PUC Distribution Inc.
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December 4, 2012

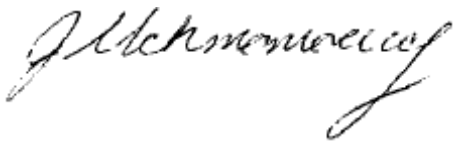
Kirsten Walli, Board Secretary
Ontario Energy Board
P.O. Box 2319, 27th Floor
2300 Yonge Street
Toronto, ON M4P 1E4

Attention: Ms. Walli

Re: PUC Distribution Inc. ("PUC") 2013 Cost of Service Electricity Distribution Rate Application EB-2012-0162

On November 6, 2013 PUC filed its 2013 Cost of Service Rate Application. The Board has assigned File Number EB-2012-0162 to this matter. On November 19, 2013 the Board issued a letter indicating a preliminary review of the application identified that certain sections of the evidence was missing or incomplete. PUC has addressed the issues and provided the requested additional information.

In the event of any additional information, questions or concerns, please contact Jennifer Uchmanowicz, Rate and Regulatory Affairs Officer, at Jennifer.Uchmanowicz@ssmpuc.com or (705) 759-3009.



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ISSUE #1

Evidence supporting the disposition of PUC's LRAMVA – Account 1568 as of December 31, 2011.

Information Requested:

i) Full LRAMVA calculations that are based on the final evaluation results for 2011 OPA-Contracted Province-Wide CDM Programs ("OPA Programs"). The LRAMVA calculations are determined by calculating the energy savings by customer class and valuing those energy savings using the distributor's Board-approved variable distribution charge appropriate to the class;

ii) Separate tables for each rate class that shows the LRAMVA amounts requested in association with the final evaluation results for 2011 OPA Programs;

iii) A statement that indicates the amount , if any, that PUC's last approved load forecast was adjusted to reflect forecast CDM impacts in association with PUC's 2011-2014 CDM Targets;

iv) Calculations showing the variance, if any, between the CDM component related to the 2011-2014 CDM Targets included in PUC's last approved load forecast and the final evaluation results for PUC's 2011 OPA Programs;

v) A statement indicating that the distributor has relied on the most recent final evaluation report from the OPA in support of its LRAMVA calculation;

vi) A statement indicating that the distributor has used the most recent input assumptions available at the time of the program evaluation when calculating its LRAMVA amount;

vii) Applicable LRAMVA rate riders for all affected rate classes;

viii) A statement, and if applicable a table, that indicates if carrying charges are being requested on the LRAMVA amount; and,

ix) Documentation of the distributor's final evaluation results for its 2011 OPA Programs.

PUC RESPONSE

LRAM and LRAMVA Process

The Board released *The Guidelines for Electricity Distributor Conservation and Demand Management* EB-2012-0003 dated April 26, 2012.

The guidelines delineate two distinct processes for recovery of lost revenues:

LRAM

1. Section 13.6 of the Guidelines deals with LRAM and SSM for Pre-CDM Code activities. It states:

   " The Board therefore expects that LRAM for pre-2011 CDM activities should be completed with the 2012 rate applications, outside persisting historical CDM impacts realized after 2010 for those distributors whose load forecast has not been updated as part of a cost of service application. "

LRAMVA

2. Section 13.2 of the Guidelines deals with the LRAMVA Mechanism for 2011-2014 programs. The Board has established a LRAM variance account ("LRAMVA") which will capture the difference between the actual verified impacts of authorized CDM program, and the level of CDM program activities included in the load forecast.

PUC is proposing an LRAM adjustment for losses persisting in 2011 from 2005 to 2010 programs and an LRAMVA adjustment for losses in 2011 relating to 2011-2014 programs. The total claim is $178,871 to be collected as a volumetric rate rider over a one year period.

LRAM

PUC is making a claim for pre-2011 CDM activities related to the persistence of CDM activities from 2005 through 2010 occurring in 2011. PUC is applying for an LRAM amount which includes carrying charges of $102,281 to be recovered over a one year period.

PUC is making this claim for pre-2011 CDM activities as the last load forecast approved was part of PUC's 2008 Cost of Service rate application. The 2008 approved load forecast did not include any adjustments for CDM. Therefore, PUC is applying for the applicable persisting losses from 2005 to 2010 in 2011.

PUC's 2012 IRM application (EB-2011-0101) included a 3rd party review prepared by IndEco Strategic Consulting Inc. for LRAM energy saving between 2005 and December 31, 2010 including persisting losses in 2011 to April 30, 2012.

The Board Decision for PUC's 2012 IRM application (EB-2011-0101) stated:

"Review and Disposition of Lost Revenue Adjustment Mechanism and Shared Savings Mechanism

The Board's Guidelines for Electricity Distributor Conservation and Demand Management (the "CDM Guidelines") issued on March 28, 2008 outline the information that is required when filing an application for LRAM or SSM.

PUC requested the recovery of an LRAM claim of $623,790 and a SSM claim of $53,663. PUC's LRAM claim includes lost revenues from CDM programs implemented from 2005-2010 and persistence until April 30, 2012. The SSM claim is based on 2005-2008 Third Tranche CDM programs. PUC proposed to recover the LRAM and SSM claims over a one-year period.

Persisting impacts of 2005-2008 CDM programs and 2008 lost revenues

Board staff noted that PUC's rates were last rebased in 2008. Board staff also noted that the CDM Guidelines state the following:

"Lost revenues are only accruable until new rates (based on a new revenue requirement and load forecast are set by the Board, as the savings would be assumed to be incorporated in the load forecast at that time."

Board staff further noted that in its Decision and Order in Hydro One Brampton's 2012 IRM Application (EB-2011-0174), the Board disallowed LRAM claims for the rebasing year as well as persistence of prior year programs in and beyond the test year on the basis that these savings should have been incorporated into the applicants load forecast at the time of the rebasing.

Board staff noted that in cases in which it was clear in the application or settlement agreement that an adjustment for CDM was not being incorporated into the load forecast specifically because of an expectation that an LRAM application would address the issue, and if this approach was accepted by the Board, then Board staff would agree that an LRAM application is appropriate. Board staff requested that PUC highlight in its reply submission whether the issue of an LRAM application was addressed in their cost of service application.

Board staff submitted that in the absence of the above information, PUC should not be permitted to recover the requested lost revenues from 2005-2007 CDM programs in 2008 or the persisting lost revenues from 2005, 2006, 2007, and 2008 CDM programs in 2009, 2010, 2011 or 2012 as these amounts should have been built into PUC's last approved load forecast.

VECC submitted that energy savings from PUC's CDM programs deployed between2005 to 2008 are not accruable in 2008 through April 30, 2012, as savings should have been incorporated in the 2008 load forecast at the time of rebasing.

In its reply submission, PUC submitted that its 2008 cost-of-service application was filed on November 30, 2007 and thus predates the 2008 CDM Guidelines which were released on March 28, 2008. PUC further submitted that the rules associated with LRAM claims, including the rules specifying that lost revenues are only accruable until new rates are set by the Board were not yet established.

PUC also submitted that the underlying principle of LRAM is to keep distributors revenue neutral and to ensure there is no disincentive to delivering energy savings to customers through CDM programs.

PUC noted that savings from 2005-2008 programs were not included into PUC's 2008 load forecast and that it is not reasonable to suggest that these lost revenues should not be recoverable when final results from these programs were not incorporated into the load forecast and the Guidelines were not yet established.

PUC requested that the Board approve the full LRAM amount, inclusive until April 30, 2012.

2005, 2006, 2007, 2009 and 2010 lost revenues

Board staff noted that except for 2006, PUC was under IRM during this period of time and did not have an opportunity to collect these amounts. Board staff submitted that it supports the recovery of lost revenues in 2005, 2006, 2007, lost revenues from 2009 and 2010 CDM programs in 2009 and 2010, and persisting lost revenues from 2005 programs in 2006, persisting lost revenues from 2005 and 2006 programs in 2007, and persisting 2009 lost revenue in 2010.

VECC submitted that it supports the approval of lost revenues in 2005, 2006, and 2007 from the impact of CDM programs implemented in 2005 to 2007, as these saving have not been claimed. VECC also supported the approval of lost revenues in 2009 and 2010 associated with 2009 and 2010 programs as these savings occurred post rebasing and have not been claimed.

In its reply submission, PUC noted that both Board staff and VECC support the LRAM claims associated with 2005, 2006 and 2007 savings during PUC's IRM period that took place before its 2008 COS application. As there is no objection to these amounts, PUC submitted that it requests approval of these amounts.

Input Assumptions for 2006 and 2007 Third Tranche CDM programs

VECC noted that for the 2009 Final Every Kilowatt Counts Power Savings Event, 2010 kWh is used as the input assumption to calculate net annual energy savings for installed CFLs.

VECC submitted that this input assumption is out-dated and that 46.3 kWh should be used, however, VECC noted that the impact is immaterial.

VECC further submitted that PUC should be required to make amendments to its LRAM claim and associated rate riders for the residential class, to reflect the use of 2011 OPA Prescriptive Measures & Assumptions List in its energy savings calculations.

In its reply submission, PUC noted that its LRAM claim was based on the final 2010 OPA program summary results and not the final 2010 OPA program full detailed results as this was the best available information at the time of filing. PUC further noted that there is no material difference in the LRAM claims calculated using either report.

PUC submitted that the use of the 2011 OPA Prescriptive Measures & Assumptions list, as suggested by VECC, is not the best available source of data inputs for the 2006 and 2007 Every Kilowatt Counts ("EKC) program.

PUC also submitted that the best available information for these programs is the final OPA-verified program-specific evaluations for these programs, which PUC has relied upon. PUC further noted that the use of final OPA program results for calculation of LRAM claims associated with 2006 and 2007 EKC programs has been approved by the Board in numerous LRAM decisions, and is specifically referenced in Burlington Hydro's 2011

LRAM claim decision (EB-2010-0067). PUC further submitted that it has used the best available information and has prepared its LRAM claim in accordance with the Board's Guidelines and previous Board decisions.

2009 and 2010 lost revenues persisting from January 1, 2011 to April 30, 2012

Board staff submitted that it is premature to consider any lost revenues persisting in 2011 or 2012 at this time.

VECC submitted that it does not support approval of 2009 and 2010 amounts in 2011 or 2012. VECC noted that LRAM is a retrospective adjustment and that PUC should apply for recovery of these amounts in a future proceeding.

In its reply submission, PUC noted that the OPA has identified the 2009 and 2010 program savings as final, including the persisting savings in 2011 and 2012. PUC also noted that the 2009 and 2010 programs do not depend on the Measures and Assumptions lists, providing no reason for PUC to revisit these amounts. PUC re-iterated its request that the Board approve the persisting savings from 2009 and 2010 programs in 2011 and 2012.

The Board will approve a total LRAM claim of $489,049, to be disposed of over a one year period, May 1, 2012 to April 30, 2013. The approved LRAM claim is comprised of lost revenues over the 2005 to 2010 period arising from CDM programs implemented from 2005 to 2010. Although the CDM Guideline states that lost revenues are only accruable until new rates (based on a new revenue requirement and load forecast) are set by the Board, as the savings would be assumed to be incorporated in the load forecast at that time, the Board has acknowledged (PowerStream decision EB-2011- 0005) that the 2004 NAC based load forecast underpinning PUC's 2008 cost of service rates does not include the impact of PUC's CDM programs. The Board also notes that, with the exception of 2008, PUC was under IRM during that period and did not otherwise receive compensation for lost revenues from these programs. The Board will not approve lost revenues arising from these programs in 2011 and 2012, as it is premature to do so and inconsistent with the CDM Guidelines.

The Board accepts PUC's calculation of lost revenues. The Board accepts that the calculation is consistent with previous decisions of the Board and accepts PUC's assertion that using the 2010 OPA program summary results instead of the final 2010 OPA program full detailed results does not materially affect the LRAM claim.

The Board approves the SSM claim of $53,663, as it is consistent with the CDM Guidelines. The Board approves a one year disposition period, May 1, 2012 to April 30, 2013."

Therefore, in PUC's 2012 IRM application the persisting losses in 2011 from 2005 to 2010 programs were disallowed as the Board determined the claim to be premature. PUC proposes in this 2013 COS Application the persisting losses in 2011 from 2005 to 2010 programs should be recovered as submitted in the independent 3rd party review prepared by IndEco Strategic Consulting Inc. as part of the 2012 IRM Application. In PUC's Reply Submission for the 2012 IRM Application, dated February 23, 2012, PUC provided a summary by rate class and by year for the LRAM claim as reported in an independent 3rd party review prepared by IndEco Strategic Consulting Inc. These tables provide the persisting losses in 2011 and are included below.

Table 1- Residential LRAM claims

Residential programs	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**Jan 1 to Apr 30 2012**
2005 programs	$0	$0	$0	$0	$0	$0	$0	$0
2006 programs		$35,668	$36,316	$48,638	$48,962	$9,745	$9,745	$3,006
2007 programs			$31,550	$35,174	$34,536	$34,536	$25,927	$8,392
2008 programs				$31,511	$31,654	$31,654	$31,654	$9,758
2009 programs					$10,940	$10,663	$10,663	$3,540
2010 programs						$6,597	$6,597	$2,194
Subtotal	*$0*	*$35,668*	*$67,866*	*$115,323*	*$126,092*	*$93,195*	*$84,586*	*$26,890*
Carrying charges	*$0*	*$5,535*	*$7,385*	*$7,141*	*$4,131*	*$2,358*	*$1,192*	*$132*
Total	**$0**	**$41,203**	**$75,250**	**$122,463**	**$130,223**	**$95,553**	**$85,778**	**$27,022**
Cumulative total	**$0**	**$41,203**	**$116,453**	**$238,916**	**$369,139**	**$464,692**	**$550,470**	**$577,492**

Table 2 - GS < 50 kW LRAM claims

GS < 50 kW programs	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**Jan 1 to Apr 30 2012**
2005 programs	$0	$0	$0	$0	$0	$0	$0	$0
2006 programs		$0	$0	$0	$0	$0	$0	$0
2007 programs			$0	$0	$0	$0	$0	$0
2008 programs				$23	$23	$22	$22	$7
2009 programs					$729	$713	$713	$237
2010 programs						$9,456	$9,456	$3,144
Subtotal	$0	$0	$0	$23	$752	$10,191	$10,191	$3,389
Carrying charges	$0	$0	$0	$1	$25	$258	$144	$17
Total	**$0**	**$0**	**$0**	**$25**	**$777**	**$10,449**	**$10,335**	**$3,405**
Cumulative total	**$0**	**$0**	**$0**	**$25**	**$801**	**$11,250**	**$21,585**	**$24,990**

Table 3 - GS > 50 kW LRAM claims

GS > 50 kW programs	2005	2006	2007	2008	2009	2010	2011	Jan 1 to Apr 30 2012
2005 programs	$0	$0	$0	$0	$0	$0	$0	$0
2006 programs		$0	$0	$0	$0	$0	$0	$0
2007 programs			$0	$0	$0	$0	$0	$0
2008 programs				$1,695	$1,678	$1,640	$1,643	$546
2009 programs					$3,243	$3,169	$3,175	$1,056
2010 programs						$1,262	$1,265	$420
Subtotal	*$0*	*$0*	*$0*	*$1,695*	*$4,921*	*$6,071*	*$6,082*	*$2,022*
Carrying charges	*$0*	*$0*	*$0*	*$105*	*$161*	*$154*	*$86*	*$10*
Total	**$0**	**$0**	**$0**	**$1,800**	**$5,083**	**$6,225**	**$6,168**	**$2,032**
Cumulative total	**$0**	**$0**	**$0**	**$1,800**	**$6,882**	**$13,107**	**$19,276**	**$21,308**

Since the 3rd party review prepared by IndEco Strategic Consulting Inc. for the 2012 IRM Application included the persisting losses in 2011 from 2005 to 2010 CDM programs, PUC submits it is appropriate to use this report for its LRAM claim in it 2013 Cost of Service Rate Application. Therefore, PUC is claiming $102,281 for LRAM in 2011 resulting from persisting losses from 2005 to 2010 programs. Table 4 below provides a summary of the LRAM claim.

Table 4 – Summary of 2011 LRAM claim

	Residential Programs 2011	General Service <50 2011	General Service > 50 2011	Total
2005 programs	$0	$0	$0	$0
2006 programs	$9,745	$0	$0	$9,745
2007 programs	$25,927	$0	$0	$25,927
2008 programs	$31,654	$22	$1,643	$33,319
2009 programs	$10,663	$713	$3,175	$14,551
2010 programs	$6,597	$9,456	$1,264	$17,317
Subtotal	*$84,586*	*$10,191*	*$6,082*	*$100,859*
Carrying charges	*$1,192*	*$144*	*$86*	*$1,422*
Total	**$85,778**	**$10,335**	**$6,168**	**$102,281**

PUC has included below the 3rd party review prepared by IndEco Strategic Consulting Inc. for the LRAM/SSM claims that was submitted as part of PUC's 2012 IRM application.

