



**CENTRE WELLINGTON HYDRO LTD.**

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September 28, 2013

Kirsten Walli  
Board Secretary  
Ontario Energy Board  
PO Box 2319  
Suite 2700  
Toronto, Ontario, M4P 1E4

**Re: Centre Wellington Hydro Ltd  
License # ED-2002-0498**

**Annual CDM Report 2012**

Dear Ms Walli:

Attached please find the Annual CDM Report 2012 prepared for Centre Wellington Hydro Ltd.

The Conservation and Demand Management Code for Electricity Distributors requires a distributor to file an annual report with the Board. The attached Annual Report is therefore prepared accordingly and covers the period from January 1, 2012 to December 31, 2012.

The Annual CDM Report 2011 for Centre Wellington Hydro Ltd also includes an overview document which relates the experience of the CHEC Member LDCs which Centre Wellington Hydro work in collaboration with to deliver CDM programs.

Yours truly

Doug Sherwood  
President/Secretary  
Cc Gord Eamer

# Cornerstone Hydro Electric Concepts (CHEC)

## Combined Conservation and Demand Management Annual Report 2012

EB-2010-0215

### Collaboration for Conservation



September 30, 2013

## ***Cornerstone Hydro Electric Concepts Association Inc.***

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### **Executive Summary:**

This represents the 2012 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 thirteen addendums containing the individual LDC Annual CDM Reports. The overview section provides a summary of the overall target achieved, conditions impacting strategy progress and tracking of the CDM Strategy.

In the second year of the program the residential portfolio did not meet expectations and did not perform at the same level as the first year. The lower than expected performance in the residential market place has had impact on all of the LDCs. The negative effect is most pronounced in LDCs with primarily high residential loads.

Customers continue to show interest in the Demand Response (DR) initiative with a number of new entries in the DR initiative. Unfortunately the second year of the initiative has seen a number of customers leave the initiative. These changes illustrated the customer interest in the initiative however they also illustrate that customers are not satisfied with the performance or impact of the initiative as related to their business. DR is seen as a crucial element to achieve the demand target. The initiative needs to be tailored to meet the customer needs aimed at maintaining their participation in the initiative.

CHEC's Roving Energy Manager (REM) was engaged late in 2012. This position is seen as a key element in successful approaches to industry and commercial customers. While the impact of the REM is limited in 2012 it is anticipated that this resource will assist to drive applications in the remaining years of the program.

The combined strategy results (Table 4) indicate a decline in the percentage of target to be achieved by the member LDCs. Based on the two year results the anticipated target completion is 87.6% of demand and 99% of the energy targets. The individual reports filed by the member LDCs outline their continued commitment and expectations for the two remaining years.

## ***Cornerstone Hydro Electric Concepts Association Inc.***

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### **1.0 Introduction:**

Cornerstone Hydro Electric Concepts Association (CHEC) is an association of thirteen (13) Local Distribution Companies (LDCs). The CHEC member LDCs have prepared this Conservation and Demand Management (CDM) Annual Report 2012 as required by the Conservation and Demand Management Code for Electricity Distributors. The report is a collaborative initiative of CHEC member LDCs. The report is consistent with the combined CDM Strategy filed in November 2010 and includes Orillia Power as a recent addition to the CHEC Association.

### **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 Annual Report 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
- Orillia Power Distribution Corporation
- 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 CDM Report includes an overview section and separate addendums for each LDC. The LDC addendum format follows the template developed 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 targets were later revised and incorporated into the LDC license requirements. Table 1 illustrates the final targets for each LDC.

**Table 1 – OEB Defined Targets**

|                         | <b>MW</b>             | <b>GWH</b>            |
|-------------------------|-----------------------|-----------------------|
| <b>LDC</b>              | <b>Revised Target</b> | <b>Revised Target</b> |
| Centre Wellington Hydro | 1.64                  | 7.81                  |
| COLLUS Power            | 3.14                  | 14.97                 |
| Innisfil Hydro          | 2.5                   | 9.2                   |
| Lakefront Utilities     | 2.77                  | 13.59                 |
| Lakeland Power          | 2.32                  | 10.18                 |
| Midland Power           | 2.39                  | 10.82                 |
| Orangeville Hydro       | 2.78                  | 11.82                 |
| Orillia Power           | 3.07                  | 15.05                 |
| Parry Sound Power       | 0.74                  | 4.16                  |
| Rideau St. Lawrence     | 1.22                  | 5.1                   |
| Wasaga Distribution     | 1.34                  | 4.01                  |
| Wellington North Power  | 0.93                  | 4.52                  |
| West Coast Huron Energy | 0.88                  | 8.28                  |
| <b>Total</b>            | <b>25.72</b>          | <b>119.51</b>         |

### 3.0 Progress toward Achieving Target

Table 2 and Table 3 provide summaries of the progress made by CHEC LDCs in 2012 towards the combined demand target. The combined results are the summation for all member LDCs and represent reported 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 (2011 adjusted to add Orillia Power)

| Implementation Period  | Annual (MW) |      |      |              |
|--|-------------|------|------|--------------|
|  | 2011        | 2012 | 2013 | 2014         |
| 2011 - Verified  | 4.89        | 4.89 | 4.89 | 4.89         |
| 2012   |             | 1.87 | 1.87 | 1.87         |
| 2013   |             |      |      |              |
| 2014   |             |      |      |              |
| <b>Verified Net Annual Peak Demand Savings in 2014 (including DR):</b> |             |      |      | 6.76         |
| <b>Combined CHEC 2014 Annual CDM Capacity Target:</b>                  |             |      |      | <b>25.72</b> |
| <b>Verified Portion of Peak Demand Savings Target Achieved (%):</b>    |             |      |      | 26.3%        |
| <b>Combined CHEC Strategy, Milestone submitted for 2012</b>            |             |      |      | 30.8%        |
| Variance:  |             |      |      | -4.5%        |

*Note: Table includes DR*

Table 2 includes the contribution from Demand Response (DR) Initiatives as these represent action within the reporting period. Reporting DR reflects the activity in the given year and to date. It is recognized that only DR in place at the end of 2014 will be attributed to the achieved target.

Removal of the DR contribution results in the Peak Demand Savings being reduced by 2,255 kW which represent 8.8% of the 2014 target. After removing DR the verified peak demand savings in 2014 would be 17.5%.

Contribution toward the peak target after two years of program delivery is lagging slightly below the strategy targets. The reported results include DR as noted on the tables. The exclusion of DR within the reporting would not present an accurate picture of target achievement and would improperly state the variance from strategy as LDCs included DR in the strategies filed. Currently LDCs include 4,500 kW of DR in the strategies with approximately 1,800 kW of DR obtained to date. Over the reporting period LDCs have seen the loss of DR which has been included in the 2012 reporting in the cumulative results.

While the progress is only 4.5% off the strategy it must be realized that the combined strategies have been adjusted (2011 and 2012 adjustments) to predict a shortfall of 3.2 MW which represents 12.4% below the peak target. The progress to peak target without DR included (17.5%) approaches the provincial average of 17.8% target achieved.

Table 3 Combined Net Energy Savings at End User Level

| Implementation Period  | Annual (MWh) |        |        |        | Cumulative (MWh) |
|--|--------------|--------|--------|--------|------------------|
|  | 2011         | 2012   | 2013   | 2014   | 2011-2014        |
| 2011 - Verified  | 10,250       | 10,250 | 10,250 | 10,250 | 41,000           |
| 2012   |              | 10,058 | 10,058 | 10,058 | 30,174           |
| 2013   |              |        |        |        |                  |
| 2014   |              |        |        |        |                  |
| <b>Verified Net Cumulative Energy Savings 2011-2014:</b>               |              |        |        |        | 71,174           |
| <b>Combined CHEC 2011-2014 Cumulative CDM Energy Target:</b>           |              |        |        |        | 119,510          |
| <b>Verified Portion of Cumulative Energy Target Achieved (%):</b>      |              |        |        |        | 59.6%            |
| <b>Combined CHEC Strategy, Milestone submitted for 2011 &amp; 2012</b> |              |        |        |        | 67.5%            |
| Variance :   |              |        |        |        | -7.9%            |

Energy savings continue to be strong with annual incremental savings staying consistent in the range of 10 MWh. While significant the achieved energy savings is 7.9% below the proposed savings at this time. Current review of the strategies indicated that the rate of savings will need to increase to achieve the MWh target. Currently the CHEC LDC combined MWh savings is

lagging behind the provincial average of 65.1%. LDCs' performance varies 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 and some of the general lessons learned over the second year of the program. While there have been many successes there remains many challenges within the CDM portfolio and the delivery of programs. Overall the delivery mechanism continues to be improved. Unfortunately opportunities lost early in the program timeframe are difficult to make up later in the program.

#### **4.1 Portfolio Reduction:**

Over the first two years of delivery the full portfolio of OPA programming proposed has not been developed and prepared for delivery. Further, replacement programs have not been developed on the provincial level. The impact of these initiatives not being in market and/or has a twofold impact. First any program savings proposed in the strategies from these initiatives are not realized. Secondly the lack of programs reduces the overall profile of the CDM initiatives. The additional initiatives, with the associated advertisement and engagement, would have reinforced all initiatives and the customers' overall awareness of the conservation effort. Improved performance of the in-market initiative would be assisted by the heightened customer awareness.

#### **4.2 Roving Energy Manager:**

CHEC LDCs applied for funding to cover the cost of a Roving Energy Manager to assist member LDCs. Application approval took several months which impacted on the ability to move forward with the engagement of a candidate (as noted in 2011 report). The ability to find a qualified energy manager to fill the position proved to be a challenge. The position was filled in September of 2012 with initial customer contacts commencing soon after becoming familiar with the service territories. Since procurement of the REM it is apparent what a benefit the position is in approaching commercial and industrial customers. An earlier approval (and market availability of candidates) would have resulted in positive results. The REM continues to have a primary role in generating both peak and energy savings.

#### **4.3 Residential Program Performance:**

The residential programs have performed well below 2011 levels. The reduced level of provincial advertising, method to share coupons and saturation of technologies impacted on the performance.



Provincial advertising is seen to have an impact on awareness of the programs as the OPA can access markets which the LDC may not be able to effectively approach. While LDCs can complete local marketing the widespread campaigns initiated by the OPA are seen as critical for overall success.

A number of LDCs noted issues with the distribution of coupons and the need for customers to print coupons. Any barrier presented to the customer limits response. While perhaps appearing to be cost effective, not providing coupons in an easy to access method reduces the number of coupons utilized.

Initiatives like the Appliance Retirement program have been in the market for some time. The number of eligible appliances has been significantly impacted by several years of successful delivery. A re-vitalization of the program may assist to acquire further appliances however the opportunity may be limited.

For LDCs with a large residential proportion of load the significance of weaker performance in the residential program impacts heavily in the overall ability to achieve targets. A number of CHEC LDCs are struggling due to the residential program lagging behind in projected savings.

#### **4.4 Peaksaver Plus:**

The residential demand response initiative (*peaksaver* PLUS<sup>®</sup>) has been identified in most strategies as being a key contributor to obtaining significant peak target from the residential sector. Unfortunately the ability to deliver state of the art equipment to meet today's requirements while providing future functionality has proved challenging.

*peaksaver* PLUS<sup>®</sup> was not initiated until early in 2012 due to the limited capabilities of the technologies, specifically the in home display. Technologies available offered a number of challenges for LDCs and customers alike. Many of the available units relied on batteries, did not offer the capability to update rate schedules, did not vary with time of use and time of year and/or only presented the energy portion of the customer's bill.

CHEC LDCs released an RFP for a supplier of service and technology in late 2012. While the technology was not at the preferred stage of development, it was recognized that to meet the requirements of the initiative procurement and delivery in 2013 would be required. The release of the RFP late in 2012 was deemed the most appropriate to allow two summer seasons for promoting the program.

#### **4.5 Relationship with Customers:**

During the second year of the program it was noted in some service territories that relationships built with organizations and municipal representatives were challenged with staff changes. With programs which extend over several years the key contact, both customer and

LDCs, may change. This was not necessarily a challenge anticipated and LDCs found they were re-educating the new decisions makers about the programs, the opportunities and the benefits. These changes have reinforced the need to approach customers multiple times to ensure that the knowledge of the programs remains current.

#### **4.6 Ministry Extension of Program into 2015:**

The Minister's Directive to extend the programs into 2015 has removed the incentive for customers to complete applications by December 31, 2014. The extension of the program removes the ability for LDCs to expedite/promote application completion prior to program changes and/or termination. While continuation of the opportunities for customers is supported, the lack of coordination between the LDC targets achievements and the program extension may prove to be problematic.

#### **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.

No OEB Approved Programs were pursued by CHEC. Work on reviewing the opportunity for an education program was pursued. Those discussions ended with conversations at the Ministry level however the initiative did not develop into an OEB approved program application.

The duplication issue with provincial initiatives has limited the potential program concepts as many ideas were based on retrofit of existing equipment which in most instances qualified for custom applications under the ERII initiative.

Time of use contribution to the overall results will be released once the evaluation is completed. These results will better the outcomes noted in this report as no contribution from time of use has been applied at this time.

#### **4.8 DR 3 Contribution:**

Within the targets achieved to date there is a significant amount of DR 3. Over the second year of the program LDCs have seen new customers enter the program and program participants leave the program. The exit of customers from the program is unfortunate as the opportunity to re-engage the customer may be limited.

With the gap between the achieved peak and the targets set, DR 3 offers an opportunity to significantly increase the peak contribution over a one year period. CHEC LDCs through the assistance of the REM position will ensure customers are aware of DR 3 opportunities and how best to take advantage of the program. Ensuring the customer understands the program and

the impact on their operation is seen as critical to the success of the program. With changes to the DR 3 program LDCs will have access to information identifying customers on the DR 3 program.

## **5.0 Revised CDM Strategy:**

The Addendums for each LDC contain a tracking of the CDM Strategy. A number of the LDCs have modified their strategies based on the results to the end of 2012. The review of the strategies includes the results to the end of 2012 as well as the Q1 verified results for 2013 and an estimate of projects in the pipeline. The combined strategy for the 13 CHEC LDCs is summarized in Table 4.

The revised Strategies anticipate a total of 22.5 MW and 118.3 GWh to be saved by December 2014. These projected savings represent 87.6% and 99% respectively of the demand and energy targets for the 13 LDCs. This is a reduction of expected target achievements from those previously noted in the 2011 Annual Report.

CHEC LDCs remain committed to achieving the targets however results to date indicate that expectations for full target achievement may not be realistic.

The specific activities associated with each LDC are outlined in the attached Addendums.

