 4,446,141 | 651 | 4,636,757 | 788 | 2,872,172 | 807 | 3,050,172 | 829 | 1,410,328 | 848 | 1,499,328 | 3,005 | 14,054,488 | 3,200 | 13,698,204 |
| | | | | | | | | | | | | | | | **Target to Achieve** | | 2,780 | 11,820,000 | | |
| | | | | | | | | | | | | | | | | | 108.1% | 118.9% | 115.1% | 115.9% |

| % of Target | 2011 Original | | 2011 Actual | | 2012 Original | | 2012 Revised | | 2013 Original | | 2013 Revised | | 2014 Original | | 2014 Revised | | Total Projected Reduction | | Total Projected Reduction | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 23.1% | 45.1% | 32.1% | 38.2% | 26.8% | 37.6% | 23.4% | 39.2% | 28.3% | 24.3% | 29.0% | 25.8% | 29.8% | 11.9% | 30.5% | 12.7% | 108.1% | 118.9% | 115.1% | 115.9% |

| Total OEB Projected Dollars | | | |
|---|---|---|---|
| kW | kWh | Total | |
| $ 732,000 | $ - | $ 732,000 | Original |
| $ 462,000 | $ - | $ 462,000 | Revised |