Strategic Solutions for a Changing World™

PUC Distribution Inc.
LRAM/SSM

Third party review:

PUC Distribution Inc. LRAM and SSM claims

This document was prepared for PUC Distribution Inc. by IndEco Strategic Consulting Inc.

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Executive summary

A third party review of the Conservation and Demand Management (CDM) programs run by PUC Distribution Inc. (PUC) was required as part of its application to the Ontario Energy Board (OEB) for collection of Lost Revenue Adjustment Mechanism (LRAM) and Shared Savings Mechanism (SSM) claims.

IndEco Strategic Consulting Inc. (IndEco) acted as third party reviewer by examining the participant rates, program costs, equipment specifications, and calculations that enter into the energy savings and Total Resource Costs (TRC) submitted by PUC to the OEB. The review was completed as detailed in the OEB *Guidelines for Electricity Distributor Conservation and Demand Management*.

The third party review included PUC's CDM activities in 2005, 2006, 2007, 2008 and 2009 and 2010 supported through Third Tranche of Market Adjustment Revenue Requirement (MARR) funding, and Ontario Power Authority (OPA) funding.

Net benefits, calculated using the TRC test, used OEB recommended inputs. For prescriptive programs, inputs were taken from the OEB *Total Resource Cost Guide*, or program evaluations provided by the OPA. Net TRC benefits totalled over $1 million dollars.

Lost revenues are calculated using estimated energy savings or monthly peak demand savings using the best available and most current input assumptions. Energy savings for prescriptive programs originally reported in PUC Distribution Inc.'s annual filings have been updated to reflect new assumptions available since then. In the span of the LRAM claim, these savings totalled over 38 GWh in the Residential rate class and 1.3 GWh in the GS < 50 kW rate class. Savings in the GS 50 to 4,999 kW rate class totalled approximately 4 MW-months.

IndEco concludes that PUC's electricity rates should be adjusted to reflect LRAM and SSM claims of $623,790 and $53,663 respectively.

Introduction

Lost Revenue Adjustment Mechanism and Shared Savings Mechanism claims can benefit a local distribution company (LDC) by removing the disincentive for energy conservation, and by providing it with a portion of net economic benefits from conservation and demand management activities, respectively.

What is the lost revenue adjustment mechanism (LRAM)

LRAM is designed to ensure that the LDC does not have a disincentive to promote energy efficiency and energy conservation by compensating the LDC for revenues lost as a result of its conservation initiatives. Calculation of lost revenues requires information on what the electricity use would have been in the absence of the LDC initiatives, and what it was with the LDC initiative. Some of the inputs to the calculation include: hours the equipment is used, wattage rating of the old and new equipment, and lifetime of the equipment if it is less than the period over which the LRAM is being claimed. Also required are the number of participants, or pieces of equipment installed, and an estimate of the free-rider rate, which is the fraction of the savings that would have occurred anyway, in the absence of the program. These savings are estimated by rate class, and revenue losses are determined by multiplying those losses by the cost of distribution per unit for each rate class. Carrying charges are calculated using deferral and variance account interest rates prescribed by the OEB.[1]

What is the shared savings mechanism (SSM)?

The SSM rewards the LDC for its CDM initiatives by sharing a percentage of the net economic benefits that result from the initiatives over their lifetime. For CDM activities by Ontario electricity distributors, that percentage has been set at five percent by the Ontario Energy Board (OEB). Key inputs to the calculation of SSM include all of the LRAM inputs, and in addition, the total lifetime of each technology installed, equipment costs, program costs, projected electricity costs (and water and natural gas if relevant) over that lifetime.

Sources of information

Although these input data requirements are sometimes measured, they sometimes use values from published sources, or assumptions provided by the Ontario Energy Board, or other reputable agencies. Collectively all these data are sometimes referred to as "TRC inputs" after the Total Resource Cost test that is used to calculate total economic costs and benefits to society. For some types of programs, such as large scale distribution of compact fluorescent bulbs, it would be impractical to

[1] For prescribed interest rates, see
http://www.oeb.gov.on.ca/OEB/Industry/Rules+and+Requirements/Rules+Codes+Guidelines+and+Forms/Prescr

measure the hours each bulb is used, for example, and therefore these published sources provide an average value that is typical for this equipment type.

In some cases, estimated values for a particular component of the calculation are available from multiple sources. In these cases, information is taken from the sources highest in the information hierarchy. The information hierarchy (from greatest to least confidence) for LRAM calculations is:

1 Information or results from an OPA conducted or sponsored evaluation of the specific program (e.g. OPA 2010)
2 Information or results from a third-party evaluation of the specific program
3 Information or results from a site-specific assessment of the application of the technology, including on-site measurement or survey of the specific customer
4 Manufacturer specifications for energy use/demand of the specific technology installed
5 Information from the OPA's most current measures and assumptions lists (OPA 2011a, OPA 2011b)
6 Information from earlier OPA measures and assumptions lists
7 Information from the OEB's TRC guide list of measures and assumptions (OEB 2008b).

Scope

This review examines the measures, energy savings, program costs and net TRC benefits for the programs in PUC's third tranche CDM portfolio. These programs ran in 2005, 2006, 2007, and 2008. It also includes programs run under contract to the Ontario Power Authority (OPA) in 2006, 2007, 2008, 2009 and 2010. Lost revenues associated with these programs are estimated through April 30, 2012.

In the TRC calculation, benefits and costs are reported in current dollars, which requires a discount rate for future dollars. Even though these activities are at the margin, OEB has dictated that the discount rate to be used is the weighted average cost of capital (WACC). The WACC provided by PUC is as follows:

- 2006: 7.67%
- 2007: 7.67%

Because the WACC is only used to calculate present values for TRC calculations used for SSM claims, it is only required for 2006 and 2007 since these are the only years for which an SSM amount is being claimed.

TRC inputs, and requested SSM and LRAM amounts

TRC inputs

Inputs used to calculate energy savings, TRC costs and TRC benefits for each prescriptive and custom measure were reviewed to ensure accuracy and suitability.

IndEco finds that appropriate measure specifications were used to calculate program energy savings and net TRC benefits. For the calculation of LRAM claims, prescriptive measures used values provided by the 2011 OPA Measures and Assumptions lists (OPA 2011a and OPA 2011b). For the calculation of SSM claims, the best available information at the beginning of the year the program was launched was used. This is consistent with the guidance in section 7.3 of the *OEB Guidelines for Electricity CDM* (OEB 2008a). Custom measures were substantiated through program-specific documentation and calculations.

Exceptions to the sources of prescriptive measure input assumptions used in the calculation of LRAM claims are as follows:

- The '2006-2009 Final OPA CDM results. PUC Distribution Inc.' and the '2010 Final CDM Results summary PUC Distribution Inc.' were used as sources of inputs for OPA-evaluated programs. These evaluated results have been adopted in accordance with Board recommendations that "The Board would consider an evaluation by the OPA or a third party designated by the OPA to be sufficient."[2] OPA advises that these estimates are prepared in a manner consistent with OPA current practice, and are the same values used to report progress against provincial conservation targets

A summary list of the assumption sources used for the calculation of the LRAM claim is provided in Table 1.

The measure inputs used to calculate SSM and LRAM claims can be found in Table 8 and Table 9 in Appendix A, respectively.

Requested SSM amounts

Equipment costs and benefits were calculated by entering the measure assumptions found in Table 8 of Appendix A into IndEco's TRC calculator.

SSM amounts were calculated for all third tranche programs, including the 2006 and 2007 EKC programs, for which PUC played a central role, and funded its contribution from third tranche funds.

[2] OEB 2008a. Guidelines for Electricity Distributor Conservation and Demand Management. p.28

The EKC program design was changed in 2008 and PUC's participation was not integral to the program. Therefore no SSM is claimed on net benefits from the 2008, 2009 or 2010 programs.

SSM amounts and TRC benefits net of free riders for all applicable programs are shown in Table 2.

Requested LRAM amounts

LRAM calculations are to be completed with the best information available at the time of the third party review. As such, the energy savings indicated in PUC's annual reports for programs in PUC's CDM portfolio were recalculated with the assumptions found in Table 9 in Appendix A.

Energy savings for measures installed between 2005 and 31 December 2010 were calculated to April 30, 2012.

Tables 3 and 4 show the net and gross energy savings or demand reductions of each program by rate class. OPA program energy savings in Tables 3 and 4 were acquired directly from spreadsheets provided by the OPA.

Energy savings were converted to LRAM values by using PUC distribution rates. Distribution rates are in Table 5.

The requested LRAM is presented in Table 6.

Table 1 – Source of information used for the calculation of the LRAM/SSM claim

Funding source	Rate class	Program	Source of inputs
OPA	Residential	2006 Secondary Refrigerator Retirement Pilot	OPA 2010
OPA	Residential	2006 Cool & Hot Savings Rebate	OPA 2010
OPA	Residential	2007 Great Refrigerator Roundup	OPA 2010
OPA	Residential	2007 Cool & Hot Savings Rebate	OPA 2010
OPA	Residential	2007 Summer Savings	OPA 2010
OPA	Residential	2007 Aboriginal	OPA 2010
OPA	Residential	2007 Social Housing Pilot	OPA 2010
OPA	Residential	2007 Energy Efficiency Assistance for Houses Pilot	OPA 2010
OPA	Residential	2008 Great Refrigerator Roundup	OPA 2010
OPA	Residential	2008 Cool Savings Rebate	OPA 2010
OPA	Residential	2008 Every Kilowatt Counts Power Savings Event	OPA 2010
OPA	Residential	2008 Summer Sweepstakes	OPA 2010
OPA	Residential	2009 Great Refrigerator Roundup	OPA 2010
OPA	Residential	2009 Cool Savings Rebate	OPA 2010
OPA	Residential	2009 Every Kilowatt Counts Power Savings Event	OPA 2010
OPA	Residential	2010 Cool Savings Rebate	OPA 2011c
OPA	Residential	2010 Every Kilowatt Counts Power Savings Event	OPA 2011c
OPA	Residential	2010 Great Refrigerator Roundup	OPA 2011c
OPA	GS < 50 kW	2008 High Performance New Construction	OPA 2010
OPA	GS < 50 kW	2009 High Performance New Construction	OPA 2010
OPA	GS < 50 kW	2010 High Performance New Construction	OPA 2011c
OPA	GS < 50 kW	2010 Multifamily Energy Efficiency Rebates	OPA 2011c
OPA	GS < 50 kW	2010 Power Savings Blitz	OPA 2011c
OPA	GS 50 to 4,999 kW	2008 Electricity Retrofit Incentive	OPA 2010
OPA	GS 50 to 4,999 kW	2009 Electricity Retrofit Incentive	OPA 2010
OPA	GS 50 to 4,999 kW	2010 Electricity Retrofit Incentive	OPA 2011c
Third Tranche	Residential	2006 Every Kilowatt Counts	OPA 2010
Third Tranche	Residential	2007 Every Kilowatt Counts	OPA 2010
Third Tranche	Residential	2006 Partnership Programs	OEB 2008b (SSM), OPA 2011a (LRAM)

1. The sources of SSM inputs were the best available at the onset of the program.

Table 2 – Summary of Net TRC benefits and SSM entitlement

Program	Year	Residential	GS < 50 kW	GS 50 to 4,999 kW	Net TRC	SSM claim
Customer Conservation Program - ETS units	2006		-$6,461		*-$6,461*	*-$323*
Education and Information	2005	-$1,958	-$1,958	-$1,958	*-$5,875*	*-$294*
	2006	-$4,615	-$4,615	-$4,615	*-$13,844*	*-$692*
	2007	-$12,816	-$12,816	-$12,816	*-$38,448*	*-$1,922*
Every Kilowatt Counts	2006	$877,505			*$877,505*	*$43,875*
	2007	$411,908			*$411,908*	*$20,595*
Partnership Programs	2005	-$3,640			*-$3,640*	*-$182*
	2006	$53,083			*$53,083*	*$2,654*
	2007	-$2,430	-$2,430	-$2,430	*-$7,289*	*-$364*
	2008	-$75,000	-$75,000		*-$150,000*	*-$7,500*
Planning and Coordination	2005	-$11,431			*-$11,431*	*-$572*
	2006	-$5,480	-$5,480	-$5,480	*-$16,440*	*-$822*
	2007	-$2,373	-$2,373	-$2,373	*-$7,118*	*-$356*
	2008	-$4,346	-$4,346		*-$8,692*	*-$435*
Total		**$1,218,407**	**-$115,479**	**-$29,672**	**$1,073,257**	**$53,663**

Table 3 – Cumulative net program energy savings and peak demand savings by rate class through April 30, 2012

Funding source	Program	Year	Residential (kWh)	GS < 50 kW (kWh)	GS > 50 kW (kW-mo)
OPA	Aboriginal	2007	2,278,800		
	Cool & Hot Savings Rebate	2006	727,660		
		2007	956,823		
	Cool Savings Rebate	2008	866,147		
		2009	845,943		
		2010	309,069		
	Electricity Retrofit Incentive	2008			1,592
		2009			2,353
		2010			649
	Energy Efficiency Assistance for Houses Pilot	2007	301,735		
	Every Kilowatt Counts Power Savings Event	2008	4,331,259		
		2009	1,428,750		
		2010	357,811		
	Great Refrigerator Roundup	2007	1,503,330		
		2008	1,956,358		
		2009	96,625		
		2010	352,210		
	High Performance New Construction	2008		5,461	
		2009		133,502	
		2010		309,739	
	Multifamily Energy Efficiency Rebates	2010		84,471	
	Power Savings Blitz	2010		844,858	
	Secondary Refrigerator Retirement Pilot	2006	279,289		
	Social Housing Pilot	2007	522,839		
	Summer Savings	2007	762,096		
	Summer Sweepstakes	2008	1,882,066		
OPA subtotal			**19,758,809**	**1,378,031**	**4,595**
Third Tranche	Customer Conservation Program - ETS units	2006			
	Education and Information	2005			
		2006			
		2007			
	Every Kilowatt Counts	2006	12,823,010		
		2007	5,683,353		
	Partnership Programs	2005			
		2006	629,805		
		2007			
		2008			

Funding source	Program	Year	Residential (kWh)	GS < 50 kW (kWh)	GS > 50 kW (kW-mo)
	Planning and Coordination	2005			
		2006			
		2007			
		2008			
Third Tranche subtotal			**19,136,168**	**0**	**0**
Total net savings			**38,894,976**	**1,378,031**	**4,595**

1. Rates for general service rate class of customers rated at greater than 50 kW are on a monthly demand basis (kW), not an energy one (kWh). Lost revenue results when the customer's monthly peak demand is lower than it otherwise would be as a result of the CDM initiatives. These are measured in kW-month, which is the reduction within one month of the peak kilowatt demand. Excluded are peak demand reductions associated with demand response programs, which are not anticipated to impact on revenues.