**Table 4 – CHEC CDM Combined Strategy:**

| Combined Strategy                                | Annual Milestone - Contribution to 2014 Target |                   |                     |                   |                                  |                   |                     |                   |                                  |                   |                     |            |                                  |                  |                     |            |                                   |                   |                        |                   |
|--|--|-------------------|---------------------|-------------------|----------------------------------|-------------------|---------------------|-------------------|----------------------------------|-------------------|---------------------|------------|----------------------------------|------------------|---------------------|------------|-----------------------------------|-------------------|------------------------|-------------------|
|  | 2011 Original Strategy Projection              |                   | Actual 2011 Results |                   | 2012 Revised Strategy Projection |                   | Actual 2012 Results |                   | 2013 Revised Strategy Projection |                   | Actual 2013 Results |            | 2014 Revised Strategy Projection |                  | Actual 2014 Results |            | Revised Total Projected Reduction |                   | Contribution to Target |                   |
| Category - Consumer                              | kW   | kWh               | kW                  | kWh               | kW                               | kWh               | kW                  | kWh               | kW                               | kWh               | kW                  | kWh        | kW                               | kWh              | kW                  | kWh        | kW                                | kWh               | kW                     | kWh               |
| <b>Provincial Programs</b>                       |  |                   |                     |                   |                                  |                   |                     |                   |                                  |                   |                     |            |                                  |                  |                     |            |                                   |                   |                        |                   |
| Appliance Retirement                             | 92   | 2,124,285         | 73                  | 2,101,386         | 77                               | 1,124,617         | 72                  | 1,216,066         | 58                               | 732,121           | 0                   | 0          | 61                               | 354,784          | 0                   | 0          | 264                               | 4,238,306         | 145                    | 3,317,452         |
| Instant Discounts (Rebates)                      | 28   | 2,893,444         | 58                  | 3,942,107         | 28                               | 1,787,544         | 33                  | 1,713,722         | 19                               | 927,638           | 0                   | 0          | 22                               | 571,319          | 0                   | 0          | 131                               | 7,358,742         | 91                     | 5,655,829         |
| HVAC Discounts (Rebates)                         | 205  | 1,286,117         | 410                 | 3,173,723         | 336                              | 1,588,507         | 284                 | 1,514,924         | 222                              | 764,551           | 0                   | 0          | 259                              | 461,010          | 0                   | 0          | 1,233                             | 6,045,846         | 694                    | 4,688,647         |
| Demand Response                                  | 607  | 3,846,518         | 130                 | 338               | 130                              | 338               | 0                   | 0                 | 1,018                            | 2,977,503         | 0                   | 0          | 1,805                            | 2,412,453        | 0                   | 0          | 3,083                             | 5,390,632         | 130                    | 338               |
| Midstream Incentives                             | 3  | 82,243            | 0                   | 0                 | 0                                | 0                 | 0                   | 0                 | 2                                | 19,945            | 0                   | 0          | 2                                | 9,973            | 0                   | 0          | 5                                 | 29,918            | 0                      | 0                 |
| New Construction                                 | 25   | 250,419           | 0                   | 0                 | 1                                | 6,486             | 0                   | 1,232             | 28                               | 131,323           | 0                   | 0          | 37                               | 90,414           | 0                   | 0          | 65                                | 222,969           | 0                      | 1,232             |
| Low Income                                       | 0  | 0                 | 0                   | 0                 | 11                               | 186,345           | 13                  | 387,788           | 156                              | 1,652,205         | 0                   | 0          | 159                              | 960,702          | 0                   | 0          | 327                               | 2,867,167         | 13                     | 387,788           |
| <b>Provincial Consumer Total</b>                 | <b>961</b>                                     | <b>10,483,027</b> | <b>671</b>          | <b>9,217,553</b>  | <b>583</b>                       | <b>4,693,837</b>  | <b>402</b>          | <b>4,833,733</b>  | <b>1,504</b>                     | <b>7,205,286</b>  | <b>0</b>            | <b>0</b>   | <b>2,345</b>                     | <b>4,860,656</b> | <b>0</b>            | <b>0</b>   | <b>5,108</b>                      | <b>26,153,581</b> | <b>1,073</b>           | <b>14,051,286</b> |
| <b>OEB Approved Programs</b>                     |  |                   |                     |                   |                                  |                   |                     |                   |                                  |                   |                     |            |                                  |                  |                     |            |                                   |                   |                        |                   |
| General Consumer                                 | 36   | 0                 | 0                   | 0                 | 0                                | 0                 | 0                   | 0                 | 10                               | 0                 | 0                   | 0          | 10                               | 0                | 0                   | 0          | 20                                | 0                 | 0                      | 0                 |
| Low Income                                       | 5  | 0                 | 0                   | 0                 | 0                                | 0                 | 0                   | 0                 | 5                                | 0                 | 0                   | 0          | 5                                | 0                | 0                   | 0          | 10                                | 0                 | 0                      | 0                 |
| <b>OEB Approved Programs Total</b>               | <b>41</b>                                      | <b>0</b>          | <b>0</b>            | <b>0</b>          | <b>0</b>                         | <b>0</b>          | <b>0</b>            | <b>0</b>          | <b>15</b>                        | <b>0</b>          | <b>0</b>            | <b>0</b>   | <b>15</b>                        | <b>0</b>         | <b>0</b>            | <b>0</b>   | <b>30</b>                         | <b>0</b>          | <b>0</b>               | <b>0</b>          |
| <b>Consumer Program Total</b>                    | <b>1,001</b>                                   | <b>10,483,027</b> | <b>671</b>          | <b>9,217,553</b>  | <b>583</b>                       | <b>4,693,837</b>  | <b>402</b>          | <b>4,833,733</b>  | <b>1,519</b>                     | <b>7,205,286</b>  | <b>0</b>            | <b>0</b>   | <b>2,360</b>                     | <b>4,860,656</b> | <b>0</b>            | <b>0</b>   | <b>5,138</b>                      | <b>26,153,581</b> | <b>1,073</b>           | <b>14,051,286</b> |
|  | Annual Milestone - Contribution to 2014 Target |                   |                     |                   |                                  |                   |                     |                   |                                  |                   |                     |            |                                  |                  |                     |            |                                   |                   |                        |                   |
|  | 2011 Original Strategy Projection              |                   | Actual 2011 Results |                   | 2012 Revised Strategy Projection |                   | Actual 2012 Results |                   | 2013 Revised Strategy Projection |                   | Actual 2013 Results |            | 2014 Revised Strategy Projection |                  | Actual 2014 Results |            | Revised Total Projected Reduction |                   | Contribution to Target |                   |
| <b>Category - Commercial &amp; Institutional</b> | <b>kW</b>                                      | <b>kWh</b>        | <b>kW</b>           | <b>kWh</b>        | <b>kW</b>                        | <b>kWh</b>        | <b>kW</b>           | <b>kWh</b>        | <b>kW</b>                        | <b>kWh</b>        | <b>kW</b>           | <b>kWh</b> | <b>kW</b>                        | <b>kWh</b>       | <b>kW</b>           | <b>kWh</b> | <b>kW</b>                         | <b>kWh</b>        | <b>kW</b>              | <b>kWh</b>        |
| <b>Provincial Programs</b>                       |  |                   |                     |                   |                                  |                   |                     |                   |                                  |                   |                     |            |                                  |                  |                     |            |                                   |                   |                        |                   |
| Retrofits – Medium and Large Buildings           | 987  | 7,342,065         | 247                 | 7,087,727         | 1,712                            | 9,875,529         | 957                 | 12,473,033        | 1,443                            | 7,290,139         | 0                   | 0          | 1,257                            | 4,493,546        | 0                   | 0          | 4,148                             | 29,511,482        | 1,204                  | 19,560,760        |
| Existing Building Retrofits – Small Buildings    | 835  | 16,571,055        | 400                 | 5,852,737         | 576                              | 7,733,791         | 634                 | 7,346,408         | 1,259                            | 8,097,565         | 0                   | 0          | 1,429                            | 4,089,765        | 0                   | 0          | 3,872                             | 27,260,416        | 1,034                  | 13,199,145        |
| Small Commercial Demand Response                 | 19   | 39,713            | 56                  | 12                | 19                               | 1,070             | 0                   | 0                 | 39                               | 58,569            | 0                   | 0          | 97                               | 300,518          | 0                   | 0          | 210                               | 359,171           | 56                     | 12                |
| Demand Response 1 & 3                            | 0  | 37                | 594                 | 7,522             | 120                              | 15,376            | -243                | 21,715            | 375                              | 60,075            | 0                   | 0          | 691                              | 33,366           | 0                   | 0          | 1,318                             | 126,130           | 351                    | 29,237            |
| <b>Provincial Commercial &amp; Inst. Total</b>   | <b>1,841</b>                                   | <b>23,952,871</b> | <b>1,297</b>        | <b>12,947,998</b> | <b>2,427</b>                     | <b>17,625,765</b> | <b>1,348</b>        | <b>19,841,156</b> | <b>3,117</b>                     | <b>15,506,348</b> | <b>0</b>            | <b>0</b>   | <b>3,473</b>                     | <b>8,917,195</b> | <b>0</b>            | <b>0</b>   | <b>9,548</b>                      | <b>57,257,198</b> | <b>2,644</b>           | <b>32,789,154</b> |
| <b>OEB Approved Programs</b>                     |  |                   |                     |                   |                                  |                   |                     |                   |                                  |                   |                     |            |                                  |                  |                     |            |                                   |                   |                        |                   |
| Retrofits  | 79   | 0                 | 0                   | 0                 | 0                                | 0                 | 0                   | 0                 | 79                               | 0                 | 0                   | 0          | 79                               | 0                | 0                   | 0          | 158                               | 0                 | 0                      | 0                 |
| New Construction                                 | 0  | 0                 | 0                   | 0                 | 0                                | 0                 | 0                   | 0                 | 0                                | 0                 | 0                   | 0          | 0                                | 0                | 0                   | 0          | 0                                 | 0                 | 0                      | 0                 |
| <b>OEB Approved Programs Total</b>               | <b>79</b>                                      | <b>0</b>          | <b>0</b>            | <b>0</b>          | <b>0</b>                         | <b>0</b>          | <b>0</b>            | <b>0</b>          | <b>79</b>                        | <b>0</b>          | <b>0</b>            | <b>0</b>   | <b>79</b>                        | <b>0</b>         | <b>0</b>            | <b>0</b>   | <b>158</b>                        | <b>0</b>          | <b>0</b>               | <b>0</b>          |
| <b>Commercial &amp; Inst. Total</b>              | <b>1,920</b>                                   | <b>23,952,871</b> | <b>1,297</b>        | <b>12,947,998</b> | <b>2,427</b>                     | <b>17,625,765</b> | <b>1,348</b>        | <b>19,841,156</b> | <b>3,196</b>                     | <b>15,506,348</b> | <b>0</b>            | <b>0</b>   | <b>3,552</b>                     | <b>8,917,195</b> | <b>0</b>            | <b>0</b>   | <b>9,706</b>                      | <b>57,257,198</b> | <b>2,644</b>           | <b>32,789,154</b> |

Cornerstone Hydro Electric Concepts Association

| Annual Milestone - Contribution to 2014 Target  |                                   |            |                     |            |                                  |            |                     |            |                                  |            |                     |      |                                  |            |                     |        |                                   |             |                        |            |
|---|-----------------------------------|------------|---------------------|------------|----------------------------------|------------|---------------------|------------|----------------------------------|------------|---------------------|------|----------------------------------|------------|---------------------|--------|-----------------------------------|-------------|------------------------|------------|
| Category - Industrial   | 2011 Original Strategy Projection |            | Actual 2011 Results |            | 2012 Revised Strategy Projection |            | Actual 2012 Results |            | 2013 Revised Strategy Projection |            | Actual 2013 Results |      | 2014 Revised Strategy Projection |            | Actual 2014 Results |        | Revised Total Projected Reduction |             | Contribution to Target |            |
|   | 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                                | 1,284,928  | 0                   | 0          | 0                                | 0          | 0                   | 0          | 0                                | 0          | 0                   | 0    | 31                               | 190,138    | 0                   | 0      | 31                                | 190,138     | 0                      | 0          |
| Industrial Equipment Replacement  | 431                               | 10,125,877 | 53                  | 2,938,736  | 436                              | 5,576,430  | 0                   | 0          | 381                              | 3,361,143  | 0                   | 0    | 469                              | 2,679,274  | 0                   | 0      | 1,199                             | 11,876,159  | 53                     | 2,938,736  |
| Demand Response 1   | 0                                 | 7          | 0                   | 0          | 0                                | 0          | 0                   | 0          | 0                                | 4          | 0                   | 0    | 2                                | 4          | 0                   | 0      | 2                                 | 8           | 0                      | 0          |
| Demand Response 3   | 24                                | 524,494    | 1,549               | 90,925     | 21                               | 436,972    | -32                 | 52,874     | 410                              | 678        | 0                   | 0    | 426                              | 50,788     | 0                   | 0      | 3,225                             | 222,176     | 1,517                  | 143,798    |
| Provincial Industrial Total   | 511                               | 11,935,306 | 1,602               | 3,029,661  | 457                              | 6,013,402  | -32                 | 52,874     | 791                              | 3,361,825  | 0                   | 0    | 927                              | 2,920,204  | 0                   | 0      | 4,457                             | 12,288,480  | 1,570                  | 3,082,534  |
| OEB Approved Programs   |                                   |            |                     |            |                                  |            |                     |            |                                  |            |                     |      |                                  |            |                     |        |                                   |             |                        |            |
| A   | 0                                 | 0          | 0                   | 0          | 0                                | 0          | 0                   | 0          | 0                                | 0          | 0                   | 0    | 0                                | 0          | 0                   | 0      | 0                                 | 0           | 0                      | 0          |
| B   | 0                                 | 0          | 0                   | 0          | 0                                | 0          | 0                   | 0          | 0                                | 0          | 0                   | 0    | 0                                | 0          | 0                   | 0      | 0                                 | 0           | 0                      | 0          |
| OEB Approved Programs Total   | 0                                 | 0          | 0                   | 0          | 0                                | 0          | 0                   | 0          | 0                                | 0          | 0                   | 0    | 0                                | 0          | 0                   | 0      | 0                                 | 0           | 0                      | 0          |
| Industrial Total  | 511                               | 11,935,306 | 1,602               | 3,029,661  | 457                              | 6,013,402  | -32                 | 52,874     | 791                              | 3,361,825  | 0                   | 0    | 927                              | 2,920,204  | 0                   | 0      | 4,457                             | 12,288,480  | 1,570                  | 3,082,534  |
| <i>Note: Sums above do not include Orillia Power's projected or actuals as Strategy not itemized by initiatives</i> |                                   |            |                     |            |                                  |            |                     |            |                                  |            |                     |      |                                  |            |                     |        |                                   |             |                        |            |
| CDM Strategy Total  |                                   |            |                     |            |                                  |            |                     |            |                                  |            |                     |      |                                  |            |                     |        |                                   |             |                        |            |
| CDM Strategy Total  | 2011 Original Strategy Projection |            | Actual 2011 Results |            | 2012 Revised Strategy Projection |            | Actual 2012 Results |            | 2013 Revised Strategy Projection |            | Actual 2013 Results |      | 2014 Revised Strategy Projection |            | Actual 2014 Results |        | Revised Total Projected Reduction |             | Contribution to Target |            |
|   | kW                                | kWh        | kW                  | kWh        | kW                               | kWh        | kW                  | kWh        | kW                               | kWh        | kW                  | kWh  | kW                               | kWh        | kW                  | kWh    | kW                                | kWh         | kW                     | kWh        |
| Program Total   | 3,952                             | 48,501,204 | 4,317               | 29,546,717 | 3,957                            | 32,093,004 | 1,849               | 28,359,333 | 5,726                            | 30,193,459 | 0                   | 0    | 8,440                            | 21,128,055 | 0                   | 0      | 22,131                            | 110,139,259 | 6,165                  | 57,906,050 |
| 2010 Contribution   | 0                                 | 0          | 577                 | 11,452,774 | 6                                | 29,450     | 31                  | 306,421    | 0                                | 0          | 0                   | 0    | 0                                | 0          | 0                   | 0      | 437                               | 8,535,431   | 608                    | 11,759,195 |
| Adjustments to Verified Final Results   | 0                                 | 0          | 0                   | 0          | 0                                | 0          | -12                 | 1,508,720  | 0                                | 0          | 0                   | 0    | 0                                | 0          | 0                   | 0      | -31                               | -340,358    | -12                    | 1,508,720  |
| Adjusted Total  | 3,952                             | 48,501,204 | 4,894               | 40,999,491 | 3,963                            | 32,122,454 | 1,868               | 30,174,474 | 5,726                            | 30,193,459 | 0                   | 0    | 8,440                            | 21,128,055 | 0                   | 0      | 22,537                            | 118,334,332 | 6,761                  | 71,173,965 |
| <i>Note: Sums include Orillia Power Strategy</i>  |                                   |            |                     |            |                                  |            |                     |            |                                  |            |                     |      |                                  |            | Target to Achieve   | 25,720 | 119,510,000                       |             |                        |            |
| Percentage of Target  |                                   |            |                     |            |                                  |            |                     |            |                                  |            |                     |      |                                  |            |                     |        |                                   |             |                        |            |
| Percentage of Target  | 2011 Original Strategy Projection |            | Actual 2011 Results |            | 2012 Revised Strategy Projection |            | Actual 2012 Results |            | 2013 Revised Strategy Projection |            | Actual 2013 Results |      | 2014 Revised Strategy Projection |            | Actual 2014 Results |        | Revised Total Projected Reduction |             | Contribution to Target |            |
|   | kW                                | kWh        | kW                  | kWh        | kW                               | kWh        | kW                  | kWh        | kW                               | kWh        | kW                  | kWh  | kW                               | kWh        | kW                  | kWh    | kW                                | kWh         | kW                     | kWh        |
|   | 15.4%                             | 40.6%      | 19.0%               | 34.3%      | 15.4%                            | 26.9%      | 7.3%                | 25.2%      | 22.3%                            | 25.3%      | 0.0%                | 0.0% | 32.8%                            | 17.7%      | 0.0%                | 0.0%   | 87.6%                             | 99.0%       | 26.3%                  | 59.6%      |
| <i>Note: This section includes Orillia Power's Strategy and Actuals</i>   |                                   |            |                     |            |                                  |            |                     |            |                                  |            |                     |      |                                  |            |                     |        |                                   |             |                        |            |

**6.0 Addendums:**

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| COLLUS Power Stream.....                 | 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  |
| Orillia Power.....                       | Addendum 8  |
| Parry Sound Power.....                   | Addendum 9  |
| Rideau St. Lawrence Distribution.....    | Addendum 10 |
| Wasaga Distribution Ltd.....             | Addendum 11 |
| Wellington North Power.....              | Addendum 12 |
| West Coast Huron Energy.....             | Addendum 13 |

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# **Centre Wellington Hydro**

**Addendum 1 – CHEC CDM Combined Annual Report 2012**

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## **Conservation and Demand Management 2012 Annual Report**

**Submitted to:  
Ontario Energy Board**

**Submitted on September 30, 2013**

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## Executive Summary

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

Centre Wellington Hydro did not apply for any Board-Approved CDM Programs during 2012; however, as noted in the CDM guidelines, released April 26, 2012, the Ontario Energy Board (OEB) has deemed Time-of-Use (TOU) pricing a Province-wide Board-Approved CDM Program. The Ontario Power Authority (OPA) is to provide measurement and verification on TOU. At the time of this report the OPA has not released any verified results of TOU savings to Centre Wellington Hydro. While these results are anticipated to better the reported savings no allowance has been made in this report.