Table 4 – Cumulative gross program energy savings and peak demand savings by rate class through April 30, 2012

Funding source	Program	Year	Residential (kWh)	GS < 50 kW (kWh)	GS > 50 kW (kW-mo)
OPA	Aboriginal	2007	2,278,800		
	Cool & Hot Savings Rebate	2006	909,796		
		2007	1,842,126		
	Cool Savings Rebate	2008	1,479,102		
		2009	1,931,362		
		2010	724,879		
	Electricity Retrofit Incentive	2008			3,045
		2009			3,224
		2010			1,279
	Energy Efficiency Assistance for Houses Pilot	2007	297,067		
	Every Kilowatt Counts Power Savings Event	2008	10,557,110		
		2009	3,652,291		
		2010	746,330		
	Great Refrigerator Roundup	2007	3,649,882		
		2008	3,538,520		
		2009	176,711		
		2010	641,232		
	High Performance New Construction	2008		7,652	
		2009		185,996	
		2010		426,834	
	Multifamily Energy Efficiency Rebates	2010		110,617	
	Power Savings Blitz	2010		816,868	
	Secondary Refrigerator Retirement Pilot	2006	310,321		
	Social Housing Pilot	2007	514,750		
	Summer Savings	2007	6,326,594		
	Summer Sweepstakes	2008	2,379,588		
OPA subtotal			**41,956,463**	**1,547,967**	**7,547**
Third Tranche	Customer Conservation Program - ETS units	2006			
	Education and Information	2005			
		2006			
		2007			
	Every Kilowatt Counts	2006	14,212,550		
		2007	7,603,931		
	Partnership Programs	2005			
		2006	888,000		
		2007			
		2008			

Funding source	Program	Year	Residential (kWh)	GS < 50 kW (kWh)	GS > 50 kW (kW-mo)
	Planning and Coordination	2005			
		2006			
		2007			
		2008			
Third Tranche subtotal			**22,704,481**	**0**	**0**
Total net savings			**64,660,944**	**1,547,967**	**7,547**

Table 5 – Distribution rates for each service area within PUC's service territory

Rate Class	Units	2005	2006	2007	2008	2009	2010	2011
Residential	$/kWh	0.012	0.011	0.0112	0.015	0.0151	0.0151	0.0151
GS < 50 kW	$/kWh	0.0189	0.0185	0.0187	0.0185	0.0182	0.0178	0.0178
GS 50 to 4,999 kW	$/kW	4.0722	3.6481	3.6781	4.5237	4.4791	4.3769	4.3848

Table 6 – Summary of requested LRAM amounts in 2012$[1]

Funding	Program	Year	Residential	GS < 50 kW	GS 50 to 4,999 kW	LRAM
OPA	Aboriginal	2007	$33,854	$0	$0	$33,854
	Cool & Hot Savings Rebate	2006	$10,628	$0	$0	$10,628
		2007	$14,315	$0	$0	$14,315
	Cool Savings Rebate	2008	$13,467	$0	$0	$13,467
		2009	$13,057	$0	$0	$13,057
		2010	$4,749	$0	$0	$4,749
	Electricity Retrofit Incentive	2008	$0	$0	$7,429	$7,429
		2009	$0	$0	$10,880	$10,880
		2010	$0	$0	$2,999	$2,999
	Energy Efficiency Assistance for Houses Pilot	2007	$4,514	$0	$0	$4,514
	Every Kilowatt Counts Power Savings Event	2008	$67,365	$0	$0	$67,365
		2009	$22,055	$0	$0	$22,055
		2010	$5,498	$0	$0	$5,498
	Great Refrigerator Roundup	2007	$22,492	$0	$0	$22,492
		2008	$30,418	$0	$0	$30,418
		2009	$1,491	$0	$0	$1,491
		2010	$5,412	$0	$0	$5,412
	High Performance New Construction	2008	$0	$102	$0	$102
		2009	$0	$2,446	$0	$2,446
		2010	$0	$5,610	$0	$5,610
	Multifamily Energy Efficiency Rebates	2010	$0	$1,530	$0	$1,530
	Power Savings Blitz	2010	$0	$15,303	$0	$15,303
	Secondary Refrigerator Retirement Pilot	2006	$4,070	$0	$0	$4,070
	Social Housing Pilot	2007	$7,822	$0	$0	$7,822
	Summer Savings	2007	$10,144	$0	$0	$10,144
	Summer Sweepstakes	2008	$29,263	$0	$0	$29,263
OPA subtotal			**$300,616**	**$24,990**	**$21,308**	**$346,914**
Third Tranche	Customer Conservation Program - ETS units	2006	$0	$0	$0	$0
	Education and Information	2005	$0	$0	$0	$0
		2006	$0	$0	$0	$0
		2007	$0	$0	$0	$0
	Every Kilowatt Counts	2006	$182,682	$0	$0	$182,682
		2007	$84,995	$0	$0	$84,995
	Partnership Programs	2005	$0	$0	$0	$0
		2006	$9,199	$0	$0	$9,199
		2007	$0	$0	$0	$0

Funding	Program	Year	Residential	GS < 50 kW	GS 50 to 4,999 kW	LRAM
		2008	$0	$0	$0	$0
	Planning and Coordination	2005	$0	$0	$0	$0
		2006	$0	$0	$0	$0
		2007	$0	$0	$0	$0
		2008	$0	$0	$0	$0
Third Tranche subtotal			**$276,876**	**$0**	**$0**	**$276,876**
Total			**$577,492**	**$24,990**	**$21,308**	**$623,790**

1. LRAM amounts are for energy (or demand) reductions for the years between the year the program began through April 30, 2012.

Findings

The Third Tranche programs in PUC's CDM portfolio were completed as of December 31, 2008. Although the OEB guidance for this report asks for comments on future program evaluation and improvements to program performance, this expectation is not relevant for these programs that have ended and are not expected to be reinitiated.

IndEco has reviewed the input values and custom project justifications used to calculate the energy savings and net TRC benefits resulting from PUC's portfolio as well as those associated with 2006, 2007, 2008, 2009, and 2010 OPA-funded programs.

IndEco has concluded that sufficient detail and documentation exists to recommend increasing PUC Distribution Inc.'s distribution rates in order to collect $623,790 in LRAM and $53,663 in SSM amounts, allocated by rate class as shown in Table 7.

Table 7 – LRAM and SSM amounts by rate class in 2012$

Rate class	LRAM	SSM
Residential	$577,492	$60,920
General Service < 50 kW	$24,990	($5,774)
General Service 50 - 4,999 kW	$21,308	($1,484)
Total	**$623,790**	**$53,663**

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Appendix A. Inputs used for TRC and energy savings calculations

Table 8 - SSM inputs and contribution to the total SSM for all measures

Program	Energy Efficient Measure	Units	Measure life	Free riders	Annual energy savings (kWh/a)	SSM	Assumption Source
2006 Every Kilowatt Counts	Energy Star® Compact Fluorescent Light Bulb - Spring Campaign	11,134	4	10%	104	$11,792	OPA 2010
2006 Every Kilowatt Counts	Electric Timers - Spring Campaign	312	20	10%	183	$1,991	OPA 2010
2006 Every Kilowatt Counts	Programmable Thermostats - Spring Campaign	136	15	10%	216	$706	OPA 2010
2006 Every Kilowatt Counts	Energy Star® Ceiling Fans - Spring Campaign	103	20	10%	141	$476	OPA 2010
2006 Every Kilowatt Counts	Energy Star® Compact Fluorescent Light Bulb - Autumn Campaign	16,508	4	10%	104	$17,484	OPA 2010
2006 Every Kilowatt Counts	Seasonal Light Emitting Diode Light String - Autumn Campaign	3,973	30	10%	31	$3,610	OPA 2010
2006 Every Kilowatt Counts	Programmable Thermostats - Autumn Campaign	262	18	10%	522	$5,941	OPA 2010
2006 Every Kilowatt Counts	Dimmers - Autumn Campaign	207	10	10%	139	$542	OPA 2010
2006 Every Kilowatt Counts	Indoor Motion Sensors - Autumn Campaign	74	20	10%	209	$522	OPA 2010
2006 Every Kilowatt Counts	Programmable Basebaord Thermostats - Autumn Campaign	16	18	10%	1,466	$811	OPA 2010
2007 Every Kilowatt Counts	15 W CFL	19,577	8	22%	43	$13,642	OPA 2010
2007 Every Kilowatt Counts	20+ W CFL	3,187	8	22%	62	$3,461	OPA 2010
2007 Every Kilowatt Counts	Energy Star® Light Fixture	76	16	45%	123	$155	OPA 2010
2007 Every Kilowatt Counts	T8 Fluorescent Tube	149	18	23%	37	$67	OPA 2010
2007 Every Kilowatt Counts	Seasonal LED Light String	5,187	5	51%	14	($535)	OPA 2010

Program	Energy Efficient Measure	Units	Measure life	Free riders	Annual energy savings (kWh/a)	SSM	Assumption Source
2007 Every Kilowatt Counts	Project Porchlight CFL	4,120	8	24%	43	$2,797	OPA 2010
2007 Every Kilowatt Counts	Solar Light	2,513	5	87%	5	($55)	OPA 2010
2007 Every Kilowatt Counts	Energy Star® Ceiling Fan	158	10	45%	90	$11	OPA 2010
2007 Every Kilowatt Counts	Furnace Filter	636	1	45%	38	($165)	OPA 2010
2007 Every Kilowatt Counts	Power Bar with Timer	70	10	23%	72	$43	OPA 2010
2007 Every Kilowatt Counts	Lighting Control Device	805	10	45%	72	$580	OPA 2010
2007 Every Kilowatt Counts	Outdoor Motion Sensor	251	10	45%	160	$467	OPA 2010
2007 Every Kilowatt Counts	Dimmer Switch	160	10	45%	24	$1	OPA 2010
2007 Every Kilowatt Counts	Programmable Thermostat	154	15	45%	75	$127	OPA 2010
2006 Partnership Programs	13W CFLs	3,200	4	10%	104	$3,749	OEB 2008b
2006 Customer Conservation Program - ETS units	ETS units	4	15	0%	0	$21	PUC 2008
Total equipment contribution to SSM						**$68,240**	

The net TRC benefits are the total technology benefits less the total technology costs (net of free riders) less the total program costs. The total net technology benefits and costs are $1,572,118 and $207,309. The total program cost for all programs is $291,561. Net TRC benefits are thus $1,073,248. The SSM incentive is 5% of these net TRC benefits, or $53,662.

Table 9 – LRAM inputs and contribution to the total LRAM for all measures.

Program	Energy Efficient Measure	Units	Measure life	Free Riders	Annual energy savings (kWh/a)	LRAM (2011$)	Assumption Source
2006 Secondary Refrigerator Retirement Pilot	Refrigerator Retirement	42	6	10%	1,200	$3,942	OPA 2010
2006 Secondary Refrigerator Retirement Pilot	Freezer Retirement	2	6	10%	900	$128	OPA 2010
2006 Cool & Hot Savings Rebate	Energy Star® Central Air Conditioner - Cool Savings	120	14	10%	390	$3,887	OPA 2010
2006 Cool & Hot Savings Rebate	Programmable Thermostat - Cool Savings	91	18	10%	177	$1,341	OPA 2010
2006 Cool & Hot Savings Rebate	Central Air Conditioner Tune-ups - Cool Savings	82	8	10%	410	$2,787	OPA 2010
2006 Cool & Hot Savings Rebate	Energy Star® Central Air Conditioner - Hot Savings	24	18	43%	155	$200	OPA 2010
2006 Cool & Hot Savings Rebate	Efficient Furnace with ECM - Hot Savings	51	15	41%	837	$2,348	OPA 2010
2006 Cool & Hot Savings Rebate	Programmable Thermostat - Hot Savings	47	15	73%	54	$65	OPA 2010
2006 Every Kilowatt Counts	Energy Star® Compact Fluorescent Light Bulb - Spring Campaign	11,134	4	10%	104	$59,261	OPA 2010
2006 Every Kilowatt Counts	Electric Timers - Spring Campaign	312	20	10%	183	$4,755	OPA 2010
2006 Every Kilowatt Counts	Programmable Thermostats - Spring Campaign	136	15	10%	216	$2,441	OPA 2010
2006 Every Kilowatt Counts	Energy Star® Ceiling Fans - Spring Campaign	103	20	10%	141	$1,212	OPA 2010
2006 Every Kilowatt Counts	Energy Star® Compact Fluorescent Light Bulb - Autumn Campaign	16,508	4	10%	104	$87,867	OPA 2010
2006 Every Kilowatt Counts	Seasonal Light Emitting Diode Light String - Autumn Campaign	3,973	30	10%	31	$10,170	OPA 2010
2006 Every Kilowatt Counts	Programmable Thermostats - Autumn Campaign	262	18	10%	522	$11,383	OPA 2010
2006 Every Kilowatt Counts	Dimmers - Autumn Campaign	207	10	10%	139	$2,396	OPA 2010

Program	Energy Efficient Measure	Units	Measure life	Free Riders	Annual energy savings (kWh/a)	LRAM (2011$)	Assumption Source
2006 Every Kilowatt Counts	Indoor Motion Sensors - Autumn Campaign	74	20	10%	209	$1,293	OPA 2010
2006 Every Kilowatt Counts	Programmable Baseboard Thermostats - Autumn Campaign	16	18	10%	1,466	$1,904	OPA 2010
2007 Great Refrigerator Roundup	Bottom Freezer Fridge	7	9	27%	1,064	$407	OPA 2010
2007 Great Refrigerator Roundup	Chest Freezer	199	8	54%	471	$3,426	OPA 2010
2007 Great Refrigerator Roundup	Side by Side Fridge-Freezer	54	9	61%	900	$1,524	OPA 2010
2007 Great Refrigerator Roundup	Single Door Fridge	150	9	61%	721	$3,384	OPA 2010
2007 Great Refrigerator Roundup	Small Freezer (under 10 cubic feet)	7	8	70%	339	$59	OPA 2010
2007 Great Refrigerator Roundup	Small Fridge (under 10 cubic feet)	12	9	70%	490	$139	OPA 2010
2007 Great Refrigerator Roundup	Top Freezer Fridge	544	9	61%	732	$12,439	OPA 2010
2007 Great Refrigerator Roundup	Upright Freezer	39	8	54%	743	$1,043	OPA 2010
2007 Great Refrigerator Roundup	Window Air Conditioner	10	5	57%	240	$71	OPA 2010
2007 Cool & Hot Savings Rebate	Energy Star® Central Air Conditioner - Hot Savings	24	18	43%	155	$171	OPA 2010
2007 Cool & Hot Savings Rebate	Efficient Furnace with ECM - Hot Savings	51	15	41%	837	$2,006	OPA 2010
2007 Cool & Hot Savings Rebate	Programmable Thermostat - Hot Savings	47	15	73%	54	$55	OPA 2010
2007 Cool & Hot Savings Rebate	Energy Star® Central Air Conditioner, Tier 2 - Cool Savings	188	18	43%	155	$1,329	OPA 2010
2007 Cool & Hot Savings	Medium Efficiency Furnace with ECM - Cool	249	15	41%	837	$9,843	OPA 2010

Program	Energy Efficient Measure	Units	Measure life	Free Riders	Annual energy savings (kWh/a)	LRAM (2011$)	Assumption Source
Rebate	Savings						
2007 Cool & Hot Savings Rebate	Programmable Thermostat - Cool Savings	233	15	73%	54	$274	OPA 2010
2007 Cool & Hot Savings Rebate	Central Air Conditioner Tune-ups - Cool Savings	231	5	84%	235	$638	OPA 2010
2007 Every Kilowatt Counts	15 W CFL	19,577	8	22%	43	$52,386	OPA 2010
2007 Every Kilowatt Counts	20+ W CFL	3,187	8	22%	62	$12,316	OPA 2010
2007 Every Kilowatt Counts	Energy Star® Light Fixture	76	16	45%	123	$410	OPA 2010
2007 Every Kilowatt Counts	T8 Fluorescent Tube	149	18	23%	37	$341	OPA 2010
2007 Every Kilowatt Counts	Seasonal LED Light String	5,187	5	51%	14	$2,602	OPA 2010
2007 Every Kilowatt Counts	Project Porchlight CFL	4,120	8	24%	43	$10,741	OPA 2010
2007 Every Kilowatt Counts	Solar Light	2,513	5	87%	5	$117	OPA 2010
2007 Every Kilowatt Counts	Energy Star® Ceiling Fan	158	10	45%	90	$622	OPA 2010
2007 Every Kilowatt Counts	Furnace Filter	636	1	45%	38	$164	OPA 2010
2007 Every Kilowatt Counts	Power Bar with Timer	70	10	23%	72	$309	OPA 2010
2007 Every Kilowatt Counts	Lighting Control Device	805	10	45%	72	$2,551	OPA 2010
2007 Every Kilowatt Counts	Outdoor Motion Sensor	251	10	45%	160	$1,763	OPA 2010
2007 Every Kilowatt Counts	Dimmer Switch	160	10	45%	24	$166	OPA 2010
2007 Every Kilowatt Counts	Programmable Thermostat	154	15	45%	75	$506	OPA 2010
2007 Summer Savings	Households, Change in Behaviour Only - Behaviour Related	290	1	88%	5,453	$2,355	OPA 2010
2007 Summer Savings	Households, Combination of Change in Behaviour and "Pulled Forward" Equipment - Behaviour Related	290	1	88%	2,919	$1,260	OPA 2010
2007 Summer Savings	Households, Combination of Change in Behaviour and "Pulled Forward" Equipment -	290	2	88%	1,662	$1,638	OPA 2010

Program	Energy Efficient Measure	Units	Measure life	Free Riders	Annual energy savings (kWh/a)	LRAM (2011$)	Assumption Source
	Equipment Related						
2007 Summer Savings	Households, Combination of Change in Behaviour and "Pulled Forward" Equipment - Compact Fluorescent Light Bulb Related	290	8	88%	171	$474	OPA 2010
2007 Summer Savings	Households, Change in Behaviour and Incremental Equipment (With Full Equipment Life) - Behaviour Related	290	1	88%	4,822	$2,082	OPA 2010
2007 Summer Savings	Households, Change in Behaviour and Incremental Equipment (With Full Equipment Life) - Equipment Related	290	14	88%	643	$1,784	OPA 2010
2007 Summer Savings	Households, Change in Behaviour and Incremental Equipment (With Full Equipment Life) - Compact Fluorescent Light Bulb Related	290	8	88%	199	$551	OPA 2010
2007 Aboriginal	Conservation Kits	633	4	0%	900	$33,854	OPA 2010
2007 Social Housing Pilot	Custom retrofit projects	1	10	0%	98,048	$7,822	OPA 2010
2007 Energy Efficiency Assistance for Houses Pilot	Custom retrofit projects	1	19	0%	56,584	$4,514	OPA 2010
2008 Great Refrigerator Roundup	Bottom Freezer Fridge	7	9	45%	775	$208	OPA 2010
2008 Great Refrigerator Roundup	Chest Freezer	211	8	48%	740	$5,474	OPA 2010
2008 Great Refrigerator Roundup	Side by Side Fridge-Freezer	68	9	45%	775	$1,944	OPA 2010
2008 Great Refrigerator Roundup	Single Door Fridge	131	9	45%	775	$3,774	OPA 2010
2008 Great Refrigerator Roundup	Small Freezer (under 10 cubic feet)	2	8	48%	740	$63	OPA 2010
2008 Great Refrigerator Roundup	Small Fridge (under 10 cubic feet)	4	9	45%	775	$113	OPA 2010

Program	Energy Efficient Measure	Units	Measure life	Free Riders	Annual energy savings (kWh/a)	LRAM (2011$)	Assumption Source
2008 Great Refrigerator Roundup	Top Freezer Fridge	616	9	45%	775	$17,678	OPA 2010
2008 Great Refrigerator Roundup	Upright Freezer	41	8	48%	740	$1,073	OPA 2010
2008 Great Refrigerator Roundup	Window Air Conditioner	19	5	64%	197	$91	OPA 2010
2008 Cool Savings Rebate	2007 Energy Star® Central Air Conditioner, Tier 2	38	18	43%	155	$230	OPA 2010
2008 Cool Savings Rebate	2007 Medium Efficiency Furnace with ECM	80	15	41%	837	$2,666	OPA 2010
2008 Cool Savings Rebate	2007 Programmable Thermostat	62	15	73%	54	$62	OPA 2010
2008 Cool Savings Rebate	2008 Energy Star® Central Air Conditioner, Tier 2	190	18	43%	125	$917	OPA 2010
2008 Cool Savings Rebate	2008 Efficient Furnace with ECM	287	18	41%	819	$9,350	OPA 2010
2008 Cool Savings Rebate	2008 Programmable Thermostat	244	18	73%	54	$242	OPA 2010
2008 Every Kilowatt Counts Power Savings Event	Energy Star® Qualified Compact Fluorescent Light Bulbs	7,721	8	48%	53	$14,393	OPA 2010
2008 Every Kilowatt Counts Power Savings Event	Energy Star® Qualified Dimmable CFLs	841	6	62%	98	$2,087	OPA 2010
2008 Every Kilowatt Counts Power Savings Event	Energy Star® Qualified Decorative CFLs	13,043	4	61%	30	$9,523	OPA 2010
2008 Every Kilowatt Counts Power Savings Event	Energy Star® Qualified Compact Fluorescent Floods (Indoor & Outdoor)	3,621	7	63%	88	$8,008	OPA 2010
2008 Every Kilowatt Counts Power Savings Event	Energy Star® Qualified Light Fixtures	5,620	16	67%	133	$16,864	OPA 2010
2008 Every Kilowatt Counts Power Savings Event	T8 Fluorescent Fixtures	1,022	16	67%	37	$842	OPA 2010
2008 Every Kilowatt Counts Power Savings Event	Lighting Control Devices	1,099	10	55%	102	$3,434	OPA 2010
2008 Every Kilowatt Counts	Power Bars with Timers	60	10	59%	53	$88	OPA 2010

Program	Energy Efficient Measure	Units	Measure life	Free Riders	Annual energy savings (kWh/a)	LRAM (2011$)	Assumption Source
Power Savings Event							
2008 Every Kilowatt Counts Power Savings Event	Heavy Duty Timers	127	10	67%	301	$859	OPA 2010
2008 Every Kilowatt Counts Power Savings Event	Programmable Thermostats - Baseboard	355	15	53%	64	$707	OPA 2010
2008 Every Kilowatt Counts Power Savings Event	Air Conditioner/Furnace Filters	334	1	65%	38	$70	OPA 2010
2008 Every Kilowatt Counts Power Savings Event	Pipe Wrap	7,202	6	53%	38	$8,632	OPA 2010
2008 Every Kilowatt Counts Power Savings Event	Keep Cool Pilot – Dehumidifier	2	12	65%	500	$26	OPA 2010
2008 Every Kilowatt Counts Power Savings Event	Keep Cool Pilot – Room Air Conditioner	3	9	58%	141	$10	OPA 2010
2008 Every Kilowatt Counts Power Savings Event	Rewards for Recycling – Dehumidifier	67	12	56%	500	$1,000	OPA 2010
2008 Every Kilowatt Counts Power Savings Event	Rewards for Recycling – Room Air Conditioner	73	9	56%	141	$304	OPA 2010
2008 Every Kilowatt Counts Power Savings Event	Rewards for Recycling – Halogen Lamp	58	16	52%	275	$518	OPA 2010
2008 Summer Sweepstakes	Registered qualified active households	244	5	22%	421	$5,361	OPA 2010
2008 Summer Sweepstakes	Registered unqualified active households	365	5	22%	421	$8,041	OPA 2010
2008 Summer Sweepstakes	Registered qualified inactive households	24	5	22%	421	$536	OPA 2010
2008 Summer Sweepstakes	Registered unqualified inactive households	92	5	22%	421	$2,017	OPA 2010
2008 Summer Sweepstakes	Non-registered active households	11,867	5	22%	21	$13,308	OPA 2010
2008 Electricity Retrofit Incentive	All projects	1	15	48%	332,177	$7,429	OPA 2010
2008 High Performance New Construction	Custom projects	1	14	30%	1,801	$102	OPA 2010
2009 Great Refrigerator	Chest Freezer - Not Replaced - Running Part	0	4	48%	282	$3	OPA 2010

Program	Energy Efficient Measure	Units	Measure life	Free Riders	Annual energy savings (kWh/a)	LRAM (2011$)	Assumption Source
Roundup	Time (26% of the time)						
2009 Great Refrigerator Roundup	Chest Freezer - Standard Efficiency Unit Replacement - Running Part Time (26% of the time)	0	4	48%	247	$1	OPA 2010
2009 Great Refrigerator Roundup	Chest Freezer - Energy Star Unit Replacement - Running Part Time (26% of the time)	0	4	48%	261	$3	OPA 2010
2009 Great Refrigerator Roundup	Chest Freezer - Not Replaced - Running All Time (100% of time)	3	4	48%	1,096	$100	OPA 2010
2009 Great Refrigerator Roundup	Chest Freezer - Standard Efficiency Unit Replacement - Running All Time (100% of time)	1	4	48%	959	$24	OPA 2010
2009 Great Refrigerator Roundup	Chest Freezer - Energy Star Unit Replacement - Running All Time (100% of time)	4	4	48%	1,012	$117	OPA 2010
2009 Great Refrigerator Roundup	Side by Side Fridge-Freezer - Not Replaced - Running Part Time (38% of the time)	0	5	46%	507	$3	OPA 2010
2009 Great Refrigerator Roundup	Side by Side Fridge-Freezer - Standard Efficiency Unit Replacement - Running Part Time (38% of the time)	0	5	46%	260	$1	OPA 2010
2009 Great Refrigerator Roundup	Side by Side Fridge-Freezer - Energy Star Unit Replacement - Running Part Time (38% of the time)	0	5	46%	309	$4	OPA 2010
2009 Great Refrigerator Roundup	Side by Side Fridge-Freezer - Not Replaced - Running All Time (100% of time)	2	5	46%	1,331	$57	OPA 2010
2009 Great Refrigerator Roundup	Side by Side Fridge-Freezer - Standard Efficiency Unit Replacement - Running All Time (100% of time)	1	5	46%	682	$11	OPA 2010
2009 Great Refrigerator Roundup	Side by Side Fridge-Freezer - Energy Star Unit Replacement - Running All Time (100% of time)	3	5	46%	812	$68	OPA 2010
2009 Great Refrigerator	Single Door Fridge - Not Replaced - Running	0	5	46%	418	$2	OPA 2010

Program	Energy Efficient Measure	Units	Measure life	Free Riders	Annual energy savings (kWh/a)	LRAM (2011$)	Assumption Source
Roundup	Part Time (38% of the time)						
2009 Great Refrigerator Roundup	Single Door Fridge - Standard Efficiency Unit Replacement - Running Part Time (38% of the time)	0	5	46%	237	$1	OPA 2010
2009 Great Refrigerator Roundup	Single Door Fridge - Energy Star Unit Replacement - Running Part Time (38% of the time)	0	5	46%	273	$3	OPA 2010
2009 Great Refrigerator Roundup	Single Door Fridge - Not Replaced - Running All Time (100% of time)	2	5	46%	1,097	$47	OPA 2010
2009 Great Refrigerator Roundup	Single Door Fridge - Standard Efficiency Unit Replacement - Running All Time (100% of time)	1	5	46%	623	$10	OPA 2010
2009 Great Refrigerator Roundup	Single Door Fridge - Energy Star Unit Replacement - Running All Time (100% of time)	3	5	46%	718	$60	OPA 2010
2009 Great Refrigerator Roundup	Top Freezer Fridge - Not Replaced - Running Part Time (38% of the time)	1	5	46%	470	$18	OPA 2010
2009 Great Refrigerator Roundup	Top Freezer Fridge - Standard Efficiency Unit Replacement - Running Part Time (38% of the time)	1	5	46%	252	$4	OPA 2010
2009 Great Refrigerator Roundup	Top Freezer Fridge - Energy Star Unit Replacement - Running Part Time (38% of the time)	3	5	46%	295	$22	OPA 2010
2009 Great Refrigerator Roundup	Top Freezer Fridge - Not Replaced - Running All Time (100% of time)	10	5	46%	1,234	$339	OPA 2010
2009 Great Refrigerator Roundup	Top Freezer Fridge - Standard Efficiency Unit Replacement - Running All Time (100% of time)	4	5	46%	661	$67	OPA 2010
2009 Great Refrigerator Roundup	Top Freezer Fridge - Energy Star Unit Replacement - Running All Time (100% of	19	5	46%	776	$415	OPA 2010

Program	Energy Efficient Measure	Units	Measure life	Free Riders	Annual energy savings (kWh/a)	LRAM (2011$)	Assumption Source
	time)						
2009 Great Refrigerator Roundup	Upright Freezer - Not Replaced - Running Part Time (26% of the time)	0	4	48%	365	$1	OPA 2010
2009 Great Refrigerator Roundup	Upright Freezer - Standard Efficiency Unit Replacement - Running Part Time (26% of the time)	0	4	48%	180	$0	OPA 2010
2009 Great Refrigerator Roundup	Upright Freezer - Energy Star Unit Replacement - Running Part Time (26% of the time)	0	4	48%	189	$1	OPA 2010
2009 Great Refrigerator Roundup	Upright Freezer - Not Replaced - Running All Time (100% of time)	1	4	48%	1,416	$52	OPA 2010
2009 Great Refrigerator Roundup	Upright Freezer - Standard Efficiency Unit Replacement - Running All Time (100% of time)	0	4	48%	697	$7	OPA 2010
2009 Great Refrigerator Roundup	Upright Freezer - Energy Star Unit Replacement - Running All Time (100% of time)	2	4	48%	736	$34	OPA 2010
2009 Great Refrigerator Roundup	Dehumidifier - Not Replaced - Running All Time (100% of time)	0	4	64%	960	$6	OPA 2010
2009 Great Refrigerator Roundup	Dehumidifier - Standard Efficiency Unit Replacement - Running All Time (100% of time)	0	4	64%	540	$2	OPA 2010
2009 Great Refrigerator Roundup	Dehumidifier - Energy Star Unit Replacement - Running All Time (100% of time)	1	4	64%	463	$4	OPA 2010
2009 Great Refrigerator Roundup	Window Air Conditioner - Not Replaced - Running All Time (100% of time)	1	3	64%	371	$4	OPA 2010
2009 Great Refrigerator Roundup	Window Air Conditioner - Standard Efficiency Unit Replacement - Running All Time (100% of time)	0	3	64%	118	$0	OPA 2010
2009 Great Refrigerator	Window Air Conditioner - Energy Star Unit	0	3	64%	141	$1	OPA 2010

Program	Energy Efficient Measure	Units	Measure life	Free Riders	Annual energy savings (kWh/a)	LRAM (2011$)	Assumption Source
Roundup	Replacement - Running All Time (100% of time)						
2009 Cool Savings Rebate	Energy Star® 14.5 SEER (Tier 1) Central Air Conditioner (CAC)	86	18	42%	113	$289	OPA 2010
2009 Cool Savings Rebate	Energy Star® 14.5 SEER (Tier 1) Central Air Conditioner (CAC) with change in behaviour	13	18	42%	317	$127	OPA 2010
2009 Cool Savings Rebate	Energy Star® 15.0 SEER (Tier 2) Central Air Conditioner (CAC)	227	18	42%	177	$1,190	OPA 2010
2009 Cool Savings Rebate	Energy Star® 15.0 SEER (Tier 2) Central Air Conditioner (CAC) with change in behaviour	35	18	42%	366	$385	OPA 2010
2009 Cool Savings Rebate	Furnace with Electronically Commutated Motor (ECM), Home constructed before 1980, AHRI Matched CAC & Furnace, Continuous Fan, No change	19	19	60%	2,773	$1,090	OPA 2010
2009 Cool Savings Rebate	Furnace with Electronically Commutated Motor (ECM), Home constructed before 1980, AHRI Matched CAC & Furnace, Non-continuous Fan, No change	79	19	60%	324	$523	OPA 2010
2009 Cool Savings Rebate	Furnace with Electronically Commutated Motor (ECM), Home constructed before 1980, AHRI Matched CAC & Furnace, Continuous Fan, Change from non-continuous	6	19	60%	91	$12	OPA 2010
2009 Cool Savings Rebate	Furnace with Electronically Commutated Motor (ECM), Home constructed before 1980, Unmatched CAC & Furnace, Continuous Fan, No change	34	19	60%	2,823	$1,957	OPA 2010
2009 Cool Savings Rebate	Furnace with Electronically Commutated Motor (ECM), Home constructed before 1980, Unmatched CAC & Furnace, Non-continuous Fan, No change	140	19	60%	373	$1,063	OPA 2010

Program	Energy Efficient Measure	Units	Measure life	Free Riders	Annual energy savings (kWh/a)	LRAM (2011$)	Assumption Source
2009 Cool Savings Rebate	Furnace with Electronically Commutated Motor (ECM), Home constructed before 1980, Unmatched CAC & Furnace, Continuous Fan, Change from non-continuous	11	19	60%	140	$32	OPA 2010
2009 Cool Savings Rebate	Furnace with Electronically Commutated Motor (ECM), Home constructed before 1980, Heating only, Continuous Fan, No change	6	19	60%	1,535	$174	OPA 2010
2009 Cool Savings Rebate	Furnace with Electronically Commutated Motor (ECM), Home constructed before 1980, Heating only, Non-continuous Fan, No change	23	19	60%	324	$151	OPA 2010
2009 Cool Savings Rebate	Furnace with Electronically Commutated Motor (ECM), Home constructed before 1980, Heating only, Continuous Fan, Change from non-continuous	2	19	60%	192	$7	OPA 2010
2009 Cool Savings Rebate	Furnace with Electronically Commutated Motor (ECM), Home constructed after 1980, AHRI Matched CAC & Furnace, Continuous Fan, No change	23	19	60%	2,867	$1,322	OPA 2010
2009 Cool Savings Rebate	Furnace with Electronically Commutated Motor (ECM), Home constructed after 1980, AHRI Matched CAC & Furnace, Non-continuous Fan, No change	93	19	60%	207	$393	OPA 2010
2009 Cool Savings Rebate	Furnace with Electronically Commutated Motor (ECM), Home constructed after 1980, AHRI Matched CAC & Furnace, Continuous Fan, Change from non-continuous	7	19	60%	(49)	($7)	OPA 2010
2009 Cool Savings Rebate	Furnace with Electronically Commutated Motor (ECM), Home constructed after 1980, Unmatched CAC & Furnace, Continuous Fan, No change	40	19	60%	2,927	$2,383	OPA 2010