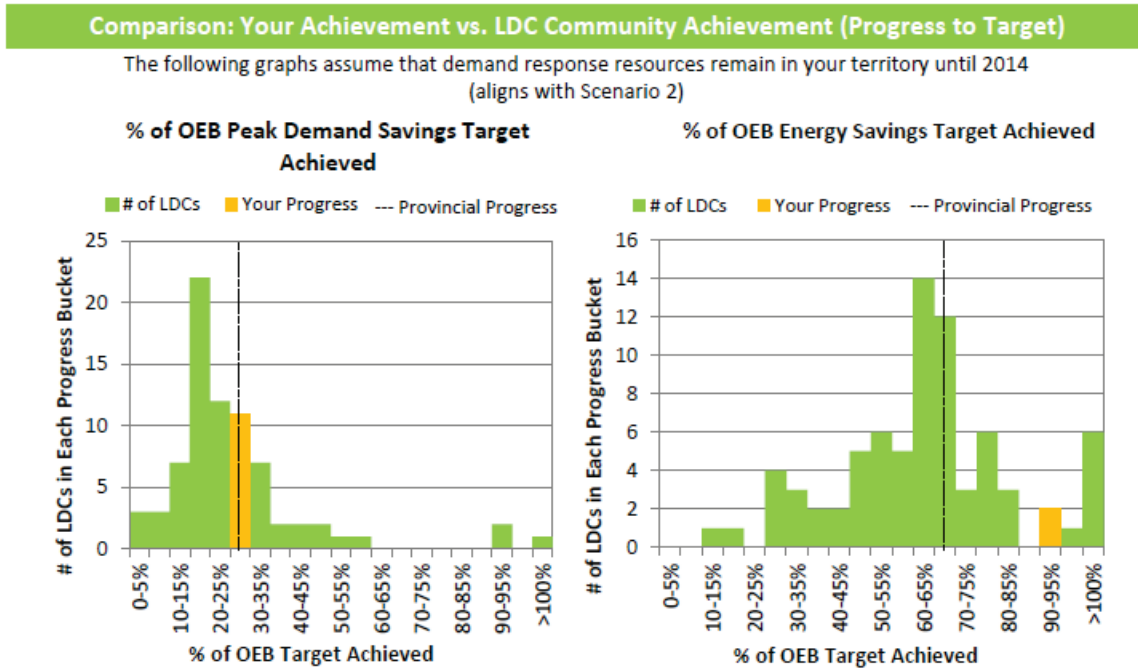
In 2011, Centre Wellington Hydro contracted with the OPA to deliver a portfolio of OPA-Contracted Province-Wide CDM Programs to all customer segments including residential, commercial, institutional, industrial and low income. These programs were rolled-out by the OPA in June 2011. In 2011 program activities were centered on building a foundation for full program execution over the next three years of the program term, including staffing, procurement, and program delivery.

In 2012 Centre Wellington Hydro continued to place significant emphasis on the programs in market. The delivery of ERII and Direct Install programs continued to be active and the Home Assistance Program was launched and the Peak Saver RFP released. To date Centre Wellington Hydro has:

- Launched all available OPA Programs following their release by the OPA;
- Delivered marketing to inform consumers in all sectors;
- Informed industry stakeholders about OPA Programs, the use of online application system;
- Partnered with CHEC LDCs to form partnerships and delivery models for the various programs;
- In conjunction with other CHEC LDCs engaged the services of a Roving Energy Manager;

- Actively participated in Electrical Distribution Association (EDA), LDC and OPA working groups through our own staff or CHEC resources in order to improve and simplify the existing programs and processes; and
- Transitioned pre-2011 projects into 2011.

To the end of 2012, as reported by the OPA, Centre Wellington Hydro has achieved .4 MW of net incremental peak demand savings and 7.2 GWh of net incremental energy savings in 2012. A summary of the achievements towards the CDM targets is shown below:



The strategies and reporting utilized for this report shows that Centre Wellington Hydro is on track to meet both the demand and energy targets. The targets are expected to be achieved if the current and anticipated successes of the OPA Contracted Province Wide CDM Programs continue.

An additional risk to achieving targets is the long planning and capital cycles for many of the commercial and industrial customers. It is unlikely that large projects, if not submitted by early to mid-2013, will be implemented in time to provide savings by the December 31<sup>st</sup> target deadline. While the program funding for incentives has been extended to December 2015, which maintains program delivery, it may have also removed the drive for larger customers to move forward at an earlier date to avoid losing the incentive if not implemented by December 2014. Currently, based on the Minister’s Directive, only kW and kWhs implemented by December 2014 will be counted towards target. The lack of coordination between the program funding extension and the implementation of savings to be counted towards target may impact negatively on achieving targets.

## 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 CDM targets to be met by electricity distributors. Accordingly, on November 12, 2010, the OEB amended the distribution license of Centre Wellington Hydro to require Centre Wellington Hydro, as a condition of its license, to achieve 7.81 GWh of energy savings and 1.64 MW of summer peak demand savings, over the period beginning January 1, 2011 through December 31, 2014.

In accordance with the same Minister's Directive, the OEB issued the Conservation and Demand Management Code for Electricity Distributors (the Code) on September 16, 2010. The Code sets out the obligations and requirements with which electricity distributors must comply in relation to the CDM targets set out in their licenses. To comply with the Code requirements, Centre Wellington Hydro submitted its CDM Strategy on November 1, 2010 which provided a high level of description of how Centre Wellington Hydro intended to achieve its CDM targets.

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

Centre Wellington Hydro submitted its 2011 Annual Report on September 28, 2012 which summarized the CDM activities, successes and challenges experienced by Centre Wellington Hydro for the January 1, 2011 to December 31, 2011 period. The OEB's 2011 CDM Results report identified that the delay in the full suite of CDM Programs being made available by the OPA, and the absence of some programs negatively impacted the final 2011 results for the LDCs. This issue was also highlighted in Volumes I & II of the Environmental Commissioner's Report on Ontario's Annual Energy Conservation Progress.

On December 21, 2012, the Minister of Energy directed the OPA to fund CDM programs which meet the definition and criteria for OPA-Contracted Province-Wide CDM Programs for an additional one-year period from January 1, 2015 to December 31, 2015.

The Ministerial Directive did not amend the timelines for LDCs to achieve their energy savings and demand savings targets. Therefore, the main focus of the LDCs remains the achievement of CDM targets by December 31, 2014. The lack of coordination between the program funding extension and the implementation of savings to be counted towards target may impact negatively on achieving targets.

# 1 Conservation Framework

## 1.1 Current Framework

With the standard template for the Annual Report it was stated “Ontario’s current CDM framework is a key step towards creating a culture of conservation in the Province.” While the current CDM framework is seen as a key step in creating kW and kWh savings, it is suggested that the framework has not been effective nor is it designed to create a “culture of conservation.” While the CDM framework has delivered programs and provided marketing initiatives it has not been focused on creating a deeper understanding of conservation through education and the associated support. The evidence is the lack of general education programs, including school programs delivered across the province. Targets and creation of a “culture of conservation” do not necessarily go together.

The Government’s Directive to the OEB to establish CDM targets that would be met by electricity distributors recognizes the importance of CDM for both electricity customers and the electricity system. CDM helps customers manage rising energy costs, supports the provincial integrated supply plan, as well as addresses local distribution and transmission supply constraints. The current framework was intended to enable customers to benefit from a suite of both Board-Approved and OPA Province-Wide programs and be a portfolio that would meet both broad and specific customer needs.

The state of Board-Approved programs and the current suite of Province-Wide OPA programs have limited CDM offerings to customers. This has produced limited savings and has restricted the associated opportunity for LDCs to meet their targets. The process to introduce changes to current program Initiatives or to pilot new Initiatives has been challenging, taking considerable cost and effort, which has resulted in limited benefits to customers and CDM savings.

Moving forward, the future CDM framework should address the challenges of the current framework and build on its strengths. Currently, overbuilt governance and excessive legal requirements results in a slow, bureaucratic process with a burdensome administrative process. There is a misalignment of control and risk where LDCs have the accountability to achieve their respective CDM targets as a condition of their distribution license, but the authority for design and funding are controlled substantially by the OPA.

The Ministerial Directive provides continuity of the conservation programs and associated compensation for the participants; however, the subsequent savings would not be attributed to any LDC target and in effect would be ‘lost’ due to misalignment of the current CDM framework and LDC Targets. In addition, the establishment of defined administrative funding for 2015 is required to avoid a “stop and start” process.

## **1.2 Future Framework**

LDCs are supportive of government's renewed commitment for CDM in Ontario. LDCs are committed to working with the government and other stakeholders to develop the next framework for CDM in the Province.

Long-term commitment for CDM funding and a confirmation of the role of the LDC are needed. This will allow LDCs to maintain current program infrastructure including LDC staff and third party contracts through 2015.

Providing clarity and continuity into the next framework is critical for all customers. To ensure a seamless and smooth transition that maintains and builds upon CDM momentum beyond 2014, a new CDM framework should be in place well before the expiry of the current one. Work involving key parties including LDCs, government, customer groups and the OEB should start in 2013 to allow for a new framework to be in place by early 2014. The remainder of 2014 would be utilized for program development and design, economic analysis, procurement and launching of new CDM program initiatives. This of course is in addition to continued focus on the current suite of programs and target achievement.

## 2 Board-Approved CDM Programs

### 2.1 Introduction

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

At this time, the implementation of TOU Pricing has been deemed as a Board-Approved CDM program. It is being offered in Centre Wellington Hydro’s service area.

### 2.2 TOU Pricing

#### 2.2.1 BACKGROUND

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

In accordance with a Directive dated March 31, 2010 by the Minister of Energy and Infrastructure, the OEB is of the view that any evaluations of savings from TOU pricing should be conducted by the OPA for the province, and then allocated to distributors. Centre Wellington Hydro will report these results upon receipt from the OPA.

At the time of preparation of this report the OPA had retained the Brattle Group as the evaluation contractor and will be working with an expert panel convened to provide advice on methodology, data collection, models, etc. The initial evaluations were conducted with 5 LDCs – Hydro One, THESL, Ottawa Hydro, Thunder Bay and Newmarket. Preliminary results from these 5 LDCs were not issued.

As of September 30, 2013, the OPA has not released any verified results of TOU savings to Centre Wellington Hydro therefore Centre Wellington Hydro is not able to provide any verified savings related to LDC’s TOU program at this time.

#### 2.2.2. TOU PROGRAM DESCRIPTION

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

**Initiative Frequency:** Year-Round

**Objectives:** TOU pricing is designed to 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:

| <b>RPP TOU</b>        | <b>Rates (cents/kWh)</b> |                 |                 |
|-----------------------|--------------------------|-----------------|-----------------|
|                       | <b>On Peak</b>           | <b>Mid Peak</b> | <b>Off Peak</b> |
| <b>Effective Date</b> |                          |                 |                 |
| November 1, 2010      | 9.9                      | 8.1             | 5.1             |
| May 1, 2011           | 10.7                     | 8.9             | 5.9             |
| November 1, 2011      | 10.8                     | 9.2             | 6.2             |
| May 1, 2012           | 11.7                     | 10.0            | 6.5             |
| November 1, 2012      | 11.8                     | 9.9             | 6.3             |
| May 1, 2013           | 12.4                     | 10.4            | 6.7             |

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

**Initiative Activities/Progress:**

Centre Wellington Hydro began transitioning its RPP customers to TOU billing on March 1, 2012. At December 31<sup>st</sup>, 2012, 100 % of eligible customers were on TOU billing.

### **2.3 Centre Wellington Hydro's Application with the OEB**

Centre Wellington Hydro did not have an application before the OEB for programming in 2012. The first two years of the CDM program has been 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 for high levels of performance in the Provincially Contracted Programs to meet the CDM Strategy Targets.

Centre Wellington Hydro and other members of the CHEC group have been closely monitoring the OEB's activities in approving programs for LDC's. We are not aware of the OEB having approved programming during the time period covered by this report.



### 3. OPA-Contracted Province-Wide CDM Programs

#### 3.1 Introduction

Effective March 9, 2011 Centre Wellington 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. Program details are included in Appendix A. In addition, results include projects started pre 2011 which were completed in 2011:

| Initiative  | Schedule                | Date schedule posted | Customer Class                | LDC In-Market Date     |
|---|-------------------------|----------------------|-------------------------------|------------------------|
| <b>Residential Program</b>  |                         |                      |                               |                        |
| Appliance Retirement  | Schedule B-1, Exhibit D | Jan 26, 2011         | All residential rate classes  | March 9, 2011          |
| Appliance Exchange  | Schedule B-1, Exhibit E | Jan 26, 2011         | All residential rate classes  | March 9, 2011          |
| HVAC Incentives   | Schedule B-1, Exhibit B | Jan 26, 2011         | All residential rate classes  | March 9, 2011          |
| Conservation Instant Coupon Booklet                                   | Schedule B-1, Exhibit A | Jan 26, 2011         | All residential rate classes  | March 9, 2011          |
| Bi-Annual Retailer Event  | Schedule B-1, Exhibit C | Jan 26, 2011         | All residential rate classes  | March 9, 2011          |
| Retailer Co-op  | n/a                     | n/a                  | All residential rate classes  | March 9, 2011          |
| Residential Demand Response   | Schedule B-3            | Aug 22, 2011         | All general service classes   | Not in market for 2012 |
| New Construction Program  | Schedule B-2            | Jan 26, 2011         | All residential rate classes  | March 9, 2011          |
| <b>Commercial &amp; Institutional Program</b>                         |                         |                      |                               |                        |
| Efficiency: Equipment Replacement                                     | Schedule C-2            | Jan 26, 2011         | All general service classes   | June 1, 2011           |
| Direct Install Lighting   | Schedule C-3            | Jan 26, 2011         | General Service < 50 kW       | June 1, 2011           |
| Existing Building Commissioning Incentive                             | Schedule C-6            | Feb 2011             | All general service classes   | June 1, 2011           |
| New Construction and Major Renovation Initiative                      | Schedule C-4            | Feb 2011             | All general service classes   | June 1, 2011           |
| Energy Audit  | Schedule C-1            | Jan 26, 2011         | All general service classes   | June 1, 2011           |
| Commercial Demand Response (part of the Residential program schedule) | Schedule B-3            | Jan 26, 2011         | All general service classes   | March 9, 2011          |
| Demand Response 3 (part of the Industrial program schedule)           | Schedule D-6            | May 31, 2011         | General Service 50 kW & above | June 1, 2011           |

| <b>Industrial Program</b>  |              |              |                               |                       |
|--|--------------|--------------|-------------------------------|-----------------------|
| Process & System Upgrades  | Schedule D-1 | May 31, 2011 | General Service 50 kW & above | June 1, 2011          |
| Monitoring & Targeting   | Schedule D-2 | May 31, 2011 | General Service 50 kW & above | June 1, 2011          |
| Energy Manager   | Schedule D-3 | May 31, 2011 | General Service 50 kW & above | September 24, 2012    |
| Key Account Manager ("KAM")  | Schedule D-4 | May 31, 2011 | General Service 50 kW & above | Not in market in 2012 |
| Efficiency: Equipment Replacement Incentive (part of the C&I program schedule) | Schedule C-2 | May 31, 2011 | General Service 50 kW & above | June 1, 2011          |
| Demand Response 3  | Schedule D-6 | May 31, 2011 | General Service 50 kW & above | June 1, 2011          |
| <b>Home Assistance Program</b>   |              |              |                               |                       |
| Home Assistance Program  | Schedule E-1 | May 9, 2011  | All residential rate classes  | January 1, 2012       |

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

| <b>Pre-2011 Programs</b>               |     |     |                             |
|--|-----|-----|-----------------------------|
| Electricity Retrofit Incentive Program | n/a | n/a | All general service classes |
| High Performance New Construction      | n/a | n/a | All general service classes |

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

| <b>Initiative Not in Market in 2012</b> | <b>Objective</b>  | <b>Status</b>   |
|---|---|---|
| <b>Residential Program</b>              |   |   |
| Midstream Electronics                   | The objective of this initiative is to encourage retailers to promote and sell high efficiency televisions, and for distributors to distribute high efficiency set top boxes. | Never launched and removed from Schedule in Q2, 2013. |

|   |   |  |
|---|---|--|
| Midstream Pool Equipment                      | The objective of this initiative is to encourage pool installers to sell and install efficient pool pump equipment in residential in-ground pools.  | Never launched and removed from Schedule in Q2, 2013.  |
| Aboriginal Conservation Program               | First Nations programs are delivered by the OPA and results are attributed to LDCs for reporting.   | Launched in 2013 by OPA.   |
| Home Energy Audit Tool                        | This is a provincial online audit tool to engage customers in conservation and help drive customer participation to CDM programs.   | Never launched and removed from Schedule in Q2, 2013.  |
| <b>Commercial &amp; Institutional Program</b> |   |  |
| Direct Service Space Cooling                  | The objective of this initiative is to offer free servicing of air conditioning systems and refrigeration units for the purpose of achieving energy savings and demand reduction.   | Not launched to market in 2011/2012. As per the OPA there are no plans to launch this Initiative in 2013.      |
| Demand Response 1 ("DR1")                     | This initiative allows distribution customers to voluntarily reduce electricity demand during certain periods of the year pursuant to the DR 1 contract. The initiative provides DR payment for service for the actual electricity reduction provided during a Demand Response event. | No customer uptake for this initiative. As a result this Initiative was removed from the Schedule in Q4, 2012. |
| <b>Industrial Program</b>                     |   |  |
| DR1   | As above  | No customer uptake for this initiative. Removed in Q4, 2012.   |

The Master CDM Program Agreement includes program change management provision in Article 3. Collaboration between the OPA and the LDCs commenced in 2011, and continued in 2012, 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.

## 3.2 Program Descriptions

Full OPA-Contracted Province-Wide CDM Program descriptions are available from the OPA and additional initiative information can be found on the saveONenergy website at <https://saveonenergy.ca>. The targeted customer types, objectives, and individual descriptions for each Program Initiative are detailed in Appendix A.

### 3.2.1 RESIDENTIAL PROGRAMS

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

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

**Discussion:**

The inclusion of LED technology into the Biannual Retailers events in 2012 and the annual coupons in 2013, as well as some LDC custom coded coupons, has had a positive effect on consumer engagement.

The revamped PeaksaverPLUS program is the main Residential Initiative which is expected to drive peak savings for LDCs. Concern existed with the technology available for In Home Displays and the consumer interface (battery replacement, inability to update rate schedules remotely and integration into existing metering systems) resulting in hesitation to initiate the program pending technology improvement. While concerns remained the RFP for equipment and support was issued in late 2012 to allow implementation of the program to commence in 2013.

HVAC Incentives has done well. Centre Wellington Hydro included HVAC in its advertising program but for the most part were not aware of any uptake until the results came in and we saw the savings.

The HVAC and Appliance Roundup performed marginally better than expected.

Peaksaver Plus not being in market impacted on peak contribution to target however it is anticipated that the peak contribution can be achieved in the following years.

The Residential Program Portfolio is predominately a carryover of Initiatives from previous programs. It had a significant dependence on retailers and contractors within the scope of many of the offerings. Three new initiatives were never launched and subsequently removed from schedule in 2013 with no new additions. Delays in communication with regards to Initiative offerings and results reporting have hampered LDC's abilities to engage customers and promote participation. Provincial wide advertising has provided limited value due to inconsistency and non-specific messaging.

Work to revitalize and increase the effectiveness and breadth of the Initiatives through the Residential Program needs to be a high priority. There are opportunities within the Residential marketplace that need to be identified, developed and offered to customers. A revised home audit and other Initiatives which

could engage an average residential customer could be considered. Continued coupon offerings to maintain the focus of the residential customer on conservation would also assist.

### **3.2.1.1 Appliance Retirement Initiative (Exhibit D)**

#### **Initiative Activities/Progress:**

Centre Wellington Hydro included a buck slip in the customer's bills in August/September, 2012 for HVAC and Appliance Retirement programs. These buck slips were also routinely given out at the front counter and are available in the reception vestibule to be picked up.

An on-bill message for Appliance Retirement was put on the July 2012 customers' bills.

Centre Wellington Hydro advertised Appliance Retirement, HVAC, Home Assistance and saveONenergy for Business on the Weather Network from June – December 2012.

Centre Wellington Hydro advertised in two local newspapers, Fergus-Elora News Express and The Wellington Advertiser each month switching between Appliance Retirement and HVAC from July – December 2012.

Centre Wellington Hydro also had a booth at the local Home Show promoting all conservation programs as well as TOU.

#### **Additional Comments:**

- With the increase in appliance age to 20 years in 2013, many LDCs increased marketing and outreach throughout 2012 in an effort to increase uptake and achieve savings.
- Due to the duration of the program, and the revised eligibility requirements to a minimum of 20 years old, this Initiative appears to be approaching market saturation and has been under consideration for removal from the Portfolio. Removal of the program would be seen as detrimental to the residential portfolio as this program highlights the issue of appliance efficiency.
- Rather than strictly remove this Initiative from the schedules, the OPA and LDCs could review what opportunities there are to include other measures such as stoves, dishwashers, washers and dryers. The framework of this Initiative may be a suitable foundation for a more holistic residential appliance retirement program. As such, the Residential portfolio could be strengthened through program evolution rather than weakened through diminished program offerings.
- As results are very responsive to province wide advertising OPA provincial marketing should continue to play a key role.
- The OPA and LDCs can continue working to establish partnerships with independent retailers and municipalities.

### **3.2.1.2      *Appliance Exchange Initiative (Exhibit E)***

#### **Initiative Activities/Progress:**

Retailers in Centre Wellington Hydro's service area may have been active in this initiative. Centre Wellington Hydro did not participate in any events.

#### **Additional Comments:**

- This Initiative, eligible measures and incentive amounts are influenced by the retail partner with no direct involvement from the LDCs. The restrictive, limited and sometimes non-participation of local stores can diminish the savings potential for this Initiative.
- To date there has only been one retailer participant in the Appliance Exchange Initiative. The Fall events have not had retailer participation, therefore savings budgeted by the LDCs have not materialized.
- Evaluation, Measurement, and Verification (EMV) results indicated that the value of savings for retired room air conditioners (AC) has dropped resulting in the retail participant not accepting window A/C's during the Spring 2013 event.
- Notification regarding retailer participation and eligible measures continues to be delayed. Improved communications will aid in appropriate resource allocation and marketing of the Initiative.
- This Initiative may benefit from the disengagement of the retailer and allowing LDCs to conduct these events, possibly as part of a larger community engagement effort, with the backing of ARCA for appliance removal.
- The initiative appears to require more promotion from retailers and LDCs.

### **3.2.1.3      *HVAC Incentives Initiative (Exhibit B)***

#### **Initiative Activities/Progress:**

Centre Wellington Hydro has included a link to the saveONenergy website on our web page to promote all CDM programs. Centre Wellington Hydro included a buck slip in the customer's bills in August/September, 2012 for HVAC and Appliance Retirement programs. These buck slips were also routinely given out at the front counter and are available in the reception vestibule to be picked up.

Centre Wellington Hydro advertised Appliance Retirement, HVAC, Home Assistance and saveONenergy for Business on the Weather Network from June – December 2012.

Centre Wellington Hydro advertised in two local newspapers, Fergus-Elora News Express and The Wellington Advertiser each month switching between Appliance Retirement and HVAC from July – December 2012.

Centre Wellington Hydro also had a booth at the local Home Show promoting all conservation programs as well as TOU.

**Additional Comments:**

- Incentive levels appear to be insufficient to prompt Participants to upgrade HVAC equipment prior to end of useful life. It is hoped that the introduction of an Air Miles incentive in 2013 may help with this.
- This Initiative is contractor driven with LDCs responsible for marketing efforts to customers. More engagement with the HVAC contractor channel should be undertaken to drive a higher proportion of furnace and CAC sales to eligible units.
- Channel partners require timeliness of the rebate process to maintain a positive relationship between consumers, contractors, the OPA, and the participating LDC. Due to a contracting delay, no applications were processed from approximately the end of October 2012 to February 2013.
- LDC HVAC reports have been delayed and are not as complete and accurate as are required by LDCs to make adjustments to their marketing strategies.
- In an effort to build capacity, mandatory training has been instituted for all participating HVAC contractors. This could present too much of a barrier for participation for some contractors as the application process already presents a restriction to contractor sales. It has been noted that there are approximately 4500-5000 HVAC contractors in the Province, however only 1500 are participating in this program.
- There are cases where non-participating contractors are offering their own incentives (by discounting their installations to match value of the OPA incentive) to make the sale. As this occurs outside of the Initiative, these installations are not attributed to the LDC target, impacting on the ability to achieve target.

**3.2.1.4 Conservation Instant Coupon Initiative (Exhibit A)**

**Initiative Activities/Progress:**

Centre Wellington Hydro has included a link to the saveONenergy website on our web page to promote all CDM programs. Centre Wellington Hydro handed out coupons at the front counter.

**Additional Comments:**

- This Initiative was ineffective for most of 2012 as the Instant coupons (annual) were not available to consumers until September 2012. As such, savings were not what they could have been.
- The timeframe for retailer submission of redeemed coupons vary from retailer to retailer and in some cases has been lengthy. The delays and incomplete results reporting limits the ability to react and respond to Initiative performance or changes in consumer behaviour. This also resulted in the delayed launch of the Initiative in 2012.
- Coupon booklets were not printed and mailed out in 2012. As such, Coupons were not widely available to consumers without the ability to download and print them. Printing of the coupons by customers can be another barrier to utilization.
- Without Provincial coupon distribution, and delay in Initiative launch, consumers may not have been aware of the online coupons. This Initiative could benefit from provincial marketing as a substitute to distribution.
- LDCs should be able to custom code all coupons to provide 100% allocation and push specific coupons based on localized needs.
- The product list could be distinctive from the Bi-Annual Retailer Event Initiative in order to gain more consumer interest and uptake.
- Program evolution, including new products and review of incentive pricing for the coupon Initiatives, should be a regular activity to ensure continued consumer interest.
- Coupon initiatives can be effective however a coordinated program maintaining profile of the coupon program in both spring and fall is required to help to maintain consumer interest and to maintain an awareness of energy efficient devices.

**3.2.1.5 *Bi-Annual Retailer Event Initiative (Exhibit C)*****Initiative Activities/Progress:**

Centre Wellington Hydro did not have any direct involvement in these events however Centre Wellington Hydro has included a link to the saveONenergy website on our web page to promote all CDM programs.

**Additional Comments:**

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



- Limited engagement of local retailers can restrict the savings potential for this Initiative.
- Program evolution, including new products and review of incentive pricing for the coupon Initiatives, must be a regular activity to ensure continued consumer interest.
- The Product list could be distinctive from the Conservation Instant Coupon Initiative in order to gain more consumer interest and uptake.
- A review conducted by the Residential Working Group in Q4 2011 identified three areas of need for Initiative evolution: 1) introduction of product focused marketing; 2) enhanced product selection and 3) improved training for retailers as retail staff tend not to be knowledgeable regarding the products or promotion.
- LDCs should be able to custom code all coupons to provide 100% allocation and push specific coupons based on localized needs.
- Communications regarding retailer participation continues to be delayed. Improved communications will aid in appropriate resource allocation and marketing of the Initiative.
- This Initiative may benefit from a more exclusive relationship with a retailer appropriate to the program. There should be a value proposition for both the retailer and LDC.

### **3.2.1.6      *Retailer Co-op***

#### **Initiative Activities/Progress:**

Centre Wellington Hydro did not have any direct involvement in this initiative however Centre Wellington Hydro has included a link to the saveONenergy website on our web page to promote all CDM programs.

#### **Additional Comments:**

- This is a retailer Initiative with limited benefit to the LDCs
- Limited engagement of local retailers can restrict the savings potential for this Initiative.
- The availability of retailer and/or LDC staff with product knowledge and the ability to conduct in store demonstrations during the events would be an asset. While this could be a valuable role for LDCs, in many smaller centers the number of customers engaged at an event is quite low impacting on the benefits of assigning resources to deliver.

### **3.2.1.7      *New Construction Program (Schedule B-2)***

#### **Initiative Activities/Progress:**

Centre Wellington Hydro did not have any direct involvement in this program however Centre Wellington Hydro has included a link to the saveONenergy website on our web page to promote all CDM programs.

**Additional Comments:**

- This Initiative provides incentives to home builders for incorporating energy efficiency into their buildings. To support this, LDCs need to provide education to the consumers regarding the importance of choosing the energy efficient builder upgrade options without an immediate benefit to the consumer.
- Following limited participation in 2011, the application process was revisited in 2012 to streamline administration in response to builder feedback. Participation levels are expected to grow but there will be a lag to when results materialize as homes pre-approved could take a year or more to be completed.
- Smaller contractors have not seen the cost benefit to participate in the program for the small number of homes they build.
- Administrative requirements, in particular individual home modeling, must align with perceived stakeholder payback. As per the EDA Working Groups, changes are being processed through change management for 2012. However, the lengthy change management process has resulted in continued non-participation from builders.

**3.2.1.8 Residential Demand Response Program (Schedule B-3)**

**Initiative Activities/Progress:**

An RFP for CHEC LDCs was prepared and out to market in December 2012. Delay in going to market was based on the state of available technology. Concerns existed with the ability of the available technology to meet consumer and LDC needs for a lasting benefit. Issues included: devices utilizing batteries and battery life and replacement; inability to change rate structure remotely and the ability of customers to make the changes; integration with existing smart meter systems to provide a state of the art solution rather than merely moving forward to meet the requirements of the program delivery.

The RFP was released late in 2012 to engage providers and to finalize technology to commence the delivery of the program in 2013. The initial year would allow any technology issues to be resolved, marketing of the program to begin and initial installations. The bulk of installations are anticipated to occur in 2014.

**Additional Comments:**

- 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 (IHD) 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 or later which has resulted in delayed savings.
- Smart Meters installed by most LDCs do not have the capability to communicate directly to an IHD. When proposing technical Initiatives that rely on existing LDC hardware or technology, there should be an extensive consultative process.
- 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.
- The variable funding associated with installing a load controllable thermostat is not sufficient unless it is combined with an IHD which might not be possible all the time and when an IHD is optional.
- This is the main Initiative within the Residential portfolio that drives peak savings for LDCs.
- Given the different LDCs smart meter environments and needs, each LDC is positioning the Initiative slightly different. As such, greater program flexibility is required to address unique LDC needs.
- Provincial wide marketing needs to be sensitive to the variations of the Initiative and provide solid, consistent messaging.
- There currently is not an avenue for participants without the ability to provide demand response capabilities to obtain an IHD and gain energy saving benefits.

### 3.2.2 COMMERCIAL AND INSTITUTIONAL PROGRAM

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

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

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

**Discussion:**

Throughout 2011 and 2012 the Commercial and Institutional (C&I) Working Group has strived to enhance the existing C&I programs and rectify identified program and system deficiencies. This has proven to be a challenging undertaking, normally taking months to complete sometimes relatively minor changes due to the current CDM framework. Overbuilt governance, numerous initiative requirements, complex program structure and lengthy change management have restricted growth without providing the anticipated improved Measurement and Verification results. In addition, Evaluation, Measurement and Verification (EM&V) has not yet achieved transparency. LDCs are held accountable for these results yet are mostly completely removed from the process.

LDC program management has been hampered by varying rule interpretation, limited marketing ability, a somewhat inflexible online system of checks and balances and revolving OPA support personnel.

The results show that while the kWh savings was higher than expected the kW is continuing to be a challenge and was lower than we had planned for.