Program	Energy Efficient Measure	Units	Measure life	Free Riders	Annual energy savings (kWh/a)	LRAM (2011$)	Assumption Source
2009 Cool Savings Rebate	Furnace with Electronically Commutated Motor (ECM), Home constructed after 1980, Unmatched CAC & Furnace, Non-continuous Fan, No change	164	19	60%	267	$894	OPA 2010
2009 Cool Savings Rebate	Furnace with Electronically Commutated Motor (ECM), Home constructed after 1980, Unmatched CAC & Furnace, Continuous Fan, Change from non-continuous	13	19	60%	11	$3	OPA 2010
2009 Cool Savings Rebate	Furnace with Electronically Commutated Motor (ECM), Home constructed after 1980, Heating only, Continuous Fan, No change	7	19	60%	1,570	$210	OPA 2010
2009 Cool Savings Rebate	Furnace with Electronically Commutated Motor (ECM), Home constructed after 1980, Heating only, Non-continuous Fan, No change	27	19	60%	207	$114	OPA 2010
2009 Cool Savings Rebate	Furnace with Electronically Commutated Motor (ECM), Home constructed after 1980, Heating only, Continuous Fan, Change from non-continuous	2	19	60%	76	$3	OPA 2010
2009 Cool Savings Rebate	Programmable Thermostat - Central Air Conditioning (CAC) & Gas heating	180	15	61%	30	$109	OPA 2010
2009 Cool Savings Rebate	Programmable Thermostat - Energy Star® Central Air Conditioning (CAC) & Gas Heating	241	15	61%	26	$125	OPA 2010
2009 Cool Savings Rebate	Programmable Thermostat - Gas Heating only	51	15	61%	9	$10	OPA 2010
2009 Cool Savings Rebate	Participant Spillover - Lighting	25	5	0%	40	$51	OPA 2010
2009 Cool Savings Rebate	Participant Spillover - Cooling or Heating	9	3	0%	100	$42	OPA 2010
2009 Cool Savings Rebate	Participant Spillover - Water heating	12	10	0%	141	$89	OPA 2010
2009 Cool Savings Rebate	Participant Spillover - Appliances	17	4	0%	76	$67	OPA 2010
2009 Cool Savings Rebate	Participant Spillover - Insulation of other	25	10	0%	75	$97	OPA 2010

Program	Energy Efficient Measure	Units	Measure life	Free Riders	Annual energy savings (kWh/a)	LRAM (2011$)	Assumption Source
	weatherization						
2009 Cool Savings Rebate	Participant Spillover - Windows	20	10	0%	100	$101	OPA 2010
2009 Cool Savings Rebate	Participant Spillover - Roof products	10	15	0%	50	$25	OPA 2010
2009 Cool Savings Rebate	Participant Spillover - Other products	11	5	0%	50	$27	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Energy Star Qualified Compact Fluorescent - Spring Campaign - Participant Rebated	950	8	31%	23	$778	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	ENERGY STAR Decorative CFLs - Spring Campaign - Participant Rebated	2,252	6	23%	26	$2,306	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	ENERGY STAR Fixtures - Spring Campaign - Participant Rebated	183	16	47%	116	$579	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	ENERGY STAR Ceiling Fans - Spring Campaign - Participant Rebated	79	10	24%	71	$222	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Heavy Duty Pool and Spa Timers - Spring Campaign - Participant Rebated	30	10	24%	454	$527	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Clotheslines - Spring Campaign - Participant Rebated	76	10	45%	77	$168	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Pipe Wrap - Spring Campaign - Participant Rebated	63	6	22%	8	$20	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Water Blanket - Spring Campaign - Participant Rebated	8	10	20%	52	$18	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Energy Star Qualified Window Air Conditioner - Spring Campaign - Participant Promoted	78	12	33%	96	$260	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Energy Star Qualified Dehumidifiers - Spring Campaign - Participant Promoted	74	12	32%	284	$736	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Programmable Thermostat - Spring Campaign - Participant Promoted	182	15	55%	138	$583	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Solar Power Products - Spring Campaign - Participant Promoted	474	5	40%	5	$71	OPA 2010
2009 Every Kilowatt Counts	Control Products - Spring Campaign -	236	10	47%	72	$468	OPA 2010

Program	Energy Efficient Measure	Units	Measure life	Free Riders	Annual energy savings (kWh/a)	LRAM (2011$)	Assumption Source
Power Savings Event	Participant Promoted						
2009 Every Kilowatt Counts Power Savings Event	Reduce power to electronics (Behavioural) - Spring Campaign - Participant Spillover	99	1	85%	21	$5	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Installed CFLs - Spring Campaign - Participant Spillover	87	8	87%	101	$59	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Washed in Cold Laundry (Behavioural) - Spring Campaign - Participant Spillover	86	1	86%	30	$6	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Turned off/Reduced lights (Behavioural) - Spring Campaign - Participant Spillover	80	1	88%	263	$39	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Dried clothes outside or on rack (Behavioural) - Spring Campaign - Participant Spillover	70	1	89%	74	$9	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Installed a new energy efficient appliance - Refrigerator - Spring Campaign - Participant Spillover	63	14	86%	65	$30	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Unplugged devices usually left plugged in (Behavioural) - Spring Campaign - Participant Spillover	60	1	80%	70	$13	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Installed a new energy efficient appliance - Clothes washing machine - Spring Campaign - Participant Spillover	38	14	88%	122	$28	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Added ceiling/attic/wall/basement insulation - Spring Campaign - Participant Spillover	38	20	88%	394	$89	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Installed Programmable Thermostat - Spring Campaign - Participant Spillover	37	15	87%	308	$73	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Energy Star Qualified Compact Fluorescent - Spring Campaign - Non-Participant Rebated	723	8	65%	22	$290	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	ENERGY STAR Decorative CFLs - Spring Campaign - Non-Participant Rebated	359	6	60%	26	$192	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	ENERGY STAR Fixtures - Spring Campaign - Non-Participant Rebated	338	16	59%	68	$478	OPA 2010

Program	Energy Efficient Measure	Units	Measure life	Free Riders	Annual energy savings (kWh/a)	LRAM (2011$)	Assumption Source
2009 Every Kilowatt Counts Power Savings Event	ENERGY STAR Ceiling Fans - Spring Campaign - Non-Participant Rebated	99	10	86%	71	$49	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Heavy Duty Pool and Spa Timers - Spring Campaign - Non-Participant Rebated	62	10	86%	454	$197	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Clotheslines - Spring Campaign - Non-Participant Rebated	229	10	86%	77	$123	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Pipe Wrap - Spring Campaign - Non-Participant Rebated	531	6	86%	8	$30	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Water Blanket - Spring Campaign - Non-Participant Rebated	78	10	86%	52	$28	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Energy Star Qualified Window Air Conditioner - Spring Campaign - Non-Participant Promoted	130	12	57%	96	$279	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Energy Star Qualified Dehumidifiers - Spring Campaign - Non-Participant Promoted	156	12	56%	284	$1,002	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Programmable Thermostat - Spring Campaign - Non-Participant Promoted	245	15	71%	138	$507	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Solar Power Products - Spring Campaign - Non-Participant Promoted	1,587	5	61%	5	$153	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Control Products - Spring Campaign - Non-Participant Promoted	546	10	66%	72	$699	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Energy Star Qualified Compact Fluorescent - Autumn Campaign - Participant Rebated	4,298	8	31%	25	$3,911	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	ENERGY STAR Specialty CFLs - Autumn Campaign - Participant Rebated	1,738	6	29%	21	$1,330	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	ENERGY STAR Fixtures - Autumn Campaign - Participant Rebated	207	16	30%	119	$889	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Weatherstripping - adhesive foam or V-strip - Autumn Campaign - Participant Rebated	192	15	43%	15	$87	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Weatherstripping - door frame kits - Autumn Campaign - Participant Rebated	126	15	47%	17	$59	OPA 2010

Program	Energy Efficient Measure	Units	Measure life	Free Riders	Annual energy savings (kWh/a)	LRAM (2011$)	Assumption Source
2009 Every Kilowatt Counts Power Savings Event	Programmable Thermostat - Autumn Campaign - Participant Rebated	83	15	33%	32	$93	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Pipe Wrap - Autumn Campaign - Participant Rebated	72	6	55%	7	$11	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Water Blanket - Autumn Campaign - Participant Rebated	16	10	37%	56	$29	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Lighting/Appliance Controls - Autumn Campaign - Participant Rebated	146	17	28%	21	$115	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Energy Star Qualified Holiday LED Lights - Autumn Campaign - Participant Promoted	512	5	41%	14	$212	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Dimmer Switches - Autumn Campaign - Participant Promoted	216	10	50%	24	$130	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Solar Powered Products - Autumn Campaign - Participant Promoted	418	4	48%	6	$62	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Washed laundry with cold water - Autumn Campaign - Participant Spillover	152	1	83%	30	$12	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Turned off / reduced use of power to electronics - Autumn Campaign - Participant Spillover	141	1	81%	21	$9	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Turned off / reduced use of lights - Autumn Campaign - Participant Spillover	131	1	83%	263	$89	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Dried clothes outside or inside on a rack - Autumn Campaign - Participant Spillover	92	1	87%	74	$14	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Turned down the thermostat setting on my furnace - Autumn Campaign - Participant Spillover	92	1	81%	270	$73	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Unplugged devices usually plugged into outlet - Autumn Campaign - Participant Spillover	87	1	82%	70	$17	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Installed a new energy efficient appliance – Refrigerator - Autumn Campaign - Participant Spillover	87	14	75%	65	$71	OPA 2010

Program	Energy Efficient Measure	Units	Measure life	Free Riders	Annual energy savings (kWh/a)	LRAM (2011$)	Assumption Source
2009 Every Kilowatt Counts Power Savings Event	Added ceiling/attic/wall/basement insulation - Autumn Campaign - Participant Spillover	70	20	78%	394	$311	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Replaced my old furnace with a high efficiency furnace - Autumn Campaign - Participant Spillover	62	15	80%	352	$220	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Installed a new energy efficient appliance - Clothes washing machine - Autumn Campaign - Participant Spillover	57	15	81%	142	$81	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Energy Star Qualified Compact Fluorescent - Autumn Campaign - Non-Participant Rebated	3,915	8	86%	24	$654	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	ENERGY STAR Specialty CFLs - Autumn Campaign - Non-Participant Rebated	1,244	6	85%	30	$289	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	ENERGY STAR Fixtures - Autumn Campaign - Non-Participant Rebated	347	16	76%	36	$157	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Weatherstripping - adhesive foam or V-strip - Autumn Campaign - Non-Participant Rebated	1,350	15	93%	15	$74	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Weatherstripping - door frame kits - Autumn Campaign - Non-Participant Rebated	1,029	15	94%	17	$59	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Programmable Thermostat - Autumn Campaign - Non-Participant Rebated	204	15	83%	83	$152	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Pipe Wrap - Autumn Campaign - Non-Participant Rebated	955	6	89%	6	$32	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Water Blanket - Autumn Campaign - Non-Participant Rebated	119	10	78%	40	$54	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Lighting/Appliance Controls - Autumn Campaign - Non-Participant Rebated	1,020	17	90%	42	$224	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Energy Star Qualified Holiday LED Lights - Autumn Campaign - Non-Participant Promoted	1,670	5	65%	14	$412	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Dimmer Switches - Autumn Campaign - Non-Participant Promoted	526	10	73%	24	$174	OPA 2010

Program	Energy Efficient Measure	Units	Measure life	Free Riders	Annual energy savings (kWh/a)	LRAM (2011$)	Assumption Source
2009 Every Kilowatt Counts Power Savings Event	Solar Powered Products - Autumn Campaign - Non-Participant Promoted	845	4	58%	5	$84	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Working Room Air Conditioner Retirement - Rewards for Recycling Campaign - Incented	41	6	62%	32	$25	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Working Room Dehumidifier Retirement - Rewards for Recycling Campaign - Incented	37	8	53%	300	$267	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Working Halogen Torchiere Retirement - Rewards for Recycling Campaign - Incented	12	10	49%	58	$19	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Recycled Second Refrigerator - Rewards for Recycling Campaign - Spillover	9	14	64%	1,238	$196	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Recycled Additional Room Air Conditioner - Rewards for Recycling Campaign - Spillover	7	6	64%	30	$4	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Recycled Central Air Conditioner - Rewards for Recycling Campaign - Spillover	7	18	64%	72	$9	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Recycled Additional Room Dehumidifier - Rewards for Recycling Campaign - Spillover	7	8	64%	309	$43	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Installed Energy Star® Windows - Rewards for Recycling Campaign - Spillover	12	20	82%	1,530	$170	OPA 2010
2009 Every Kilowatt Counts Power Savings Event	Installed Energy Star® CFL Bulbs - Rewards for Recycling Campaign - Spillover	39	8	82%	45	$17	OPA 2010
2009 Electricity Retrofit Incentive	All projects	1	8	27%	557,130	$10,880	OPA 2010
2009 High Performance New Construction	Custom projects	1	20	30%	57,230	$2,446	OPA 2010
2006 Partnership Programs	13W CFLs	3,200	8	30%	44	$9,199	OPA 2011a
2010 Cool Savings Rebate	All measures	487	3	59%	662	$4,749	OPA 2011c
2010 Every Kilowatt Counts Power Savings Event	All measures	4,925	3	54%	67	$5,498	OPA 2011c
2010 Great Refrigerator Roundup	All measures	263	3	47%	1,084	$5,412	OPA 2011c

Program	Energy Efficient Measure	Units	Measure life	Free Riders	Annual energy savings (kWh/a)	LRAM (2011$)	Assumption Source
2010 Electricity Retrofit Incentive	All projects	2	3	49%	143,753	$2,999	OPA 2011c
2010 High Performance New Construction	Custom	1	3	30%	145,999	$5,610	OPA 2011c
2010 Multifamily Energy Efficiency Rebates	Custom	1	3	26%	75,155	$1,530	OPA 2011c
2010 Power Savings Blitz	All measures	135	3	0%	2,683	$15,303	OPA 2011c
Total LRAM						**$623,790**	

Table 10 –LRAM contributions and carrying charges.

Program	Year	LRAM	Carrying charges	Total
Aboriginal	2007	$32,131	$1,723	*$33,854*
Cool & Hot Savings Rebate	2006	$10,057	$571	*$10,628*
	2007	$13,728	$587	*$14,315*
Cool Savings Rebate	2008	$13,059	$408	*$13,467*
	2009	$12,774	$283	*$13,057*
	2010	$4,667	$82	*$4,749*
Electricity Retrofit Incentive	2008	$7,202	$227	*$7,429*
	2009	$10,643	$236	*$10,880*
	2010	$2,947	$52	*$2,999*
Energy Efficiency Assistance for Houses Pilot	2007	$4,330	$185	*$4,514*
Every Kilowatt Counts Power Savings Event	2008	$65,301	$2,064	*$67,365*
	2009	$21,574	$481	*$22,055*
	2010	$5,403	$95	*$5,498*
Great Refrigerator Roundup	2007	$21,572	$920	*$22,492*
	2008	$29,496	$922	*$30,418*
	2009	$1,459	$32	*$1,491*
	2010	$5,318	$94	*$5,412*
High Performance New Construction	2008	$99	$3	*$102*
	2009	$2,392	$53	*$2,446*
	2010	$5,513	$97	*$5,610*
Multifamily Energy Efficiency Rebates	2010	$1,504	$26	*$1,530*
Power Savings Blitz	2010	$15,038	$264	*$15,303*
Secondary Refrigerator Retirement Pilot	2006	$3,840	$230	*$4,070*
Social Housing Pilot	2007	$7,503	$320	*$7,822*
Summer Savings	2007	$9,346	$798	*$10,144*
Summer Sweepstakes	2008	$28,376	$887	*$29,263*
Every Kilowatt Counts	2006	$169,477	$13,206	*$182,682*
	2007	$81,505	$3,491	*$84,995*
Partnership Programs	2006	$8,704	$494	*$9,199*
Total		**$594,958**	**$28,832**	**$623,790**

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LRAMVA

PUC has included an expected amount related to CDM saving in the 2013 Test Year Forecast as part of the cost of service rate application as detailed in Exhibit 3. However, for 2011 and 2012 there will be lost revenue that occurred prior to a forecast of CDM impacts being included in the 2013 forecast. Therefore, PUC is making a claim for lost revenues related to programs implemented in 2011. In future applications PUC will apply for 2012 lost revenues when the final actual results are available.

PUC has based the claim on the most recent and final input assumptions documented in the "OPA 2011 Final Annual Report on provincial conservation results to Local Distribution Company service territories – issued August 31, 2012." This report includes both the most recent input assumptions, and contains PUC's most recent verified activity by program. PUC has included the OPA Report below. PUC has no Board Approved CDM programs.

The results of the 2011 final report were used to calculate the LRAMVA claim of $36,741 plus $1,012 in carrying charges for a total of $37,753 representing lost volumes of 1,533,501 kWh and 2,676 kW related to programs implemented in 2011.

PUC has included the Gross and Net kWh/kW saving by rate class in the following Tables.

Table 5 – Residential 2011 Net kWh Savings

Residential 2011 Programs (Net kWh)	
Appliance Retirement	115,083
Appliance Exchange	9,081
HVAC Incentvies	302,460
Conservation Instant Coupon Booklet	166,010
Bi-Annual Retailer Event	255,303
2011 kWh Total	**847,937**

Table 6 – Residential 2011 Gross kWh Savings

Residential 2011 Programs (Gross kWh)	
Appliance Retirement	224,471
Appliance Exchange	17,621
HVAC Incentvies	508,931
Conservation Instant Coupon Booklet	150,411
Bi-Annual Retailer Event	233,687
2011 kWh Total	**1,135,121**

Table 7 – General Service < 50 kW 2011 Net kWh Savings

GSLT50 2011 Programs (Net kWh)	
Direct Install Lighting	576,898
Efficiency: Equipment Replacement	108,666
2011 kWh Total	**685,564**

Table 8 – General Service < 50 kW 2011 Gross kWh Savings

GSLT50 2011 Programs (Gross kWh)	
Direct Install Lighting	621,297
Efficiency: Equipment Replacement	142,363
2011 kWh Total	**763,660**

Table 9 – General Service > 50 kW 2011 Net kW Savings

GS >50 2011 Programs (Net kW)	
High Performance New Construction	1,176
Efficiency: Equipment Replacement (from C&I program schedule)	1,308
Electricity Retrofit Incentive Program	192
2011 kW Total	**2,676**

Table 10 – General Service > 50 kW 2011 Gross kW Savings

GS >50 2011 Programs (Gross kW)	
High Performance New Construction	2,352
Efficiency: Equipment Replacement (from C&I program schedule)	1,740
Electricity Retrofit Incentive Program	360
2011 kW Total	**4,452**

PUC has included a summary below of the net saving based on the approved 2011 rates. PUC is applying for $36,741 plus carrying charges of $1,012 to be recovered over a one year period as shown in Table 11 and Table 12.

Table 11 – Net LRAMVA Savings

2011 Programs			
	Net kWh	2011 Rate	Amount
Residential	847,937	0.0151	$12,804
GSLT50	685,564	0.0178	$12,203
	Net kW	2011 Rate	
GSGT50	2,676	4.3848	$11,734
Total			$36,741

PUC applied carrying charges to the 2011 CDM savings based on the OEB prescribed interest rates. Table 12 below shows the calculations of the carrying charges.

Table 12 – Carrying Charges on LRAMVA

				LRAM LRAMVA			Allocated Carrying Costs		
Month	OEB Prescribed Annual Rate	Days in Month	Monthly Intrest rate	Residential	GS LT 50	GS GT 50	Residential	GS LT 50	GS GT 50
Jan-11	1.47%	31	0.12%	$ 1,066.99	$ 1,016.92	$ 977.81	$ 1.33	$ 1.27	$ 1.22
Feb-11	1.47%	28	0.11%	$ 2,133.97	$ 2,033.84	$ 1,955.62	$ 2.41	$ 2.29	$ 2.21
Mar-11	1.47%	31	0.12%	$ 3,200.96	$ 3,050.76	$ 2,933.43	$ 4.00	$ 3.81	$ 3.66
Apr-11	1.47%	30	0.12%	$ 4,267.95	$ 4,067.68	$ 3,911.24	$ 5.16	$ 4.91	$ 4.73
May-11	1.47%	31	0.12%	$ 5,334.94	$ 5,084.60	$ 4,889.05	$ 6.66	$ 6.35	$ 6.10
Jun-11	1.47%	30	0.12%	$ 6,401.92	$ 6,101.52	$ 5,866.86	$ 7.73	$ 7.37	$ 7.09
Jul-11	1.47%	31	0.12%	$ 7,468.91	$ 7,118.44	$ 6,844.67	$ 9.32	$ 8.89	$ 8.55
Aug-11	1.47%	31	0.12%	$ 8,535.90	$ 8,135.36	$ 7,822.48	$ 10.66	$ 10.16	$ 9.77
Sep-11	1.47%	30	0.12%	$ 9,602.89	$ 9,152.28	$ 8,800.29	$ 11.60	$ 11.06	$ 10.63
Oct-11	1.47%	31	0.12%	$ 10,669.87	$ 10,169.20	$ 9,778.10	$ 13.32	$ 12.70	$ 12.21
Nov-11	1.47%	30	0.12%	$ 11,736.86	$ 11,186.12	$ 10,755.91	$ 14.18	$ 13.52	$ 13.00
Dec-11	1.47%	31	0.12%	$ 12,803.85	$ 12,203.04	$ 11,733.72	$ 15.99	$ 15.24	$ 14.65
Jan-12	1.47%	31	0.12%	$ 12,803.85	$ 12,203.04	$ 11,733.72	$ 15.99	$ 15.24	$ 14.65
Feb-12	1.47%	29	0.12%	$ 12,803.85	$ 12,203.04	$ 11,733.72	$ 14.95	$ 14.25	$ 13.70
Mar-12	1.47%	31	0.12%	$ 12,803.85	$ 12,203.04	$ 11,733.72	$ 15.99	$ 15.24	$ 14.65
Apr-12	1.47%	30	0.12%	$ 12,803.85	$ 12,203.04	$ 11,733.72	$ 15.47	$ 14.74	$ 14.18
May-12	1.47%	31	0.12%	$ 12,803.85	$ 12,203.04	$ 11,733.72	$ 15.99	$ 15.24	$ 14.65
Jun-12	1.47%	30	0.12%	$ 12,803.85	$ 12,203.04	$ 11,733.72	$ 15.47	$ 14.74	$ 14.18
Jul-12	1.47%	31	0.12%	$ 12,803.85	$ 12,203.04	$ 11,733.72	$ 15.99	$ 15.24	$ 14.65
Aug-12	1.47%	31	0.12%	$ 12,803.85	$ 12,203.04	$ 11,733.72	$ 15.99	$ 15.24	$ 14.65
Sep-12	1.47%	30	0.12%	$ 12,803.85	$ 12,203.04	$ 11,733.72	$ 15.47	$ 14.74	$ 14.18
Oct-12	1.47%	31	0.12%	$ 12,803.85	$ 12,203.04	$ 11,733.72	$ 15.99	$ 15.24	$ 14.65
Nov-12	1.47%	30	0.12%	$ 12,803.85	$ 12,203.04	$ 11,733.72	$ 15.47	$ 14.74	$ 14.18
Dec-12	1.47%	31	0.12%	$ 12,803.85	$ 12,203.04	$ 11,733.72	$ 15.99	$ 15.24	$ 14.65
Jan-13	1.47%	31	0.12%	$ 12,803.85	$ 12,203.04	$ 11,733.72	$ 15.99	$ 15.24	$ 14.65
Feb-13	1.47%	28	0.11%	$ 12,803.85	$ 12,203.04	$ 11,733.72	$ 14.44	$ 13.76	$ 13.23
Mar-13	1.47%	31	0.12%	$ 12,803.85	$ 12,203.04	$ 11,733.72	$ 15.99	$ 15.24	$ 14.65
Apr-13	1.47%	30	0.12%	$ 12,803.85	$ 12,203.04	$ 11,733.72	$ 15.47	$ 14.74	$ 14.18
							$ 352.97	$ 336.41	$ 323.47

The total claim for 2011 LRAMVA by rate class, including carrying charges, is shown in Table 13 below.

Table 13 – Summary of 2011 LRAMVA by rate class

	Residential Programs 2011	**General Service <50 2011**	**General Service > 50 2011**	**Total**
2011 programs	$12,804	$12,203	$11,734	$36,741
Subtotal	*$12,804*	*$12,203*	*$11,734*	*$36,741*
Carrying charges	*$353*	*$336*	*$323*	*$1,012*
Total	**$13,157**	**$12,539**	**$12,057**	**$37,753**

PUC has included below the 2011 Final Results Report issued by the OPA on August 31, 2012.

Message from the Vice President:

The OPA is pleased to provide you with the enclosed Final 2011 Results Report.

Despite some of the inertial challenges in 2011 with program start up, on average, year one province-wide forecasts were met and the year finished out with strong momentum which continues to build 2012. There are still challenges for LDCs of all sizes and we are committed to ensuring LDCs are successful in meeting their objectives. We look forward to further dialogue to discover opportunities to improve the current program suite with local program opportunities, best practices and successes to better reach our customers in the years to come.

This report was developed in collaboration with the OPA-LDC Reporting and Evaluation Working Group and is designed to help populate LDC annual report templates that will be submitted to the OEB in late September. Between the draft and final reports several improvements were made to improve clarity and transparency based on feedback provided by LDCs, such as: the addition of a glossary tab, total adjustments to savings are now broken out into both the realization rate and net-to-gross ratio for both peak demand and energy savings and modifications were made to the methodology tab. We invite you to continue to provide your feedback.

All results are now considered final for 2011. Any additional 2011 program activity not captured will be reported in the Final 2012 Results Report. Please continue to monitor saveONenergy E-blasts for any further updates and should you have any other questions or comments please contact LDC.Support@powerauthority.on.ca.

We appreciate your collaboration and cooperation throughout the reporting and evaluation process. We look forward to another successful year in 2012.

Sincerely,
Andrew Pride

Table of Contents

Summary	Provides a "snapshot" of your LDC's OPA-Contracted Province-Wide Program performance in 2011: progress to target using 2 scenarios, sector breakdown and progress against the LDC community.
LDC-Specific Data: table formats, section references and table numbers align with the OEB Reporting Template	
2.3 Results Participation - LDC	Breakdown of initiative-level participation in 2011 for your LDC.
2.5.1 Evaluation Findings	Provides a summary of the province-wide evaluation findings for each initiative and highlights which initiatives were not evaluated.
2.5.2 Results - LDC	Provides LDC-specific initiative-level results (net and gross peak demand and energy savings, realization rates, net-to-gross ratios and how each initiative contributes to target)
3.1.1 Summary - LDC	Provides a portfolio level view of achievement towards your OEB targets in 2011. Contains space to input LDC-specific progress to milestones set out in your CDM Strategy.
Province-Wide Data: LDC performance in aggregate (province-wide results)	
Provincial - Participation	Breakdown of initiative-level participation in 2011 for the province.
Provincial - Results	Provides province-wide initiative-level results (net and gross peak demand and energy savings, realization rates, net-to-gross ratios and how each initiative contributes to target)
Provincial - Progress Summary	Provides a portfolio level view of provincial achievement towards province-wide OEB targets in 2011.
Methodology	Provides key equations, notes and an initiative-level breakdown of: how savings are attributed to LDCs, when the savings are considered to 'start' (i.e. what period the savings are attributed to) and how the savings are calculated.
Reference Tables	Provides the sector mapping used for Retrofit and the allocation methodology table used in the consumer program when customer specific information is unavailable.
Glossary	Contains definitions for terms used throughout the report.

OPA-Contracted Province-Wide CDM Programs FINAL 2011 Results

LDC: PUC Distribution Inc.

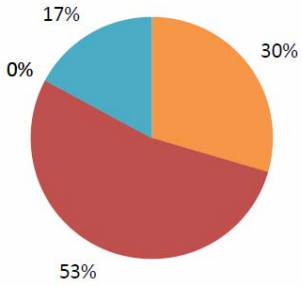
FINAL 2011 Progress to Targets	Incremental 2011	Scenario 1: % of Target Achieved	Scenario 2: % of Target Achieved
Net Annual Peak Demand Savings (MW)	0.7	**11.2%**	**11.9%**
Net Cumulative Energy Savings (GWh)	2.7	**35.2%**	**35.2%**

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

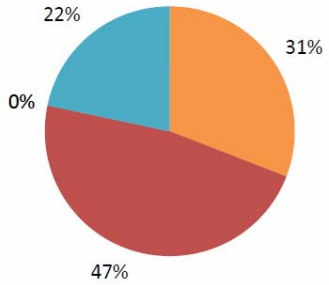
Scenario 2 = Assumes that demand response resources remain in your territory until 2014

Achievement by Sector

2011 Incremental Peak Demand Savings (MW)



2011 Incremental Energy Savings (GWh)

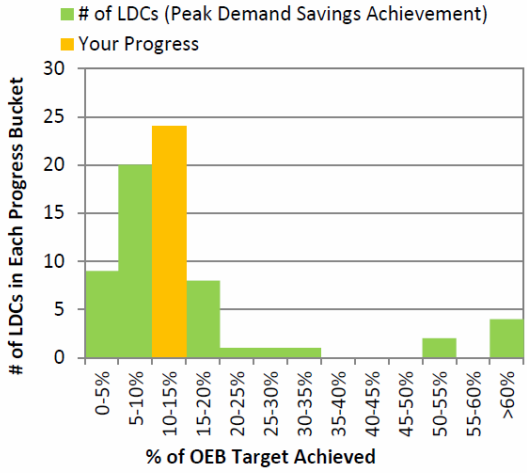


Consumer Program Total
Business Program Total
Industrial Program Total
Home Assistance Program Total
Pre-2011 Programs completed in 2011 Total

Comparison: Your Achievement vs. LDC Community Achievement

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

% of OEB Peak Demand Savings Target Achieved



% of OEB Energy Savings Target Achieved

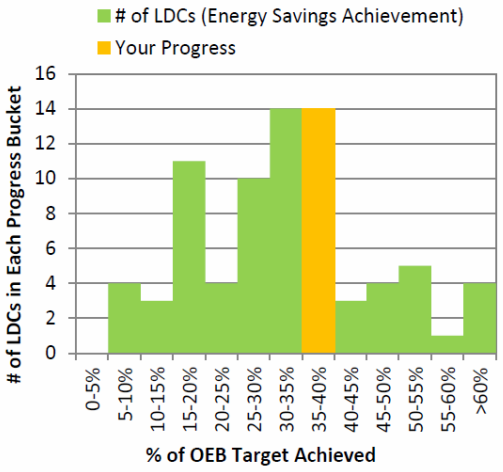


Table 1: Participation[1]

#	Initiative	Unit	Uptake/ Participation Units
Consumer Program			
1	Appliance Retirement	Appliances	273
2	Appliance Exchange	Appliances	53
3	HVAC Incentives	Equipment	407
4	Conservation Instant Coupon Booklet	Products	4,398
5	Bi-Annual Retailer Event	Products	7,561
6	Retailer Co-op	Products	0
7	Residential Demand Response	Devices	0
8	Residential New Construction	Houses	0
Business Program			
9	Efficiency: Equipment Replacement	Projects	11
10	Direct Install Lighting	Projects	182
11	Existing Building Commissioning Incentive	Buildings	0
12	New Construction and Major Renovation Incentive	Buildings	0
13	Energy Audit	Audits	0
14	Commercial Demand Response (part of the Residential program schedule)	Devices	0
15	Demand Response 3 (part of the Industrial program schedule)	Facilities	0
Industrial Program			
16	Process & System Upgrades	Projects[2]	0
17	Monitoring & Targeting	Projects[3]	0
18	Energy Manager	Managers[2 3]	0
19	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	Projects	0
20	Demand Response 3	Facilities	0
Home Assistance Program			
21	Home Assistance Program	Homes	0
Pre 2011 Programs Completed in 2011			
22	Electricity Retrofit Incentive Program	Projects	5
23	High Performance New Construction	Projects	3
24	Toronto Comprehensive	Projects	0
25	Multifamily Energy Efficiency Rebates	Projects	0
26	Data Centre Incentive Program	Projects	0
27	EnWin Green Suites	Projects	0

[1] *Please see "Methodology" tab for more information regarding attributing savings to LDCs*

[2] *Results are based on completed incentive projects (see "Methodology" tab for more information)*

[3] *Includes: Roving Energy Managers, Key Account Managers and Embedded Energy Managers if projects are completed in 2011*

Table 3: OPA Province-Wide Evaluation Findings

#	Initiative	OPA Province-Wide Key Evaluation Findings
Consumer Program		

1	Appliance Retirement	* Overall participation continues to decline year over year
		  * Participation declined 17% from 2010 (from over 67,000 units in 2010 to over 56,000 units in 2011)
		* 97% of net resource savings achieved through the home pick-up stream
		  * Measure Breakdown: 66% refrigerators, 30% freezers, 4% Dehumidifiers and window air conditioners
		* 3% of net resource savings achieved through the Retailer pick-up stream
		  * Measure Breakdown: 90% refrigerators, 10% freezers
		* Net-to-Gross ratio for the initiative was 50%
		  * Measure-level free ridership ranges from 82% for the retailer pick-up stream to 49% for the home pick-up stream
		  * Measure-level spillover ranges from 3.7% for the retailer pick-up stream to 1.7% for the home pick-up stream

2	Appliance Exchange	* Overall eligible units exchanged declined by 36% from 2010 (from over 5,700 units in 2010 to
		  * Measure Breakdown: 75% window air conditioners, 25% dehumidifiers
		* Dehumidifiers and window air conditioners contributed almost equally to the net energy
		  * Dehumidifiers provide more than three times the energy savings per unit than window air conditioners
		* Window air conditioners contributed to 64% of the net peak demand savings achieved
		* Approximately 96% of consumers reported having replaced their exchanged units (as opposed to retiring the unit)
		* Net-to-Gross ratio for the initiative is consistent with previous evaluations (51.5%)