Despite these challenges the C&I Working Group, working in cooperation with the OPA, have managed to iron out many of the issues which could be rectified. In particular, an accomplishment of 2012 was the advent of the expedited change management as means to accelerate certain program changes.

The C&I portfolio continues to offer one of the best avenues for savings for LDCs with a good C&I sector and will continue to be focused on over the remaining program years.

During 2012 Centre Wellington Hydro along with other CHEC LDCs received funding for a Roving Energy Manager (REM) to assist member LDCs. This key resource provides CHEC members the ability to offer energy assessments, saving evaluations and program recommendations to C&I customers. The resource has the knowledge base to assist industrial and commercial customers to identify savings and implement programs to achieve savings while taking the customer's needs into consideration.

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

While promotion of the program was limited the prior activity and customer engagement continued to maintain a profile of the ERII program. This program was primarily promoted by direct contact with large customers. The completion of a number of retrofit projects has assisted Centre Wellington in moving forward in both the peak and energy targets. Later in the year the hiring of a REM by CHEC has allowed further focus on the ERII Initiative.

**Additional Comments:**

- It appears that the marketplace largely understands the programs now and a large proportion of LDC savings are attributed to ERII.

- The centralized process review used for 2012 project payment has been streamlined by the OPA and payments for projects were greatly improved – faster and more consistent compared to 2011.
- This Initiative is limited by the state of the economy and the ability of commercial/institutional facility to complete capital upgrades.
- A number of customer facing issues in CRM (the OPA centralized application system) have been resolved; however key LDC administrative back office processing issues continue to be a challenge.
- Applicants and Applicant Representatives continue to express dissatisfaction and difficulty with the online application system. This issue has been addressed by LDCs through application training workshops, Key Account Managers, channel partner/contractor training and LDC staff acting as customer Application Representatives. Although this has been an effective method of overcoming these issues and encouraging submissions, it also reflects on the complexity and time consuming nature of the application process. As such, Applicant Representatives continue to influence the majority of applications submitted. Continued development of Channel Partners is essential to program success.
- Lighting is still the most popular measure. Other market sectors are not as engaged yet, specifically the mechanical world. There continues to be significant barriers to program participation from HVAC (Unitary AC) and compressed air channel partners.
- Prescriptive and Engineered worksheets provide a much needed simplified application process for customers. However, the eligible measures need to be updated and expanded in both technology and incentive amounts to address changing product costs and evolution of the marketplace.
- Expanding the capacity of the engineered applications can offer customers an opportunity to maximize savings and incentives. Recognizing this, Toronto Hydro and London Hydro worked together to develop and provide the OPA with compressed air engineered worksheets for inclusion in the Initiative in Q3, 2012. To date, these have not been accepted and provided to LDCs for use.
- While the Ministerial Directive provides continuity of the conservation programs for the participant to the end of 2015, unclear direction on LDC administrative funding could result in many LDCs ‘ramping down’ programs in 2015. The establishment of defined administrative funding for 2015 is required to avoid a “stop and start” process.
- Further, the extension of the program will most likely remove the pressure on C&I customers to initiate and complete projects by December 2014 impacting on the LDC target achievement. Towards the end of the past programs, an increase in projects was seen. Such a spike in project activity is unlikely to occur in 2014 due to the extension.

### **3.2.2.2      *Direct Install Initiative (DIL) (Schedule C-3)***

#### **Initiative Activities/Progress:**

Center Wellington Hydro promoted this program through direct door-to-door contact which has been demonstrated as one of the most effective manners to engage the customer in this program. Participation in this program has remained relatively strong. Centre Wellington Hydro has included a link to the saveONenergy website on our web page to promote all CDM programs.

#### **Additional Comments:**

- Successful execution of the previous rendition of this Initiative has resulted in diminished potential for the 2011-2014 Initiative in some LDC's territories.
- The inclusion of a standard incentive for additional measures increased project size and drove higher energy and demand savings results in some situations.
- Electrical contractor's margins have been reduced due to no labour rate increase, increase cost of materials, greater distances between retrofits, more door knocking required before a successful sale and no funding for lifts. This has led to a reduction in vendor channel participation in some regions and LDC needing to reach out to other contractors.
- Ambiguity with regard to eligibility resulted in large lists of customers rejected following installation due to perceived ineligibility. Due to this, some LDCs were forced to carry considerable financial burden while this was worked through.
- The eligibility requirements have now been revamped and expanded however, there has been limited communication and documentation of this to the marketplace.
- Currently LDCs are unable to offer these standard incentives to prior participants. The ability to return to prior participants and offer a standard incentive on the remaining measures has potential to provide additional energy and demand savings. Within the scope of returning to a previous customer, contractor funding is required beyond merely the mark up on material.

### **3.2.2.3      *Existing Building Commissioning Incentive Initiative (Schedule C-6)***

#### **Initiative Activities/Progress:**

General promotion of this initiative with similar programs was utilized. The opportunity for chilled water systems is limited in Centre Wellington Hydro service territory.

**Additional Comments:**

- Initiative name does not properly describe the Initiative.
- There was minimal participation for this Initiative. It is suspected that the lack of participation in the program is a result of the Initiative being limited to space cooling and a limited window of opportunity (cooling season) for participation.
- Participation is mainly channel partner driven, however the particulars of the Initiative have presented too significant of a barrier for many channel partners to participate.
- The customer expectation is that the program be expanded to include a broader range of measures for a more holistic approach to building re-commissioning and chilled water systems used for other purposes should be made eligible and considered through Change Management.
- This initiative should be reviewed for incentive alignment with ERII, as currently a participant will not receive an incentive if the overall payback is less than 2 years.

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

This program is dependent upon the type of development and renovations proposed in the service territory. Development is monitored to determine projects available for this program.

**Additional Comments**

- There is typically a long sales cycle for these projects, and then a long project development cycle. As the program did not launch until mid-2011 and had limited participation, results did not appear in 2011. Minimum results are expected to appear in 2012. The majority of the results are expected in 2013-2014, with a reduced benefit to cumulative energy savings targets.
- With the Ministerial Directive, facilities with a completion date near the end of 2014 currently have some security that they will be compensated for choosing efficient measures if completion is delayed.
- Participants estimated completion dates tend to be inaccurate and are usually 6 months longer. This could result in diminished savings towards target when facilities are not substantially completed by December 31, 2014.
- The custom application process requires considerable customer support and skilled LDC staff. Many LDCs are unsure how these project applications will be finalized beyond 2014 if administrative funding is not extended.

- The effort required to participate through the custom stream exceeds the value of the incentive for many customers.
- This Initiative has a very low Net-to-Gross ratio, which results in half the proposed target savings being 'lost'.

### **3.2.2.5 Energy Audit Initiative**

#### **Initiative Activities/Progress:**

To the end of 2012 no applications were received, however it is realized the planning window may take some time for customers to implement. In addition, the assistance of the REM may increase the audit applications.

- The energy audit Initiative is considered an 'enabling' Initiative and 'feeds into' other saveONenergy Initiatives. There are no savings attributed to LDC targets from an audit.
- Audit reports from consultants vary considerably and in some cases, while they adhere to the Initiative requirements, do not provide value for the Participant. A standard template with specific energy saving calculation requirements should be considered.
- Customers look to the LDCs to recommend audit companies. A centralized prequalified list provided by the OPA may be beneficial.
- Participants are limited to one energy audit which restricts enabling and direction to the other Initiatives. This Initiative should be evaluated for additional customer participation when presented with a new scope of work.

### **3.2.3 INDUSTRIAL PROGRAM**

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

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

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

**Discussion:**



The Industrial Program Portfolio has been able to provide valuable resources to large facilities such as Energy Managers and enabling Engineering Studies. The Engineering Studies in particular provide a unique opportunity for a customer to complete a comprehensive analysis of an energy intensive process that they would not otherwise be able to undertake. Energy Managers provide customers with a skilled individual whose only role is to assist them with conservation initiatives. To date, these Energy Managers have played a key role in customer participation.

Within the service territory of Centre Wellington Hydro there are a limited number of customers who can take advantage of the industrial portfolio of programs. In many instances the focus has been on the ERII program from the C&I Programs. The promotion of industrial programs will be assisted with the services of the CHEC REM, a position which was filled in the 3<sup>rd</sup> quarter of 2012.

Due to the size, scope and long lead time of these Initiatives and associated projects, the Ministerial Directive provides some security for the continuation of the conservation programs and associated compensation for the participant; however, the subsequent savings would not be attributed to any LDC target.

Extensive legal documents, complex program structure and lengthy change management have restricted the change and growth of this Portfolio. While the expedited change management has benefited the Commercial Portfolio, the Industrial Portfolio has not seen the same results due to the narrow scope of the process. For 2013, a change to the threshold for small capital projects and a new small capital project agreement are expected to improve the number of projects and savings achieved within Process & Systems Upgrades Initiative (PSUI). Likewise, a decision to proceed with natural gas load displacement generation projects will also increase uptake although results may not be counted towards LDC targets due to in-service dates beyond 2014. Looking ahead there is minimal opportunity to make additional valuable changes to the current program suite and have these changes reflected in LDC 2014 results.

### **3.2.3.1 Process & Systems Upgrades Initiative (PSUI) (Schedule D-1)**

#### **Initiative Activities/Progress:**

Centre Wellington Hydro has had no applications for PSUI to date. It is anticipated that if this initiative is a viable option for our customers the REM will advise during site visits over the next year.

#### **Additional Comments:**

- Approximately 100 engineering study applications have been submitted across the province. This is a strong indication that there is the potential for large projects with corresponding energy savings. Most of these studies have been initiated through the Energy Manager and KAM resources.
- Within smaller service territories there is limited customer base to participate in this initiative.
- This Initiative is limited by the state of the economy and the ability of a facility to complete large capital upgrades.

- The contract required for PSUI is a lengthy and complicated document. A key to making PSUI successful is a new agreement for 'small' projects which is simplified with less onerous conditions for the customer.
- To partially address this, changes were made to the ERII Initiative which allowed smaller projects to be directed to the Commercial stream. Most industrial projects to-date have been submitted as ERII projects due to less onerous contract and M&V requirements. With smaller customers the ERII application is the most common approach.
- A business case was submitted by the Industrial Working Group in July 2012 which would change the upper limit for a small project from 700 MWh to 1 million dollars in incentives. This would allow more projects to be eligible for the new small capital project agreement and increase participant uptake, while still protecting the ratepayer. To the end of 2012 this change was not implemented.
- While there was considerable customer interest in on-site Load Displacement (Co-Generation) projects, in 2012 the OPA was accepting waste heat/waste fuel projects only. Natural gas generation projects were on hold awaiting a decision on whether PSUI will fund these types of projects. In June 2013, a decision was made to allow natural gas load displacement generation projects to proceed under PSUI. It is expected that a number of projects will proceed although results may not be counted towards LDC targets due to in-service dates beyond 2014.

### **3.2.3.2      *Monitoring & Targeting Initiative (M&T) (Schedule D-2)***

#### **Initiative Activities/Progress:**

The hiring of a REM for CHEC LDCs will assist with this initiative moving forward.

#### **Additional Comments:**

- The M&T initiative is targeted at larger customers with the capacity to review the M&T data. This review requires the customer facility to employ an Energy Manager, or a person with equivalent qualifications, which has been a barrier for some customers. As such, a limited number of applications have been received to date.
- The savings target required for this Initiative can present a significant challenge for smaller customers.
- Through the change management process in 2013, changes are being made to ERII to allow smaller facilities to employ M&T systems.

### **3.2.3.3 Energy Manager Initiative (Schedule D-3)**

#### **Initiative Activities/Progress:**

CHEC LDCs applied for a REM position in June of 2011 and received approval in mid- 2012. Following a selection process a REM was engaged by CHEC LDCs in September of 2012. The remainder of 2012 allowed the REM to become familiar with the 12 CHEC LDC service territories and to commence contacting customers of interest.

#### **Additional Comments:**

- The REM has proven to be a popular and useful resource for larger customers. CHEC LDCs hired a REM to be shared by the group of utilities.
- At the beginning, it took longer than expected to receive approval of the REM position and unclear communication resulted in marketing and implementation challenges. This delay impacts on the number of customers which can be contacted over the remaining program period and the kWh savings achieved under this initiative.
- Two rounds of advertising and interviews were completed prior to hiring a suitable candidate for the REM position.
- New energy managers require training, time to familiarize with facilities and staff and require time to establish “credibility”. The REM started filling the pipeline with projects but no projects were implemented in 2012.
- Requirement that 30% of target must come from non-incented projects is identified as an issue for most REMs. Working group has proposed to remove this requirement for REM’s only as they are not resident full time at a customer facility to find the non-incented savings.
- A decision on extending funding for Energy Managers is required in 2013 for this important Initiative, which should continue beyond 2014, failing which these expert resources will be lost in favour of full-time employment elsewhere.

### **3.2.3.4 Key Account Manager (KEM)(Schedule D-4)**

#### **Initiative Activities/Progress:**

Large accounts not contained in service territory

#### **Additional Comments**

### **3.2.3.5 Demand Response 3 (DR3)(D-6)**

#### **Initiative Activities/Progress:**

Marketing has been limited with DR3 noted with other industrial programs in literature and on website. REM is including DR3 within discussions with customers.

#### **Additional Comments:**

- Until early 2013 customer data was not provided on an individual customer basis due to contractual requirements with the aggregators. This limited LDCs' ability to effectively market to prospective participants and verify savings.
- No program improvements were made in 2012 however, it was accepted that prior participants who renew their DR3 contract within the 2011-2014 term will contribute to LDC targets.
- As of 2013, Aggregators are able to enter into contracts beyond 2014. This has allowed them to offer a more competitive contract price (5 year) than if limited to 1 or 2 year contracts.
- Metering and settlement requirements are expensive and complicated and can reduce customer compensation amounts, and present a barrier to smaller customers.
- Compensation amounts for new contracts and renewals have been reduced from the initial launch of this program (premium zones and 200 hour option have been discontinued) and subsequently there has been a corresponding decrease in renewal revenue. This can impact on customers remaining in the program.

### **3.2.4 LOW INCOME INITIATIVE (HOME ASSISTANCE PROGRAM) (HAP) (Schedule E-1)**

#### **Initiative Activities/Progress:**

The CHEC RFP for services to deliver the Home Assistance Program (HAP) was released in November of 2011 with award of contract in December 2011. Program set up and delivery commenced in 2012 by the Service Provider. During this time the coordination and initial set up of the program took longer than anticipated resulting in delay into market with limited results over the first year. Meetings were held with local social service providers along with general marketing of the program.

#### **Additional Comments:**

- Awareness of the program amongst social agencies took time to develop. Centralized payment processes were not developed in 2011. The payment process was established in 2012.
- The process for enrolling in social housing was complicated and time consuming. This was addressed in late 2012 and is showing benefits in 2013.

- The financial scope, complexity, and customer privacy requirements of this Initiative are challenging for LDCs and most have contracted this program out. This Initiative may benefit from an OPA contracted centralized delivery agent.
- The lack of deep installs has been surprising. Much of the savings appear to be on lighting which was not the anticipated focus of the program.