3	HVAC Incentives	* Total air conditioner and furnace installations increased by 14% (from over 95,800 units in 2010 to over 111,500 units in 2011)
		  * Measure Breakdown: 64% furnaces, 10% tier 1 air conditioners (SEER 14.5) and 26% tier 2 air conditioners (SEER 15)
		  * Measure breakdown did not change from 2010 to 2011
		* The HVAC Incentives initiative continues to deliver the majority of both the energy (45%) and demand (83%) savings in the consumer program
		  * Furnaces accounted for over 91% of energy savings achieved for this initiative
		* Net-to-Gross ratio for the initiative was 17% higher than 2010 (from 43% in 2010 to 60% in
		  * Increase due in part to the removal of programmable thermostats from the program, and an increase in the net-to-gross ratio for both Furnaces and Tier 2 air conditioners (SEER 15)

4	Conservation Instant Coupon Booklet	* Customers redeemed nearly 210,000 coupons, translating to nearly 560,000 products
		  * Majority of coupons redeemed were downloadable (~40%) or LDC-branded (~35%)
		  * Majority of coupons redeemed were for multi-packs of standard spiral CFLs (37%), followed by multi-packs of specialty CFLs (17%)
		* Per unit savings estimates and net-to-gross ratios for 2011 are based on a weighted average of 2009 and 2010 evaluation findings
		* Careful attention in the 2012 evaluation will be made for standard CFLs since it is believed that the market has largely been transformed

#	Initiative	OPA Province-Wide Key Evaluation Findings
5	Bi-Annual Retailer Event	* Customers redeemed nearly 370,000 coupons, translating to over 870,000 products * Majority of coupons redeemed were for multi-packs of standard spiral CFLs (49%), followed by multi-packs of specialty CFLs (16%) * Per unit savings estimates and net-to-gross ratios for 2011 are based on a weighted average of 2009 and 2010 evaluation findings * Standard CFLs and heavy duty outdoor timers were reintroduced to the initiative in 2011 and contributed more than 64% of the initiative's 2011 net annual energy savings * While the volume of coupons redeemed for heavy duty outdoor timers was relatively small (less than 1%), the measure accounted for 10% of net annual savings due to high per unit savings * Careful attention in the 2012 evaluation will be made for standard CFLs since it is believed that the market has largely been transformed.
6	Retailer Co-op	* Initiative was not evaluated in 2011 due to low uptake. Verified Bi-Annual Retailer Event per unit assumptions and free-ridership rates were used to calculate net resource savings
7	Residential Demand Response	* Approximately 20,000 new devices were installed in 2011 * 99% of the new devices enrolled controlled residential central AC (CAC) * 2011 only saw 1 atypical event (in both weather and timing) that had limited participation * The ex ante impact developed through the 2009/2010 evaluations was maintained for 2011; residential CAC: 0.56 kW/device, commercial CAC: 0.64 kW/device, and Electric Water Heaters: 0.30 kW/device
8	Residential New Construction	* Initiative was not evaluated in 2011 due to limited uptake * Business case assumptions were used to calculate savings
Business Program		
9	Efficiency: Equipment Replacement	* Gross verified energy savings were boosted by lighting projects in the prescriptive and * Lighting projects overall were determined to have a realization rate of 112%; 116% when including interactive energy changes * On average, the evaluation found high realization rates as a result of both longer operating hours and larger wattage reductions than initial assumptions * Low realization rates for engineered lighting projects due to overstated operating hour assumptions * Custom non-lighting projects suffered from process issues such as: the absence of required M&V plans, the use of inappropriate assumptions , and the lack of adherence to the M&V plan * The final realization rate for summer peak demand was 94% * 84% was a result of different methodologies used to calculate peak demand savings * 10% due to the benefits from reduced air conditioning load in lighting retrofits * Overall net-to-gross ratios in the low 70's represent an improvement over the 2009 and Strict eligibility requirements and improvements in the pre-approval process contributed to the improvement in net-to-gross ratios
		* Though overall performance is above expectations, participation continues to decline year over year as the initiative reaches maturity * 70% of province-wide resource savings persist to 2014

#	Initiative	OPA Province-Wide Key Evaluation Findings
10	Direct Install Lighting	* Over 35% of the projects for 2011 included at least one CFL measure * Resource savings from CFLs in the commercial sector only persist for the industry standard of 3 years * Since 2009 the overall realization rate for this program has improved * 2011 evaluation recorded the highest energy realization rate to date at 89.5% * The hours of use values were held constant from the 2010 evaluation and continue to be the main driver of energy realization rate * Lights installed in "as needed" areas (e.g., bathrooms, storage areas) were determined to have very low realization rates due to the difference in actual energy saved vs. reported savings
11	Existing Building Commissioning Incentive	* Initiative was not evaluated in 2011, no completed projects in 2011
12	New Construction and Major Renovation Incentive	* Initiative was not evaluated in 2011 due to low uptake * Assumptions used are consistent with preliminary reporting based on the 2010 Evaluation findings and consultation with the C&I Work Group (100% realization rate and 50% net-to-gross ratio)
13	Energy Audit	* The evaluation is ongoing. The sample size for 2011 was too small to draw reliable conclusions.
14	Commercial Demand Response (part of the Residential program schedule)	* See residential demand response (#7)
15	Demand Response 3 (part of the Industrial program schedule)	* See Demand Response 3 (#20)
Industrial Program		
16	Process & System Upgrades	* Initiative was not evaluated in 2011, no completed projects in 2011
17	Monitoring & Targeting	* Initiative was not evaluated in 2011, no completed projects in 2011
18	Energy Manager	* Initiative was not evaluated in 2011, no completed projects in 2011
19	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	* See Efficiency: Equipment Replacement (#9)
20	Demand Response 3	* Program performance for Tier 1 customers increased with DR-3 participants providing 75% * Industrial customers outperform commercial customers by provide 84% and 76% of contracted MW, respectively * Program continues to diversify but still remains heavily concentrated with less than 5% of

#	Initiative	OPA Province-Wide Key Evaluation Findings
		* By increasing the number of contributors in each settlement account and implementation of the new baseline methodology the performance of the program is expected to increase
Home Assistance Program		
21	Home Assistance Program	* Initiative was not evaluated in 2011 due to low uptake * Business Case assumptions were used to calculate savings
Pre-2011 Programs completed in 2011		
22	Electricity Retrofit Incentive Program	* Initiative was not evaluated * Net-to-Gross ratios used are consistent with the 2010 evaluation findings (multifamily buildings 99% realization rate and 62% net-to-gross ratio and C&I buildings 77% realization rate and 52% net-to-gross ratio)
23	High Performance New Construction	* Initiative was not evaluated * Net-to-Gross ratios used are consistent with the 2010 evaluation findings (realization rate of 100% and net-to-gross ratio of 50%)
24	Toronto Comprehensive	* Initiative was not evaluated * Net-to-Gross ratios used are consistent with the 2010 evaluation findings
25	Multifamily Energy Efficiency Rebates	* Initiative was not evaluated * Net-to-Gross ratios used are consistent with the 2010 evaluation findings
26	Data Centre Incentive Program	* Initiative was not evaluated
27	EnWin Green Suites	* Initiative was not evaluated

Table 5: Summarized Program Results

Program	Gross Savings			Net Savings	
	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)		Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)
Consumer Program Total	318	1,135,121		196	847,937
Business Program Total	383	1,570,383		355	1,301,338
Industrial Program Total	0	0		0	0
Home Assistance Program Total	0	0		0	0
Pre-2011 Programs completed in 2011 Total	226	1,182,772		114	594,888
Total OPA Contracted Province-Wide CDM Programs	**927**	**3,888,276**		**665**	**2,744,164**

#	Initiative	Realization Rate		Gross Savings		Net-to-Gross Ratio		Net Savings	
		Peak Demand Savings	Energy Savings	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Peak Demand Savings	Energy Savings	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)
Consumer Program									
1	Appliance Retirement	100%	100%	35	224,471	50%	52%	17	115,083
2	Appliance Exchange	100%	100%	12	17,621	52%	52%	6	9,081
3	HVAC Incentives	100%	100%	249	508,931	59%	59%	148	302,460
4	Conservation Instant Coupon Booklet	100%	100%	9	150,411	114%	111%	10	166,010
5	Bi-Annual Retailer Event	100%	100%	13	233,687	113%	110%	15	255,303
6	Retailer Co-op	-	-	0	0	-	-	0	0
7	Residential Demand Response	0%	0%	0	0	-	-	0	0
8	Residential New Construction	-	-	0	0	-	-	0	0
Business Program									
9	Efficiency: Equipment Replacement	92%	130%	171	949,087	75%	76%	128	724,440
10	Direct Install Lighting	108%	90%	212	621,297	93%	93%	227	576,898
11	Existing Building Commissioning Incentive	-	-	0	0	-	-	0	0
12	New Construction and Major Renovation Incentive	-	-	0	0	-	-	0	0
13	Energy Audit	-	-	0	0	-	-	0	0
14	Commercial Demand Response (part of the Residential program schedule)	0%	0%	0	0	-	-	0	0
15	Demand Response 3 (part of the Industrial program schedule)	76%	100%	0	0	n/a	n/a	0	0
Industrial Program									
16	Process & System Upgrades	-	-	0	0	-	-	0	0
17	Monitoring & Targeting	-	-	0	0	-	-	0	0
18	Energy Manager	-	-	0	0	-	-	0	0
19	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	-	-	0	0	-	-	0	0
20	Demand Response 3	84%	100%	0	0	n/a	n/a	0	0
Home Assistance Program									
21	Home Assistance Program	-	-	0	0	-	-	0	0
Pre-2011 Programs completed in 2011									
22	Electricity Retrofit Incentive Program	77%	77%	30	175,126	52%	52%	16	91,066
23	High Performance New Construction	100%	100%	196	1,007,645	50%	50%	98	503,823
24	Toronto Comprehensive	-	-	0	0	-	-	0	0
25	Multifamily Energy Efficiency Rebates	-	-	0	0	-	-	0	0
26	Data Centre Incentive Program	-	-	0	0	-	-	0	0
27	EnWin Green Suites	-	-	0	0	-	-	0	0

Assumes demand response resources have a persistence of 1 year

Program	Contribution to Targets	
	Program-to-Date: Net Annual Peak Demand Savings (kW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh)
Consumer Program Total	194	3,389,277
Business Program Total	317	5,088,694
Industrial Program Total	0	0
Home Assistance Program Total	0	0
Pre-2011 Programs completed in 2011 Total	114	2,379,553
Total OPA Contracted Province-Wide CDM Programs	**624**	**10,857,524**

#	Initiative	Contribution to Targets	
		Program-to-Date: Net Annual Peak Demand Savings (kW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh)
Consumer Program			
1	Appliance Retirement	17	459,825
2	Appliance Exchange	4	34,360
3	HVAC Incentives	148	1,209,842
4	Conservation Instant Coupon Booklet	10	664,038
5	Bi-Annual Retailer Event	15	1,021,212
6	Retailer Co-op	0	0
7	Residential Demand Response	0	0
8	Residential New Construction	0	0
Business Program			
9	Efficiency: Equipment Replacement	128	2,897,760
10	Direct Install Lighting	189	2,190,934
11	Existing Building Commissioning Incentive	0	0
12	New Construction and Major Renovation Incentive	0	0
13	Energy Audit	0	0
14	Commercial Demand Response (part of the Residential program schedule)	0	0
15	Demand Response 3 (part of the Industrial program schedule)	0	0
Industrial Program			
16	Process & System Upgrades	0	0
17	Monitoring & Targeting	0	0
18	Energy Manager	0	0
19	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	0	0
20	Demand Response 3	0	0
Home Assistance Program			
21	Home Assistance Program	0	0
Pre-2011 Programs completed in 2011			
22	Electricity Retrofit Incentive Program	16	364,262
23	High Performance New Construction	98	2,015,291
24	Toronto Comprehensive	0	0
25	Multifamily Energy Efficiency Rebates	0	0
26	Data Centre Incentive Program	0	0
27	EnWin Green Suites	0	0

Assumes demand response resources have a persistence of 1 year

Progress Towards CDM Targets

Results are attributed to target using current OPA reporting policies. Energy efficiency resources persist for the duration of the effective useful life. Any upcoming code changes are taken into account. Demand response resources persist for 1 year. Please see methodology tab for more detailed information.

Yellow cells are intended for the LDC to input information to complete their OEB Reporting Template.

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

Implementation Period	Annual			
	2011	2012	2013	2014
2011 - Verified	0.66	0.66	0.66	0.62
2012				
2013				
2014				0.00
Verified Net Annual Peak Demand Savings Persisting in 2014:				0.62
PUC Distribution Inc. 2014 Annual CDM Capacity Target:				5.58
Verified Portion of Peak Demand Savings Target Achieved in 2014(%):				11.19%
LDC Milestone submitted for 2011				-%
Variance				

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

Implementation Period	Annual				Cumulative
	2011	2012	2013	2014	2011-2014
2011 - Verified	2.74	2.74	2.74	2.63	10.86
2012					
2013					
2014					
Verified Net Cumulative Energy Savings 2011-2014:					10.86
PUC Distribution Inc. 2011-2014 Cumulative CDM Energy Target:					30.83
Verified Portion of Cumulative Energy Target Achieved (%):					35.22%
LDC Milestone submitted for 2011					-%
Variance					

Table P1: Province-Wide Participation

#	Initiative	Activity Unit	Uptake/ Participation Units
Consumer Program			
1	Appliance Retirement	Appliances	56,110
2	Appliance Exchange	Appliances	3,688
3	HVAC Incentives	Equipment	111,587
4	Conservation Instant Coupon Booklet	Products[4]	559,462
5	Bi-Annual Retailer Event	Products[5]	870,332
6	Retailer Co-op	Products	152
7	Residential Demand Response	Devices	19,577
8	Residential New Construction	Houses	7
Business Program			
9	Efficiency: Equipment Replacement	Projects	2,516
10	Direct Installed Lighting	Projects	20,297
11	Existing Building Commissioning Incentive	Buildings	-
12	New Construction and Major Renovation Incentive	Buildings	10
13	Energy Audit	Audits	103
14	Commercial Demand Response (part of the Residential program schedule)	Devices	264
15	Demand Response 3 (part of the Industrial program schedule)	Facilities	148
Industrial Program			
16	Process & System Upgrades[2]	Projects	-
17	Monitoring & Targeting[2]	Projects	-
18	Energy Manager[2 3]	Managers	-
19	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)[1]	Projects	433
20	Demand Response 3	Facilities	134
Home Assistance Program			
21	Home Assistance Program	Homes	46
Pre 2011 Programs Completed in 2011			
22	Electricity Retrofit Incentive Program	Projects	2,023
23	High Performance New Construction	Projects	145
24	Toronto Comprehensive	Projects	553
25	Multifamily Energy Efficiency Rebates	Projects	110
26	Data Centre Incentive Program	Projects	5
27	EnWin Green Suites	Projects	3

[2] Results are based on completed incentive projects (see "Methodology" tab for more information)

[3] Includes: Roving Energy Managers, Key Account Managers and Embedded Energy Managers with completed projects

[4] 209,693 valid coupons redeemed

[5] 369,446 valid coupons redeemed

Table P2: Province-Wide Results

Program	Gross Savings			Net Savings	
	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)		Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)
Consumer Program Total	73,757	192,379,633		49,123	133,519,668
Business Program Total	78,048	251,304,448		64,594	198,124,227
Industrial Program Total	68,648	41,493,145		57,099	31,947,577
Home Assistance Program Total	4	56,119		2	39,283
Pre-2011 Programs completed in 2011 Total	87,169	460,822,079		44,833	241,853,020
Total OPA Contracted Province-Wide CDM Programs	**307,626**	**946,055,425**		**215,651**	**605,483,775**