### **3.2.5 PRE-2011 PROGRAMS**

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

## 4 2012 LDC CDM Results

### 4.1 Participation and Savings

Table 1:

Table 1: Centre Wellington Hydro Ltd. Initiative and Program Level Savings by Year (Scenario 1)

| Initiative  | Unit       | Incremental Activity<br>(new program activity occurring within the specified reporting period) |       |      |      | Net Incremental Peak Demand Savings (kW)<br>(new peak demand savings from activity within the specified reporting period) |            |      |      | Net Incremental Energy Savings (kWh)<br>(new energy savings from activity within the specified reporting period) |                  |      |      | Program-to-Date Verified Progress to Target<br>(excludes DR) |   |                  |
|---|------------|--|-------|------|------|---|------------|------|------|--|------------------|------|------|--|---|------------------|
|   |            | 2011   | 2012  | 2013 | 2014 | 2011  | 2012       | 2013 | 2014 | 2011   | 2012             | 2013 | 2014 | 2014 Net Annual Peak Demand Savings (kW)                     | 2011-2014 Net Cumulative Energy Savings (kWh) |                  |
|   |            |  |       |      |      |   |            |      |      |  |                  |      |      | 2014   | 2014  |                  |
| <b>Consumer Program</b>   |            |  |       |      |      |   |            |      |      |  |                  |      |      |  |   |                  |
| Appliance Retirement  | Appliances | 85   | 76    |      |      | 5   | 5          |      |      | 35,189   | 29,800           |      |      | 10   | 229,952                                       |                  |
| Appliance Exchange  | Appliances | 7  | 41    |      |      | 1   | 6          |      |      | 986  | 10,402           |      |      | 6  | 34,757  |                  |
| HVAC Incentives   | Equipment  | 140  | 109   |      |      | 44  | 28         |      |      | 84,048   | 51,118           |      |      | 71   | 489,548                                       |                  |
| Conservation Instant Coupon Booklet   | Items      | 565  | 35    |      |      | 1   | 0          |      |      | 21,107   | 1,579            |      |      | 2  | 89,163  |                  |
| Bi-Annual Retailer Event  | Items      | 983  | 1,198 |      |      | 2   | 2          |      |      | 33,185   | 30,242           |      |      | 4  | 223,467                                       |                  |
| Retailer Co-op  | Items      | 0  | 0     |      |      | 0   | 0          |      |      | 0  | 0                |      |      | 0  | 0   |                  |
| Residential Demand Response (switch/pstat)  | Devices    | 0  | 0     |      |      | 0   | 0          |      |      | 0  | 0                |      |      | 0  | 0   |                  |
| Residential Demand Response (IHD)   | Devices    | 0  | 0     |      |      | 0   | 0          |      |      | 0  | 0                |      |      | 0  | 0   |                  |
| Residential New Construction  | Homes      | 0  | 0     |      |      | 0   | 0          |      |      | 0  | 0                |      |      | 0  | 0   |                  |
| <b>Consumer Program Total</b>   |            |  |       |      |      | <b>53</b>   | <b>40</b>  |      |      | <b>174,514</b>   | <b>123,142</b>   |      |      | <b>92</b>  | <b>1,066,887</b>                              |                  |
| <b>Business Program</b>   |            |  |       |      |      |   |            |      |      |  |                  |      |      |  |   |                  |
| Retrofit  | Projects   | 1  | 15    |      |      | 3   | 133        |      |      | 16,911   | 446,895          |      |      | 109  | 1,274,410                                     |                  |
| Direct Install Lighting   | Projects   | 34   | 58    |      |      | 43  | 56         |      |      | 117,589  | 217,953          |      |      | 90   | 1,093,835                                     |                  |
| Building Commissioning  | Buildings  | 0  | 0     |      |      | 0   | 0          |      |      | 0  | 0                |      |      | 0  | 0   |                  |
| New Construction  | Buildings  | 0  | 0     |      |      | 0   | 0          |      |      | 0  | 0                |      |      | 0  | 0   |                  |
| Energy Audit  | Audits     | 0  | 0     |      |      | 0   | 0          |      |      | 0  | 0                |      |      | 0  | 0   |                  |
| Small Commercial Demand Response  | Devices    | 0  | 0     |      |      | 0   | 0          |      |      | 0  | 0                |      |      | 0  | 0   |                  |
| Small Commercial Demand Response (IHD)  | Devices    | 0  | 0     |      |      | 0   | 0          |      |      | 0  | 0                |      |      | 0  | 0   |                  |
| Demand Response 3   | Facilities | 1  | 1     |      |      | 16  | 17         |      |      | 622  | 254              |      |      | 0  | 876   |                  |
| <b>Business Program Total</b>   |            |  |       |      |      | <b>62</b>   | <b>207</b> |      |      | <b>137,122</b>   | <b>665,102</b>   |      |      | <b>199</b>   | <b>2,369,121</b>                              |                  |
| <b>Industrial Program</b>   |            |  |       |      |      |   |            |      |      |  |                  |      |      |  |   |                  |
| Process & System Upgrades   | Projects   | 0  | 0     |      |      | 0   | 0          |      |      | 0  | 0                |      |      | 0  | 0   |                  |
| Monitoring & Targeting  | Projects   | 0  | 0     |      |      | 0   | 0          |      |      | 0  | 0                |      |      | 0  | 0   |                  |
| Energy Manager  | Projects   | 0  | 0     |      |      | 0   | 0          |      |      | 0  | 0                |      |      | 0  | 0   |                  |
| Retrofit  | Projects   | 0  | 0     |      |      | 0   | 0          |      |      | 0  | 0                |      |      | 0  | 0   |                  |
| Demand Response 3   | Facilities | 0  | 0     |      |      | 0   | 0          |      |      | 0  | 0                |      |      | 0  | 0   |                  |
| <b>Industrial Program Total</b>   |            |  |       |      |      | <b>0</b>  | <b>0</b>   |      |      | <b>0</b>   | <b>0</b>         |      |      | <b>0</b>   | <b>0</b>                                      |                  |
| <b>Home Assistance Program</b>  |            |  |       |      |      |   |            |      |      |  |                  |      |      |  |   |                  |
| Home Assistance Program   | Homes      | 0  | 0     |      |      | 0   | 0          |      |      | 0  | 0                |      |      | 0  | 0   |                  |
| <b>Home Assistance Program Total</b>  |            |  |       |      |      | <b>0</b>  | <b>0</b>   |      |      | <b>0</b>   | <b>0</b>         |      |      | <b>0</b>   | <b>0</b>                                      |                  |
| <b>Pre-2011 Programs completed in 2011</b>  |            |  |       |      |      |   |            |      |      |  |                  |      |      |  |   |                  |
| Electricity Retrofit Incentive Program  | Projects   | 5  | 0     |      |      | 115   | 0          |      |      | 662,465  | 0                |      |      | 115  | 2,649,862                                     |                  |
| High Performance New Construction   | Projects   | 0  | 0     |      |      | 0   | 0          |      |      | 475  | 124              |      |      | 0  | 2,272   |                  |
| Toronto Comprehensive   | Projects   | 0  | 0     |      |      | 0   | 0          |      |      | 0  | 0                |      |      | 0  | 0   |                  |
| Multifamily Energy Efficiency Rebates   | Projects   | 0  | 0     |      |      | 0   | 0          |      |      | 0  | 0                |      |      | 0  | 0   |                  |
| LDC Custom Programs   | Projects   | 0  | 0     |      |      | 0   | 0          |      |      | 0  | 0                |      |      | 0  | 0   |                  |
| <b>Pre-2011 Programs completed in 2011 Total</b>  |            |  |       |      |      | <b>115</b>  | <b>0</b>   |      |      | <b>662,941</b>   | <b>124</b>       |      |      | <b>115</b>   | <b>2,652,134</b>                              |                  |
| <b>Other</b>  |            |  |       |      |      |   |            |      |      |  |                  |      |      |  |   |                  |
| Program Enabled Savings   | Projects   | 0  | 0     |      |      | 0   | 0          |      |      | 0  | 0                |      |      | 0  | 0   |                  |
| Time-of-Use Savings   | Homes      |  |       |      |      |   |            |      |      |  |                  |      |      |  |   |                  |
| <b>Other Total</b>  |            |  |       |      |      | <b>0</b>  | <b>0</b>   |      |      | <b>0</b>   | <b>0</b>         |      |      | <b>0</b>   | <b>0</b>                                      |                  |
| <b>Adjustments to Previous Year's Verified Results</b>  |            |  |       |      |      |   |            |      |      |  |                  |      |      |  |   |                  |
|   |            |  |       |      |      |   | 33         |      |      |  | 268,979          |      |      | 33   | 1,075,916                                     |                  |
| <b>Energy Efficiency Total</b>  |            |  |       |      |      | <b>214</b>  | <b>230</b> |      |      | <b>973,955</b>   | <b>788,113</b>   |      |      | <b>406</b>   | <b>6,087,265</b>                              |                  |
| <b>Demand Response Total (Scenario 1)</b>   |            |  |       |      |      | <b>16</b>   | <b>17</b>  |      |      | <b>622</b>   | <b>254</b>       |      |      | <b>0</b>   | <b>876</b>                                    |                  |
| <b>OPA-Contracted LDC Portfolio Total (inc. Adjustments)</b>  |            |  |       |      |      | <b>229</b>  | <b>280</b> |      |      | <b>974,577</b>   | <b>1,057,347</b> |      |      | <b>439</b>   | <b>7,164,058</b>                              |                  |
| <p>Activity &amp; savings for Demand Response resources for each year and quarter represent the savings from all active facilities or devices contracted since January 1, 2011.</p> <p>Due to the limited timeframe of data, which didn't include the summer months, 2012 IHD results have been deemed inconclusive. The IHD line item on the 2012 annual report will be left blank. Once a full year of data is available (2013 evaluation), and the savings are quantified, 2012 results will be updated to reflect the quantified savings.</p> |            |  |       |      |      |   |            |      |      |  |                  |      |      | <b>Full OEB Target:</b>                                      | <b>1,640</b>                                  | <b>7,810,000</b> |
| <b>% of Full OEB Target Achieved to Date (Scenario 1):</b>  |            |  |       |      |      |   |            |      |      |  |                  |      |      | <b>26.8%</b>   | <b>91.7%</b>                                  |                  |

**Table 2: Summarized Program Results**

Table 2 does not include gross numbers as the measure towards target is the net savings. Standard EM&V methods have been applied by the OPA to determine the net figures which are outlined in this report.

| Program  | Net Savings                          |                                  | Contribution to Targets                                      |  |
|--|--------------------------------------|----------------------------------|--|--|
|  | Incremental Peak Demand Savings (MW) | Incremental Energy Savings (GWh) | Program-to-Date: Net Annual Peak Demand Savings (MW) in 2014 | Program-to-Date: 2011-2014 Net Cumulative Energy Savings (GWh) |
| Consumer Program Total   | .04                                  | .12                              | .09  | 1.07   |
| Business Program Total   | .21                                  | .67                              | .20  | 2.37   |
| Industrial Program Total   | 0                                    | 0                                | 0  | 0  |
| Home Assistance Program Total  | 0                                    | 0                                | 0  | 0  |
| Pre-2011 Programs completed in 2011 Total (includes adjustments to Previous Year's Verified Results) |                                      | .27                              | .15  | 3.73   |
| <b>Total OPA Contracted Province-Wide CDM Programs</b>   | <b>.25</b>                           | <b>1.06</b>                      | <b>.44</b>   | <b>7.16</b>  |

## 4.2 Evaluation

August 30, 2013

### Final 2012 EM&V Findings

The following document provides a summary of the 2012 EM&V findings for all of the evaluated *saveONenergy* initiatives.

#### Consumer Program

##### Bi-Annual Coupons

- 15% lower net savings due to a change in the net-to-gross factors (increased free-ridership, less participant behavior spillover, and less non-participant like spillover).
- Majority of participation, energy, & demand savings are from standard CFLs.
- 15% of net savings due to ~73,000 coupons for new LED measures.

##### Annual Coupons

- The number of coupons associated with the redemption of 2012 Annual Coupons was 90% lower than 2011 Instant Coupon Booklet. Key factors for the decrease include:
  - Shorter duration of available coupons (September 2012 – December 2012)
  - In 2012, only online coupons were available
    - 2011 had both online coupons AND coupon mailing booklets.

##### HVAC

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

##### Appliance Retirement

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

##### Appliance Exchange

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

##### *peaksaverPLUS*

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



August 30, 2013

- Evaluation to date has indicated savings from in-home displays (IHDs) are not statistically significant (in and around zero).
  - However, since 2012 evaluation did not include full year analysis (specifically the summer months), these results have been deemed inconclusive.
- The IHD offer had a positive influence on enrollment and re-enrollment with between 20 to 35% of new enrollees said they wouldn't have enrolled without the IHD offer.

#### ***Residential New Construction***

- All projects are opting for the prescriptive or performance path - there have been no custom project applications to date.

### **Business Programs**

#### **Retrofit**

- Reported savings for prescriptive lighting projects continue to be overstated:
  - Verified wattage reductions were 15% higher than assumed; and
  - Verified operating hours were 11% higher than assumed.
- A lower realization rate in the engineered measure track can be partially explained by overstated lighting operation hour assumptions reported on the application.
- Net-to-gross ratios for the initiatives were above 75% in 2012, which is consistent with 2011.

#### **Small Business Lighting**

- Reported hours of usage continue to be inaccurate - only 12% of site visits had verified annual hours of use within +/-10% of the assumed value.
- The saturation of eligible customers and preferred business types are resulting in participation from building types that may not fully operate during the summer peak period.
  - This trend contributes to lower realization rates for demand savings in 2012.
- Due to changing regulations in lighting measures, the assumed baseline technology will eventually be phased out. This regulation impacts the persistence of savings over the lifetime of lighting measures.

#### **Existing Building Commissioning (EBC)**

- There were no applications in 2012.
- Market feedback suggests that EBC's focus on chilled-water space-cooling systems may be too narrow, and participation could be expanded by incenting a wider range of measures.

#### **New Construction**

- Custom projects account for 66% of program savings, with the remainder coming from the prescriptive track.

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#### **Audit Funding Program**

- Through Audit Funding, 280 projects were completed in 2012 based on recommendations from the auditors, resulting in 1.4 MW and 7 GWh of Program Enabled Savings.
- Office buildings represented the largest portion of applicants for 2012.

#### **Industrial Programs**

##### **Process and Systems Upgrade Initiative**

- Energy managers are seen as important drivers of Program Enabled savings projects.
  - 88% of survey respondents indicated that the assistance provided by energy managers was “somewhat” or “very” important to implementing projects.
- Energy Managers indicated that additional support (additional training and guides) may further help influence the adoption of energy efficiency measures by the participants.
- Documentation for Program Enabled Savings projects varied substantially by LDC. More guidance on documentation requirements would be beneficial to all parties

##### **DR-3**

- 2012 saw improvements in the performance of DR-3 participants resulting higher *ex ante* realization rates, particularly for the industrial participants.

#### **Home Assistance Program**

- Participation in the initiative ramped up in 2012, with over 5,000 homes participating in the initiative.
- Majority of energy savings (62%) comes from lighting measures, while 21% of energy savings resulting from refrigerator and freezer replacements.

## 4.3 Spending

**Table 3: 2012 Spending**

| Initiative                                | Program Administration Budget (PAB) | Participant Based Funding (PBF) | Participant Incentives (PI) | Capability Building Funding (CBF) | TOTAL    |
|---|-------------------------------------|---------------------------------|-----------------------------|-----------------------------------|----------|
| <b>Consumer Program</b>                   |                                     |                                 |                             |                                   |          |
| Appliance Retirement                      | 2916.14                             |                                 |                             |                                   | 2916.14  |
| Appliance Exchange                        | 2916.14                             |                                 |                             |                                   | 2916.14  |
| HVAC Incentives                           | 2916.14                             |                                 |                             |                                   | 2916.14  |
| Conservation Instant Coupon Booklet       | 2916.14                             |                                 |                             |                                   | 2916.14  |
| Bi-Annual Retailer Event                  | 2916.15                             |                                 |                             |                                   | 2916.15  |
| Retailer Co-op                            | 2916.15                             |                                 |                             |                                   | 2916.15  |
| Residential Demand Response               | 2916.11                             |                                 |                             |                                   | 2916.11  |
| New Construction Program                  |                                     |                                 |                             |                                   |          |
| <b>Business Program</b>                   |                                     |                                 |                             |                                   |          |
| Efficiency: Equipment Replacement         | 3494.57                             |                                 | 51903.00                    |                                   | 55397.57 |
| Direct Installed Lighting                 | 3494.57                             | 15300.00                        | 56168.00                    |                                   | 74962.57 |
| Existing Building Commissioning Incentive | 3494.57                             |                                 |                             |                                   | 3494.57  |
| New Construction and Major                | 3494.57                             |                                 |                             |                                   | 3494.57  |

|   |         |        |        |  |         |
|---|---------|--------|--------|--|---------|
| Renovation Initiative                                       |         |        |        |  |         |
| Energy Audit  | 3494.57 |        |        |  | 3494.57 |
| Direct Service Space Cooling Initiative                     | 3494.57 |        |        |  | 3494.57 |
| Demand Response 3 (part of the Industrial program schedule) |         |        |        |  |         |
| <b>Industrial Program</b>                                   |         |        |        |  |         |
| Process & System Upgrades                                   |         |        |        |  |         |
| a) preliminary engineering study                            | 816.88  |        |        |  | 816.88  |
| b) detailed engineering study                               | 816.88  |        |        |  | 816.88  |
| c) program incentive  | 816.89  |        |        |  | 816.89  |
| Monitoring & Targeting                                      | 816.89  |        |        |  | 816.89  |
| Energy Manager  | 816.87  |        |        |  | 816.87  |
| Key Account Manager ("KAM")                                 | 816.87  |        |        |  | 816.87  |
| Demand Response 1 Initiative Schedule                       |         |        |        |  |         |
| Demand Response 3   | 816.87  |        |        |  | 816.87  |
| <b>Home Assistance Program</b>                              |         |        |        |  |         |
| Home Assistance Program                                     | 3104.43 | 400.00 | 209.00 |  | 3713.43 |
| <b>Pre 2011 Programs</b>                                    |         |        |        |  |         |
| Electricity Retrofit Incentive Program                      |         |        |        |  |         |

|   |                 |                 |                  |  |                  |
|---|-----------------|-----------------|------------------|--|------------------|
| High Performance New Construction       |                 |                 |                  |  |                  |
| Toronto Comprehensive                   |                 |                 |                  |  |                  |
| Multifamily Energy Efficiency Rebates   |                 |                 |                  |  |                  |
| Data Centre Incentive Program           |                 |                 |                  |  |                  |
| EnWin Green Suites                      |                 |                 |                  |  |                  |
| <b>Initiatives Not In Market</b>        |                 |                 |                  |  |                  |
| Midstream Electronics                   |                 |                 |                  |  |                  |
| Midstream Pool Equipment                |                 |                 |                  |  |                  |
| Demand Service Space Cooling            |                 |                 |                  |  |                  |
| Demand Response 1 (Commercial)          |                 |                 |                  |  |                  |
| Demand Response 1 (Industrial)          |                 |                 |                  |  |                  |
| Home Energy Audit Tool                  |                 |                 |                  |  |                  |
| <b>TOTAL Province-wide CDM PROGRAMS</b> | <b>50202.97</b> | <b>15700.00</b> | <b>108280.00</b> |  | <b>174182.97</b> |
|   |                 |                 |                  |  |                  |

**Table 4: Cumulative Spending (2011-2014)**

| Initiative | Program Administration Budget (PAB) | Participant Based Funding (PBF) | Participant Incentives (PI) | Capability Building Funding (CBF) | TOTAL |
|------------|-------------------------------------|---------------------------------|-----------------------------|-----------------------------------|-------|
|------------|-------------------------------------|---------------------------------|-----------------------------|-----------------------------------|-------|

| <b>Consumer Program</b>  |         |          |          |  |           |
|--|---------|----------|----------|--|-----------|
| Appliance Retirement   | 3983.02 |          |          |  | 3983.02   |
| Appliance Exchange   | 3983.02 |          |          |  | 3983.02   |
| HVAC Incentives  | 3983.01 |          |          |  | 3983.01   |
| Conservation Instant Coupon Booklet                                  | 3983.02 |          |          |  | 3983.02   |
| Bi-Annual Retailer Event   | 3983.03 |          |          |  | 3983.03   |
| Retailer Co-op   | 2916.15 |          |          |  | 2916.15   |
| Residential Demand Response  | 3982.99 |          |          |  | 3982.99   |
| New Construction Program   | 1066.87 |          |          |  | 1066.87   |
| <b>Business Program</b>  |         |          |          |  |           |
| Efficiency: Equipment Replacement                                    | 4851.49 |          | 54423.00 |  | 59274.49  |
| Direct Installed Lighting  | 4851.49 | 23970.00 | 84572.25 |  | 113393.74 |
| Existing Building Commissioning Incentive                            | 4851.49 |          |          |  | 4851.49   |
| New Construction and Major Renovation Initiative                     | 4851.49 |          |          |  | 4851.49   |
| Energy Audit   | 4851.49 |          |          |  | 4851.49   |
| Commercial Demand Response(part of the Residential program schedule) | 1356.91 |          |          |  | 1356.91   |
| Direct Service Space Cooling Initiative                              | 3494.57 |          |          |  | 3494.57   |
| <b>Industrial Program</b>  |         |          |          |  |           |

|  |         |        |        |  |         |
|--|---------|--------|--------|--|---------|
| Process & System Upgrades  |         |        |        |  |         |
| a) preliminary engineering study   | 1592.38 |        |        |  | 1592.38 |
| b) detailed engineering study  | 1592.38 |        |        |  | 1592.38 |
| c) program incentive   | 1592.39 |        |        |  | 1592.39 |
| Monitoring & Targeting   | 1592.39 |        |        |  | 1592.39 |
| Energy Manager   | 1592.37 |        |        |  | 1592.37 |
| Key Account Manager ("KAM")  | 1592.37 |        |        |  | 1592.37 |
| Efficiency: Equipment Replacement Incentive (part of the C&I program schedule) |         |        |        |  |         |
| Demand Response 3  | 1592.37 |        |        |  | 1592.37 |
| <b>Home Assistance Program</b>   |         |        |        |  |         |
| Home Assistance Program  | 3339.71 | 400.00 | 209.00 |  | 3948.71 |
| <b>Pre 2011 Programs</b>   |         |        |        |  |         |
| Electricity Retrofit Incentive Program   |         |        |        |  |         |
| High Performance New Construction  |         |        |        |  |         |
| Toronto Comprehensive  |         |        |        |  |         |
| Multifamily Energy Efficiency Rebates  |         |        |        |  |         |
| Data Centre Incentive Program  |         |        |        |  |         |
| EnWin Green Suites   |         |        |        |  |         |

| <b>Initiatives Not In Market</b>        |                 |                 |                  |  |                  |
|---|-----------------|-----------------|------------------|--|------------------|
| Midstream Electronics                   |                 |                 |                  |  |                  |
| Midstream Pool Equipment                |                 |                 |                  |  |                  |
| Demand Service Space Cooling            |                 |                 |                  |  |                  |
| Demand Response 1 (Commercial)          |                 |                 |                  |  |                  |
| Demand Response 1 (Industrial)          | <b>775.50</b>   |                 |                  |  | 775.50           |
| Home Energy Audit Tool                  |                 |                 |                  |  |                  |
| <b>TOTAL Province-wide CDM PROGRAMS</b> | <b>72251.90</b> | <b>24370.00</b> | <b>139204.25</b> |  | <b>235826.15</b> |



## 4.4 Additional Comments

The overall portfolio performance has been impacted by a number of issues. While some of these issues were noted within the initiative discussion it is important to note within the scope of the entire portfolio.

The inclusion of the REM as a resource for CHEC LDCs is seen as a significant enabler moving forward. The REM's ability to enter into industrial and commercial establishments and provide solid guidance and support to the customer is anticipated to move forward projects which will add to target. The delay in obtaining approval for the REM position has been a detriment to target achieved as the delay impacts on customer contacts, lead time for completing studies and the implementation cycle by the customer may extend beyond the target timeline of December 2014. If the REM had been in market 6 to 8 months earlier a positive result would be apparent on the targets achieved.

Of note in the industrial and municipal area there has been competition for capital funding between micro fit and conservation. With limited capital dollars there is consideration that renewable generation may offer a better return on investment and hence are delaying the implementation of conservation projects.

The programs which have not been placed into market or have been removed from market have not been replaced by alternate initiatives by the OPA. The lack of these programs impacts on the ability to meet target and to offer a full scope of initiatives to the customer. While the cancellation of these programs is supported, based on the OPA evaluation, the design and inclusion of alternate programs would help mitigate the impacts.

The market ability to continue to support initiative such as SBL, and Appliance Program is questioned. The saturation and the contribution of the initiative to target will require evaluation to determine if, on a provincial basis, the OPA expectations of the program were accurate or too optimistic. Cancellations of programs impact market place awareness and the entire suite of offerings. Hence rather than removing programs, altering the program to reflect current market pressure may be more appropriate, to ensure all capacity for savings is captured.

## 5 Combined CDM Reporting Elements

### 5.1 Progress Towards CDM Targets

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

| Implementation Period   | Annual (MW) |      |      |              |
|---|-------------|------|------|--------------|
|   | 2011        | 2012 | 2013 | 2014         |
| 2011 – Verified by OPA  | 0.2         | 0.2  | 0.2  | 0.2          |
| 2012 – Verified by OPA  |             | 0.3  | 0.2  | 0.2          |
| 2013  |             |      |      |              |
| 2014  |             |      |      |              |
| <b>Verified Net Annual Peak Demand Savings in 2014:</b>             |             |      |      | <b>0.4</b>   |
| <b>CENTRE WELLINGTON HYDRO 2014 Annual CDM Capacity Target:</b>     |             |      |      | <b>1.6</b>   |
| <b>Verified Portion of Peak Demand Savings Target Achieved (%):</b> |             |      |      | <b>26.8%</b> |

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

| Implementation Period  | Annual (GWh) |      |      |      | Cumulative (GWh) |
|--|--------------|------|------|------|------------------|
|  | 2011         | 2012 | 2013 | 2014 | 2011-2014        |
| 2011 – Verified by OPA   | 1.0          | 1.0  | 1.0  | 0.9  | 3.9              |
| 2012 – Verified by OPA   |              | 1.1  | 1.0  | 1.0  | 3.3              |
| 2013   |              |      |      |      |                  |
| 2014   |              |      |      |      |                  |
| <b>Verified Net Cumulative Energy Savings 2011-2014:</b>               |              |      |      |      | <b>7.2</b>       |
| <b>CENTRE WELLINGTON HYDRO 2011-2014 Cumulative CDM Energy Target:</b> |              |      |      |      | <b>7.8</b>       |
| <b>Verified Portion of Cumulative Energy Target Achieved (%):</b>      |              |      |      |      | <b>91.7%</b>     |

### 5.2 Variance from Strategy

Centre Wellington Hydro is generally on target with the strategy filed last year with the Annual CDM Report. At that time it was anticipated for 2012 that 13.6% of the targeted peak would be achieved and 18.6% of the energy target. Actual achieved towards the December 31<sup>st</sup>, 2014 targets were 14.5% and 42.2% respectively. 2012 was a successful year and continued

performance has assured the energy target to be met. The Peak target while meeting expectations in 2012 is behind anticipated and remains a challenge based on the remaining peak required to achieve target.

### **5.3 Outlook to 2014 and Strategy Modifications**

The Strategy has not been altered at this time. The changes made last year continue to be the strategy moving forward. As noted in section 5.2 kWh appear achievable while peak will remain a focus over the remaining years.

| Centre Wellington                              |                                   |                  |                     |                |                                  |                  |                     |                  |                                  |                  |                     |          |                                  |                |                     |          |                                   |                  |                        |                  |
|--|-----------------------------------|------------------|---------------------|----------------|----------------------------------|------------------|---------------------|------------------|----------------------------------|------------------|---------------------|----------|----------------------------------|----------------|---------------------|----------|-----------------------------------|------------------|------------------------|------------------|
| Annual Milestone - Contribution to 2014 Target |                                   |                  |                     |                |                                  |                  |                     |                  |                                  |                  |                     |          |                                  |                |                     |          |                                   |                  |                        |                  |
| Category - Consumer                            | 2011 Original Strategy Projection |                  | Actual 2011 Results |                | 2012 Revised Strategy Projection |                  | Actual 2012 Results |                  | 2013 Revised Strategy Projection |                  | Actual 2013 Results |          | 2014 Revised Strategy Projection |                | Actual 2014 Results |          | Revised Total Projected Reduction |                  | Contribution to Target |                  |
|  | kW                                | kWh              | kW                  | kWh            | kW                               | kWh              | kW                  | kWh              | kW                               | kWh              | kW                  | kWh      | kW                               | kWh            | kW                  | kWh      | kW                                | kWh              | kW                     | kWh              |
| <b>Provincial Programs</b>                     |                                   |                  |                     |                |                                  |                  |                     |                  |                                  |                  |                     |          |                                  |                |                     |          |                                   |                  |                        |                  |
| Appliance Retirement                           | 4                                 | 86,274           | 5                   | 144,103        | 4                                | 68,316           | 11                  | 120,606          | 3                                | 27,811           |                     |          | 2                                | 12,477         |                     |          | 14                                | 252,707          | 16                     | 264,709          |
| Instant Discounts (Rebates)                    | 2                                 | 163,513          | 3                   | 217,166        | 3                                | 217,166          | 2                   | 95,464           | 2                                | 99,740           |                     |          | 2                                | 49,870         |                     |          | 11                                | 583,942          | 5                      | 312,630          |
| HVAC Discounts (Rebates)                       | 12                                | 73,327           | 44                  | 336,193        | 16                               | 83,412           | 28                  | 153,355          | 13                               | 40,189           |                     |          | 14                               | 21,129         |                     |          | 86                                | 480,923          | 72                     | 489,548          |
| Demand Response                                | 17                                | 81,622           | 0                   | 0              | 0                                | 0                | 0                   | 0                | 72                               | 242,000          |                     |          | 47                               | 80,000         |                     |          | 119                               | 322,000          | 0                      | 0                |
| Midstream Incentives                           | 0                                 | 1,722            | 0                   | 0              | 0                                | 0                | 0                   | 0                | 0                                | 691              |                     |          | 0                                | 346            |                     |          | 0                                 | 1,037            | 0                      | 0                |
| New Construction                               | 1                                 | 12,622           | 0                   | 0              | 0                                | 0                | 0                   | 0                | 2                                | 9,418            |                     |          | 2                                | 5,366          |                     |          | 4                                 | 14,784           | 0                      | 0                |
| Low Income                                     | 0                                 | 0                | 0                   | 0              | 0                                | 0                | 0                   | 0                | 8                                | 150,000          |                     |          | 8                                | 50,000         |                     |          | 16                                | 200,000          | 0                      | 0                |
| <b>Provincial Consumer Total</b>               | <b>35</b>                         | <b>419,080</b>   | <b>52</b>           | <b>697,462</b> | <b>23</b>                        | <b>368,894</b>   | <b>41</b>           | <b>369,425</b>   | <b>100</b>                       | <b>569,849</b>   | <b>0</b>            | <b>0</b> | <b>76</b>                        | <b>219,187</b> | <b>0</b>            | <b>0</b> | <b>250</b>                        | <b>1,855,391</b> | <b>93</b>              | <b>1,066,887</b> |
| <b>OEB Approved Programs</b>                   |                                   |                  |                     |                |                                  |                  |                     |                  |                                  |                  |                     |          |                                  |                |                     |          |                                   |                  |                        |                  |
| General Consumer                               | 10                                | 0                | 0                   | 0              | 0                                | 0                | 0                   | 0                | 10                               | 0                |                     |          | 10                               | 0              |                     |          | 20                                | 0                | 0                      | 0                |
| Low Income                                     | 5                                 | 0                | 0                   | 0              | 0                                | 0                | 0                   | 0                | 5                                | 0                |                     |          | 5                                | 0              |                     |          | 10                                | 0                | 0                      | 0                |
| <b>OEB Approved Programs Total</b>             | <b>15</b>                         | <b>0</b>         | <b>0</b>            | <b>0</b>       | <b>0</b>                         | <b>0</b>         | <b>0</b>            | <b>0</b>         | <b>15</b>                        | <b>0</b>         | <b>0</b>            | <b>0</b> | <b>15</b>                        | <b>0</b>       | <b>0</b>            | <b>0</b> | <b>30</b>                         | <b>0</b>         | <b>0</b>               | <b>0</b>         |
| <b>Consumer Program Total</b>                  | <b>50</b>                         | <b>419,080</b>   | <b>52</b>           | <b>697,462</b> | <b>23</b>                        | <b>368,894</b>   | <b>41</b>           | <b>369,425</b>   | <b>115</b>                       | <b>569,849</b>   | <b>0</b>            | <b>0</b> | <b>91</b>                        | <b>219,187</b> | <b>0</b>            | <b>0</b> | <b>280</b>                        | <b>1,855,391</b> | <b>93</b>              | <b>1,066,887</b> |
| Annual Milestone - Contribution to 2014 Target |                                   |                  |                     |                |                                  |                  |                     |                  |                                  |                  |                     |          |                                  |                |                     |          |                                   |                  |                        |                  |
| Category - Commercial & Institutional          | 2011 Original Strategy Projection |                  | Actual 2011 Results |                | 2012 Revised Strategy Projection |                  | Actual 2012 Results |                  | 2013 Revised Strategy Projection |                  | Actual 2013 Results |          | 2014 Revised Strategy Projection |                | Actual 2014 Results |          | Revised Total Projected Reduction |                  | Contribution to Target |                  |
|  | kW                                | kWh              | kW                  | kWh            | kW                               | kWh              | kW                  | kWh              | kW                               | kWh              | kW                  | kWh      | kW                               | kWh            | kW                  | kWh      | kW                                | kWh              | kW                     | kWh              |
| <b>Provincial Programs</b>                     |                                   |                  |                     |                |                                  |                  |                     |                  |                                  |                  |                     |          |                                  |                |                     |          |                                   |                  |                        |                  |
| Retrofits - Medium and Large Buildings         | 81                                | 564,048          | 3                   | 75,644         | 120                              | 493,943          | 106                 | 1,198,766        | 150                              | 479,393          |                     |          | 180                              | 287,592        |                     |          | 454                               | 1,336,572        | 109                    | 1,274,410        |
| Existing Building Retrofits - Small Buildings  | 68                                | 1,288,349        | 34                  | 439,976        | 80                               | 591,875          | 56                  | 653,859          | 106                              | 643,273          |                     |          | 121                              | 297,226        |                     |          | 341                               | 1,972,350        | 90                     | 1,093,835        |
| Small Commercial Demand Response               | 3                                 | 6,776            | 0                   | 0              | 0                                | 0                | 0                   | 0                | 7                                | 10,048           |                     |          | 7                                | 5,185          |                     |          | 14                                | 15,233           | 0                      | 0                |
| Demand Response 1                              | 0                                 | 0                | 16                  | 622            | 0                                | 0                | 1                   | 254              | 0                                | 0                |                     |          | 30                               | 0              |                     |          | 46                                | 622              | 17                     | 876              |
| <b>Provincial Commercial &amp; Inst. Total</b> | <b>153</b>                        | <b>1,859,172</b> | <b>53</b>           | <b>516,242</b> | <b>200</b>                       | <b>1,085,818</b> | <b>163</b>          | <b>1,852,879</b> | <b>263</b>                       | <b>1,132,715</b> | <b>0</b>            | <b>0</b> | <b>339</b>                       | <b>590,003</b> | <b>0</b>            | <b>0</b> | <b>855</b>                        | <b>3,324,778</b> | <b>216</b>             | <b>2,369,121</b> |
| <b>OEB Approved Programs</b>                   |                                   |                  |                     |                |                                  |                  |                     |                  |                                  |                  |                     |          |                                  |                |                     |          |                                   |                  |                        |                  |
| Retrofits                                      | 79                                | 0                | 0                   | 0              |                                  |                  |                     |                  | 79                               | 0                |                     |          | 79                               | 0              |                     |          | 158                               | 0                | 0                      | 0                |
| New Construction                               | 0                                 | 0                | 0                   | 0              |                                  |                  |                     |                  | 0                                | 0                |                     |          | 0                                | 0              |                     |          | 0                                 | 0                | 0                      | 0                |
| <b>OEB Approved Programs Total</b>             | <b>79</b>                         | <b>0</b>         | <b>0</b>            | <b>0</b>       | <b>0</b>                         | <b>0</b>         | <b>0</b>            | <b>0</b>         | <b>79</b>                        | <b>0</b>         | <b>0</b>            | <b>0</b> | <b>79</b>                        | <b>0</b>       | <b>0</b>            | <b>0</b> | <b>158</b>                        | <b>0</b>         | <b>0</b>               | <b>0</b>         |
| <b>Commercial &amp; Inst. Total</b>            | <b>232</b>                        | <b>1,859,172</b> | <b>53</b>           | <b>516,242</b> | <b>200</b>                       | <b>1,085,818</b> | <b>163</b>          | <b>1,852,879</b> | <b>342</b>                       | <b>1,132,715</b> | <b>0</b>            | <b>0</b> | <b>418</b>                       | <b>590,003</b> | <b>0</b>            | <b>0</b> | <b>1,013</b>                      | <b>3,324,778</b> | <b>216</b>             | <b>2,369,121</b> |

| Annual Milestone - Contribution to 2014 Target |                                   |                  |                     |          |                                  |          |                     |          |                                  |                |                     |          |                                  |                |                     |          |                                   |                  |                        |          |
|--|-----------------------------------|------------------|---------------------|----------|----------------------------------|----------|---------------------|----------|----------------------------------|----------------|---------------------|----------|----------------------------------|----------------|---------------------|----------|-----------------------------------|------------------|------------------------|----------|
| Category - Industrial                          | 2011 Original Strategy Projection |                  | Actual 2011 Results |          | 2012 Revised Strategy Projection |          | Actual 2012 Results |          | 2013 Revised Strategy Projection |                | Actual 2013 Results |          | 2014 Revised Strategy Projection |                | Actual 2014 Results |          | Revised Total Projected Reduction |                  | Contribution to Target |          |
|  | kW                                | kWh              | kW                  | kWh      | kW                               | kWh      | kW                  | kWh      | kW                               | kWh            | kW                  | kWh      | kW                               | kWh            | kW                  | kWh      | kW                                | kWh              | kW                     | kWh      |
| <b>Program Name</b>                            |                                   |                  |                     |          |                                  |          |                     |          |                                  |                |                     |          |                                  |                |                     |          |                                   |                  |                        |          |
| Industrial Accelerator                         | 0                                 | 0                | 0                   | 0        | 0                                | 0        | 0                   | 0        | 0                                | 0              |                     |          | 31                               | 190,138        |                     |          | 31                                | 190,138          | 0                      | 0        |
| Industrial Equipment Replacement               | 194                               | 4,694,236        | 0                   | 0        | 0                                | 0        | 0                   | 0        | 124                              | 700,000        |                     |          | 94                               | 568,000        |                     |          | 218                               | 1,268,000        | 0                      | 0        |
| Demand Response 1                              | 0                                 | 1                | 0                   | 0        | 0                                | 0        | 0                   | 0        | 0                                | 0              |                     |          | 0                                | 0              |                     |          | 0                                 | 0                | 0                      | 0        |
| Demand Response 3                              | 0                                 | 6                | 0                   | 0        | 0                                | 0        | 0                   | 0        | 0                                | 0              |                     |          | 0                                | 0              |                     |          | 0                                 | 0                | 0                      | 0        |
| <b>Provincial Industrial Total</b>             | <b>194</b>                        | <b>4,694,243</b> | <b>0</b>            | <b>0</b> | <b>0</b>                         | <b>0</b> | <b>0</b>            | <b>0</b> | <b>124</b>                       | <b>700,000</b> | <b>0</b>            | <b>0</b> | <b>125</b>                       | <b>758,138</b> | <b>0</b>            | <b>0</b> | <b>249</b>                        | <b>1,458,138</b> | <b>0</b>               | <b>0</b> |
| <b>OEB Approved Programs</b>                   |                                   |                  |                     |          |                                  |          |                     |          |                                  |                |                     |          |                                  |                |                     |          |                                   |                  |                        |          |
| A  | 0                                 | 0                | 0                   | 0        | 0                                | 0        | 0                   | 0        | 0                                | 0              |                     |          | 0                                | 0              |                     |          | 0                                 | 0                | 0                      | 0        |
| B  | 0                                 | 0                | 0                   | 0        | 0                                | 0        | 0                   | 0        | 0                                | 0              |                     |          | 0                                | 0              |                     |          | 0                                 | 0                | 0                      | 0        |
| <b>OEB Approved Programs Total</b>             | <b>0</b>                          | <b>0</b>         | <b>0</b>            | <b>0</b> | <b>0</b>                         | <b>0</b> | <b>0</b>            | <b>0</b> | <b>0</b>                         | <b>0</b>       | <b>0</b>            | <b>0</b> | <b>0</b>                         | <b>0</b>       | <b>0</b>            | <b>0</b> | <b>0</b>                          | <b>0</b>         | <b>0</b>               | <b>0</b> |
| <b>Industrial Total</b>                        | <b>194</b>                        | <b>4,694,243</b> | <b>0</b>            | <b>0</b> | <b>0</b>                         | <b>0</b> | <b>0</b>            | <b>0</b> | <b>124</b>                       | <b>700,000</b> | <b>0</b>            | <b>0</b> | <b>125</b>                       | <b>758,138</b> | <b>0</b>            | <b>0</b> | <b>249</b>                        | <b>1,458,138</b> | <b>0</b>               | <b>0</b> |

| CDM Strategy Total                    | 2011 Original Strategy Projection |                  | Actual 2011 Results |                  | 2012 Revised Strategy Projection |                  | Actual 2012 Results |                  | 2013 Revised Strategy Projection |                  | Actual 2013 Results |          | 2014 Revised Strategy Projection |                  | Actual 2014 Results |          | Revised Total Projected Reduction |                  | Contribution to Target |                  |  |
|---------------------------------------|-----------------------------------|------------------|---------------------|------------------|----------------------------------|------------------|---------------------|------------------|----------------------------------|------------------|---------------------|----------|----------------------------------|------------------|---------------------|----------|-----------------------------------|------------------|------------------------|------------------|--|
|                                       | kW                                | kWh              | kW                  | kWh              | kW                               | kWh              | kW                  | kWh              | kW                               | kWh              | kW                  | kWh      | kW                               | kWh              | kW                  | kWh      | kW                                | kWh              | kW                     | kWh              |  |
| <b>Program Total</b>                  | <b>477</b>                        | <b>6,972,495</b> | <b>105</b>          | <b>1,213,704</b> | <b>223</b>                       | <b>1,454,712</b> | <b>204</b>          | <b>2,222,304</b> | <b>581</b>                       | <b>2,402,563</b> | <b>0</b>            | <b>0</b> | <b>633</b>                       | <b>1,567,328</b> | <b>0</b>            | <b>0</b> | <b>1,542</b>                      | <b>6,638,307</b> | <b>309</b>             | <b>3,436,008</b> |  |
| 2010 Contribution                     |                                   |                  | 115                 | 2,651,763        |                                  |                  |                     | 371              |                                  |                  |                     |          |                                  |                  |                     |          | 115                               | 2,651,763        | 115                    | 2,652,134        |  |
| Adjustments to Verified Final Results |                                   |                  |                     |                  |                                  |                  | 33                  | 1,075,916        |                                  |                  |                     |          |                                  |                  |                     |          | 0                                 | 0                | 33                     | 1,075,916        |  |
| <b>Adjusted Total</b>                 | <b>477</b>                        | <b>6,972,495</b> | <b>220</b>          | <b>3,865,467</b> | <b>223</b>                       | <b>1,454,712</b> | <b>237</b>          | <b>3,298,591</b> | <b>581</b>                       | <b>2,402,563</b> | <b>0</b>            | <b>0</b> | <b>633</b>                       | <b>1,567,328</b> | <b>0</b>            | <b>0</b> | <b>1,657</b>                      | <b>9,290,070</b> | <b>457</b>             | <b>7,164,058</b> |  |
|                                       |                                   |                  |                     |                  |                                  |                  |                     |                  |                                  |                  |                     |          |                                  |                  |                     |          | <b>Target to Achieve</b>          | <b>1,640</b>     | <b>7,810,000</b>       |                  |  |

| Percentage of Target | 2011 Original Strategy Projection |       | Actual 2011 Results |       | 2012 Revised Strategy Projection |       | Actual 2012 Results |       | 2013 Revised Strategy Projection |       | Actual 2013 Results |      | 2014 Revised Strategy Projection |       | Actual 2014 Results |      | Revised Total Projected Reduction |        | Contribution to Target |       |
|----------------------|-----------------------------------|-------|---------------------|-------|----------------------------------|-------|---------------------|-------|----------------------------------|-------|---------------------|------|----------------------------------|-------|---------------------|------|-----------------------------------|--------|------------------------|-------|
|                      | kW                                | kWh   | kW                  | kWh   | kW                               | kWh   | kW                  | kWh   | kW                               | kWh   | kW                  | kWh  | kW                               | kWh   | kW                  | kWh  | kW                                | kWh    | kW                     | kWh   |
|                      | 29.1%                             | 89.3% | 13.4%               | 49.5% | 13.6%                            | 18.6% | 14.5%               | 42.2% | 35.4%                            | 30.8% | 0.0%                | 0.0% | 38.6%                            | 20.1% | 0.0%                | 0.0% | 101%                              | 119.0% | 27.8%                  | 91.7% |

Note: Total Projection is formed of 2011 Actuals added with 2012, 2013 and 2014 Revised Strategy Projection

## 6.0 Conclusion

Over the course of 2012, Centre Wellington Hydro has achieved .4 MW in peak demand savings and 7.2 GWh in energy savings, which represents 26.8% and 91.7% of Centre Wellington Hydro's 2014 target, respectively. These results are representative of a considerable effort expended by Centre Wellington Hydro, in cooperation with other LDCs, customers, channel partners and stakeholders to overcome many operational and structural issues that limited program effectiveness across all market sectors. This achievement is a success and the relationships built within the 2011-2014 CDM program term will aid results in a subsequent CDM term.

However, despite continuing improvements to existing programs Centre Wellington Hydro faces challenges in the remaining years of the current CDM framework. With the current slate of available OPA Programs, and the current forecast of implementation and projected savings, Centre Wellington Hydro expects to meet its 7.81 GWh Energy target but will struggle to meet its 1.64 MW Demand savings target. Centre Wellington Hydro is planning to increase activity with respect to the enrolment in the Peaksaver PLUS and HVAC programs as well as use the Energy Manager to achieve the demand savings by the end of 2014.

Looking ahead, there is limited opportunity to make valuable changes to the current program portfolios and have these changes reflected in LDC 2014 results. However, Centre Wellington Hydro will continue to work with the current portfolio to ensure the maximum contribution to target is achieved. Moving forward LDCs and the OPA can build on the strengths and key successes of the 2011-2014 programs to launch new programs which will meet the needs of the industry and consumers.

## Appendix A: Initiative Descriptions

### Residential Program

#### APPLIANCE RETIREMENT INITIATIVE (Exhibit D)

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

**Initiative Frequency:** Year round

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

**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. LDCs provide local marketing and coordination with municipal pick-up where available.

#### APPLIANCE EXCHANGE INITIATIVE (Exhibit E)

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

**Initiative Frequency:** Spring and Fall

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

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

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

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

## 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.

## CONSERVATION INSTANT COUPON INITIATIVE (Exhibit A)

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

**Initiative Frequency:** Year round

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

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

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

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



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

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

**Initiative Frequency:** Bi-annual events

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

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

**Targeted End Uses:** As per the Conservation Instant Coupon Initiative

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

## RETAILER CO-OP

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

**Initiative Frequency:** Year Round

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

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

**Targeted End Uses:** As per the Conservation Instant Coupon Initiative

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

## NEW CONSTRUCTION PROGRAM (Schedule B-2)

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

**Initiative Frequency:** Year round

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

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

- 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 directing builders to their LDC for additional information.

#### 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 IHD.

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

**Delivery:** LDC's recruit customers and procure technology

## C&I Program

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

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

**Initiative Frequency:** Year round

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

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

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

**Delivery:** LDC delivered.

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

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

**Initiative Frequency:** Year round

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

**Description:** The DIL 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.

#### 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.

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

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

**Initiative Frequency:** Year round

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

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

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

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

#### 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.

## Industrial Program

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

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

**Initiative Frequency:** Year round

**Objectives:** The objectives of this Initiative are to:

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

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

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

**Targeted End Uses:** Process and systems

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

#### MONITORING & TARGETING INITIATIVE (M&T)(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 M&T 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 M&T 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.

#### 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.

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

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

**Initiative Frequency:** Year round

**Objective:** This initiative offers LDCs the opportunity to access funding for the employment of a KAM in order to support them in fulfilling their obligations related to the PSUI.

**Description:** This Initiative provides LDCs the opportunity to utilize a KAM to assist their customers. The KAM is considered to be a key element in assisting the consumer in overcoming traditional barriers related to energy management and help them achieve savings since the KAM can build relationships and become a significant resource of knowledge to the customer.

**Targeted End Uses:** Process and systems

**Delivery:** LDC delivered

#### DEMAND RESPONSE 3 (DR3)(Schedule D-6)

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

**Initiative Frequency:** Year round

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

**Description:** 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.

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

#### **LOW INCOME INITIATIVE (HOME ASSISTANCE PROGRAM) (SCHEDULE E)**

**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.

**Initiative Activities/Progress:**

The CHEC RFP for Home Assistance Program provider was released in November of 2011. Due to the delay in schedule release, and the time required for the RFP process, Centre Wellington Hydro was not in market in 2011, however launched in early 2012.



## Appendix B: Pre-2011 Programs

### ELECTRICITY RETROFIT INCENTIVE PROGRAM

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

**Initiative Frequency:** Year Round

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

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

**Targeted End Uses:** Electricity savings measures.

**Delivery:** LDC Delivered.

### HIGH PERFORMANCE NEW CONSTRUCTION

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

**Initiative Frequency:** Year round

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

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

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

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

## MULTIFAMILY ENERGY EFFICIENCY REBATES (MEER)

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

**Initiative Frequency:** Year round

**Objective:** Improve energy efficiency of Multi-unit buildings

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

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

**Targeted End Uses:** Electricity saving measures

**Delivery:** OPA contracted with Greensaver