#	Initiative	Realization Rate		Gross Savings		Net-to-Gross Ratio		Net Savings	
		Peak Demand Savings	Energy Savings	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)	Peak Demand Savings	Energy Savings	Incremental Peak Demand Savings (kW)	Incremental Energy Savings (kWh)
Consumer Program									
1	Appliance Retirement	100%	100%	6,750	45,971,627	51%	51%	3,299	23,005,812
2	Appliance Exchange	100%	100%	719	873,531	51%	51%	371	450,187
3	HVAC Incentives	100%	100%	53,209	99,413,430	60%	60%	32,037	59,437,670
4	Conservation Instant Coupon Booklet	100%	100%	1,184	19,192,453	114%	111%	1,344	21,211,537
5	Bi-Annual Retailer Event	100%	100%	1,504	26,899,265	112%	110%	1,681	29,387,468
6	Retailer Co-op	100%	100%	0	3,917	68%	68%	0	2,652
7	Residential Demand Response	n/a	n/a	10,390	23,597	n/a	n/a	10,390	23,597
8	Residential New Construction	100%	100%	0	1,813	41%	41%	0	743
Business Program									
9	Efficiency: Equipment Replacement	106%	91%	34,201	184,070,265	72%	74%	24,467	136,002,258
10	Direct Installed Lighting	108%	93%	22,155	65,777,197	108%	93%	23,724	61,076,701
11	Existing Building Commissioning Incentive	-	-	-	-	-	-	-	-
12	New Construction and Major Renovation Incentive	50%	50%	247	823,434	50%	50%	123	411,717
13	Energy Audit	-	-	-	-	-	-	-	-
14	Commercial Demand Response (part of the Residential program schedule)	n/a	n/a	55	131	n/a	n/a	55	131
15	Demand Response 3 (part of the Industrial program schedule)	76%	n/a	21,390	633,421	n/a	n/a	16,224	633,421
Industrial Program									
16	Process & System Upgrades	-	-	-	-	-	-	-	-
17	Monitoring & Targeting	-	-	-	-	-	-	-	-
18	Energy Manager	-	-	-	-	-	-	-	-
19	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	111%	91%	6,372	38,412,408	72%	75%	4,615	28,866,840
20	Demand Response 3	84%	n/a	62,276	3,080,737	n/a	n/a	52,484	3,080,737
Home Assistance Program									
21	Home Assistance Program	100%	100%	4	56,119	70%	70%	2	39,283
Pre-2011 Programs completed in 2011									
22	Electricity Retrofit Incentive Program	80%	80%	40,418	223,956,390	54%	54%	21,550	120,492,549
23	High Performance New Construction	100%	100%	10,197	52,371,183	49%	49%	5,098	26,185,591
24	Toronto Comprehensive	113%	113%	33,467	174,070,574	50%	52%	15,805	86,964,886
25	Multifamily Energy Efficiency Rebates	93%	93%	2,553	9,774,792	78%	78%	1,981	7,595,683
26	Data Centre Incentive Program	100%	100%	81	533,038	100%	100%	81	533,038
27	EnWin Green Suites	100%	100%	453	116,102	70%	70%	317	81,272

Assumes demand response resources have a persistence of 1 year

Program	Contribution to Targets	
	Program-to-Date: Net Annual Peak Demand Savings (kW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh)
Consumer Program Total	38,405	534,017,835
Business Program Total	41,048	767,657,790
Industrial Program Total	4,613	118,543,019
Home Assistance Program Total	2	157,134
Pre-2011 Programs completed in 2011 Total	44,833	967,412,079
Total OPA Contracted Province-Wide CDM Programs	**128,901**	**2,387,787,856**

#	Initiative	Contribution to Targets	
		Program-to-Date: Net Annual Peak Demand Savings (kW) in 2014	Program-to-Date: 2011-2014 Net Cumulative Energy Savings (kWh)
Consumer Program			
1	Appliance Retirement	3,160	91,903,303
2	Appliance Exchange	181	1,930,651
3	HVAC Incentives	32,037	237,750,681
4	Conservation Instant Coupon Booklet	1,344	84,846,148
5	Bi-Annual Retailer Event	1,681	117,549,874
6	Retailer Co-op	0	10,607
7	Residential Demand Response	0	23,597
8	Residential New Construction	0	2,973
Business Program			
9	Efficiency: Equipment Replacement	24,438	543,856,392
10	Direct Installed Lighting	16,486	221,520,977
11	Existing Building Commissioning Incentive	-	-
12	New Construction and Major Renovation Incentive	123	1,646,869
13	Energy Audit	-	-
14	Commercial Demand Response (part of the Residential program schedule)	0	131
15	Demand Response 3 (part of the Industrial program schedule)	0	633,421
Industrial Program			
16	Process & System Upgrades	-	-
17	Monitoring & Targeting	-	-
18	Energy Manager	-	-
19	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	4,613	115,462,282
20	Demand Response 3	0	3,080,737
Home Assistance Program			
21	Home Assistance Program	2	157,134
Pre-2011 Programs completed in 2011			
22	Electricity Retrofit Incentive Program	21,550	481,970,197
23	High Performance New Construction	5,098	104,742,366
24	Toronto Comprehensive	15,805	347,859,545
25	Multifamily Energy Efficiency Rebates	1,981	30,382,733
26	Data Centre Incentive Program	81	2,132,152
27	EnWin Green Suites	317	325,086

Assumes demand response resources have a persistence of 1 year

Summary - Provincial Progress

Table P3: Province-Wide Net Peak Demand Savings at the End User Level (MW)

Implementation Period	Annual			
	2011	2012	2013	2014
2011	215.7	136.4	135.7	128.9
2012				
2013				
2014				
Verified Net Annual Peak Demand Savings in 2014:				128.9
2014 Annual CDM Capacity Target				1,330
Verified Peak Demand Savings Target Achieved - 2011 (%):				9.69%

Table P4: Province-Wide Net Energy Savings at the End-User Level (GWh)

Implementation Period	Annual				Cumulative
	2011	2012	2013	2014	2011-2014
2011	605.5	601.6	599.6	580.9	2,388
2012					0
2013					0
2014					0
Verified Net Cumulative Energy Savings 2011-2014:					2,388
2011-2014 Cumulative CDM Energy Target:					6,000
Verified Portion of Energy Target Achieved - 2011 (%):					39.79%

METHODOLOGY

All results are at the end-user level (not including transmission and distribution losses)

EQUATIONS:

PRESCRIPTIVE MEASURES/PROJECTS:

Gross Savings = Activity * Per Unit Assumption

Net Savings = Gross Savings * Net-to-Gross Ratio

All savings are annualized (i.e. the savings are the same regardless of time of year a project was completed or measure installed)

ENGINEERED/CUSTOM PROJECTS:

Gross Savings = Reported Savings * Realization Rate

Net Savings = Gross Savings * Net-to-Gross Ratio

All savings are annualized (i.e. the savings are the same regardless of time of year a project was completed or measure installed)

DEMAND RESPONSE:

Peak Demand: Gross Savings = Net Savings = contracted MW at contributor level * Provincial contracted to ex ante ratio

Energy: Gross Savings = Net Savings = provincial ex post energy savings * LDC proportion of total provincial contracted MW

All savings are annualized (i.e. the savings are the same regardless of the time of year a participant began offering DR)

#	Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Consumer Program				
1	Appliance Retirement	Includes both retail and home pickup stream; Retail stream allocated based on average of 2008 & 2009 residential throughput; Home pickup stream directly attributed by postal code or customer selection	Savings are considered to begin in the year the appliance is picked up.	**Peak demand and energy savings** are determined using the verified measure level per unit assumption multiplied by the uptake in the market (gross) taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.
2	Appliance Exchange	When postal code information is provided by customer, results are directly attributed to the LDC. When postal code is not available, results allocated based on average of 2008 & 2009 residential throughput	Savings are considered to begin in the year that the exchange event occurred	
3	HVAC Incentives	Results directly attributed to LDC based on customer postal code	Savings are considered to begin in the year that the installation occurred	

#	Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
4	Conservation Instant Coupon Booklet	LDC-coded coupons directly attributed to LDC; Otherwise results are allocated based on average of 2008 & 2009 residential throughput	Savings are considered to begin in the year in which the coupon was redeemed.	**Peak demand and energy savings** are determined using the verified measure level per unit assumption multiplied by the uptake in the market (gross) taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level. Initiative was not evaluated in 2011, reported results are presented with verified per unit assumptions and net-to-gross ratio from Bi-Annual Retailer Event and Conservation Instant Coupon Booklet initiatives.
5	Bi-Annual Retailer Event	Results are allocated based on average of 2008 & 2009 residential throughput	Savings are considered to begin in the year in which the event occurs.	
6	Retailer Co-op	When postal code information is provided by the customer, results are directly attributed. If postal code information is not available, results are allocated based on average of 2008 & 2009 residential throughput.	Savings are considered to begin in the year of the home visit and installation date.	**Peak demand and energy savings** are determined using the verified measure level per unit assumption multiplied by the uptake in the market (gross) taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level. Initiative was not evaluated in 2011, reported results are presented with verified per unit assumptions and net-to-gross ratio from Bi-Annual Retailer Event and Conservation Instant Coupon Booklet initiatives.

#	Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
7	Residential Demand Response	Results are directly attributed to LDC based on data provided to OPA through project completion reports and continuing participant lists	Savings are considered to begin in the year the device was installed and/or when a customer signed a ***peaksaver*** PLUS™ participant agreement.	**Peak demand savings** are based on an ex ante estimate assuming a 1 in 10 weather year and represents the "insurance value" of the initiative. **Energy savings** are based on an ex post estimate which reflects the savings that occurred as a result of activations in the year and accounts for any "snapback" in energy consumption experienced after the event. Savings are assumed to **persist** for only 1 year, reflecting that savings will only occur if the resource is activated.
8	Residential New Construction	Results are directly attributed to LDC based on LDC identified in application in the saveONenergy CRM system; Initiative was not evaluated in 2011, reported results are presented with forecast assumptions as per the business case.	Savings are considered to begin in the year of the project completion date.	**Peak demand and energy savings** are determined using a measure level per unit assumption multiplied by the uptake in the market (gross) taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.
Business Program				

#	Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
9	Efficiency: Equipment Replacement	Results are directly attributed to LDC based on LDC identified at the facility level in the saveONenergy CRM; Projects in the Application Status: "Post-Stage Submission" are included (excluding "Payment denied by LDC"); Please see "Reference Tables" tab for Building type to Sector mapping	Savings are considered to begin in the year of the actual project completion date on the iCON CRM system.	**Peak demand and energy savings** are determined by the total savings for a given project as reported in the iCON CRM system (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net). Both realization rate and net-to-gross ratios can differ for energy and demand savings and depend on the mix of projects within an LDC territory (i.e. lighting or non-lighting project, engineered/custom/prescriptive track).
		Additional Note: project counts were derived by filtering out "Application Status" = "Post-Project Submission - Payment denied by LDC" and only including projects with an "Actual Project Completion Date" in 2011 and pulling both the "Application Name" field followed by the "Building Address 1" field from the Post Stage Retrofit Report and finally performing a count of the Building Addresses.		
10	Direct Installed Lighting	Results are directly attributed to LDC based on the LDC specified on the work order	Savings are considered to begin in the year of the actual project completion date.	**Peak demand and energy savings** are determined using the verified measure level per unit assumptions multiplied by the uptake of each measure accounting for the realization rate for both peak demand and energy to reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings take into account net-to-gross factors such as free-ridership and spillover for both peak demand and energy savings at the program level (net).

#	Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
11	Existing Building Commissioning Incentive	Results are directly attributed to LDC based on LDC identified in the application; Initiative was not evaluated, no completed projects in 2011.	Savings are considered to begin in the year of the actual project completion date.	**Peak demand and energy savings** are determined by the total savings for a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).
12	New Construction and Major Renovation Incentive	Results are directly attributed to LDC based on LDC identified in the application; Initiative was not evaluated, reported results are presented with reported assumptions (as per evaluated results in 2010 and consultation with OPA-LDC Work Groups)	Savings are considered to begin in the year of the actual project completion date.	
13	Energy Audit	No resource savings results determined in 2011; Projects are directly attributed to LDC based on LDC identified in the application	Savings are considered to begin in the year of the audit date.	**Peak demand and energy savings** are determined by the total savings resulting from an audit as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).

#	Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
14	Commercial Demand Response (part of the Residential program schedule)	Results are directly attributed to LDC based on data provided to OPA through project completion reports and continuing participant lists	Savings are considered to begin in the year the device was installed and/or when a customer signed a ***peaksaver*** PLUS™ participant agreement.	**Peak demand savings** are based on an ex ante estimate assuming a 1 in 10 weather year and represents the "insurance value" of the initiative. **Energy savings** are based on an ex post estimate which reflects the savings that occurred as a result of activations in the year. Savings are assumed to **persist** for only 1 year, reflecting that savings will only occur if the resource is activated.
15	Demand Response 3 (part of the Industrial program schedule)	Results are attributed to LDCs based on the total contracted megawatts at the contributor level as of December 31st, applying the provincial ex ante to contracted ratio (ex ante estimate/contracted megawatts); Ex post energy savings are attributed to the LDC based on their proportion of the total contracted megawatts at the contributor level.	Savings are considered to begin in the year in which the contributor signed up to participate in demand response.	**Peak demand savings** are ex ante estimates based on the load reduction capability that can be expected for the purposes of planning. The ex ante estimates factor in both scheduled non-performances (i.e. maintenance) and historical performance. **Energy savings** are based on an ex post estimate which reflects the savings that actually occurred as a results of activations in the year. Savings are assumed to persist for 1 year, reflecting that savings will not occur if the resource is not activated and additional costs are incurred to activate the resource.
Industrial Program				

#	Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
16	Process & System Upgrades	Results are directly attributed to LDC based on LDC identified in application in the saveONenergy CRM system; Initiative was not evaluated, no completed projects in 2011.	Savings are considered to begin in the year in which the incentive project was completed.	**Peak demand and energy savings** are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).
17	Monitoring & Targeting	Results are directly attributed to LDC based on LDC identified in the application; Initiative was not evaluated, no completed projects in 2011.	Savings are considered to begin in the year in which the incentive project was completed.	**Peak demand and energy savings** are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).
18	Energy Manager	Results are directly attributed to LDC based on LDC identified in the application; Initiative was not evaluated, no completed projects in 2011.	Savings are considered to begin in the year in which the project was completed by the energy manager. If no date is specified the savings will begin the year of the Quarterly Report submitted by the energy manager.	**Peak demand and energy savings** are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net).

#	Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
19	Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)	Results are directly attributed to LDC based on LDC identified at the facility level in the saveONenergy CRM; Projects in the Application Status: "Post-Stage Submission" are included (excluding "Payment denied by LDC"); Please see "Reference Tables" tab for Building type to Sector mapping	Savings are considered to begin in the year of the actual project completion date on the iCON CRM system.	**Peak demand and energy savings** are determined by the total savings for a given project as reported in the iCON CRM system (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net). Both realization rate and net-to-gross ratios can differ for energy and demand savings and depend on the mix of projects within an LDC territory (i.e. lighting or non-lighting project, engineered/custom/prescriptive track).

#	Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
20	Demand Response 3	Results are attributed to LDCs based on the total contracted megawatts at the contributor level as of December 31st, applying the provincial ex ante to contracted ratio (ex ante estimate/contracted megawatts); Ex post energy savings are attributed to the LDC based on their proportion of the total contracted megawatts at the contributor level.	Savings are considered to begin in the year in which the contributor signed up to participate in demand response.	**Peak demand savings** are ex ante estimates based on the load reduction capability that can be expected for the purposes of planning. The ex ante estimates factor in both scheduled non-performances (i.e. maintenance) and historical performance. **Energy savings** are based on an ex post estimate which reflects the savings that actually occurred as a results of activations in the year. Savings are assumed to persist for 1 year, reflecting that savings will not occur if the resource is not activated and additional costs are incurred to activate the resource.
Home Assistance Program				
21	Home Assistance Program	Results are directly attributed to LDC based on LDC identified in the application; Initiative was not evaluated in 2011, reported results are presented with forecast assumptions as per the business case.	Savings are considered to begin in the year in which the measures were installed.	**Peak demand and energy savings** are determined using the measure level per unit assumption multiplied by the uptake of each measure (gross) taking into account net-to-gross factors such as free-ridership and spillover (net) at the measure level.
Pre-2011 Programs completed in 2011				

#	Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
22	Electricity Retrofit Incentive Program	Results are directly attributed to LDC based on LDC identified in the application; Initiative was not evaluated in 2011, assumptions as per 2010 evaluation	Savings are considered to begin in the year in which a project was completed.	**Peak demand and energy savings** are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net). **If energy savings are not available,** an estimate is made based on the kWh to kW ratio in the provincial results from the 2010 evaluated results (http://www.powerauthority.on.ca/evaluation-measurement-and-verification/evaluation-reports).
23	High Performance New Construction	Results are directly attributed to LDC based on customer data provided to the OPA from Enbridge; Initiative was not evaluated in 2011, assumptions as per 2010 evaluation	Savings are considered to begin in the year in which a project was completed.	
24	Toronto Comprehensive	Program run exclusively in Toronto Hydro-Electric System Limited service territory; Initiative was not evaluated in 2011, assumptions as per 2010 evaluation		
25	Multifamily Energy Efficiency Rebates	Results are directly attributed to LDC based on LDC identified in the application; Initiative was not evaluated in 2011, assumptions as per 2010 evaluation	Savings are considered to begin in the year in which a project was completed.	**Peak demand and energy savings** are determined by the total savings from a given project as reported (reported). A realization rate is applied to the reported savings to ensure that these savings align with EM&V protocols and reflect the savings that were actually realized (i.e. how many light bulbs were actually installed vs. what was reported) (gross). Net savings takes into account net-to-gross factors such as free-ridership and spillover (net). **If energy savings are not available,** an estimate is made based on the kWh to kW ratio in the provincial results
26	Data Centre Incentive Program	Program run exclusively in PowerStream Inc. service territory; Initiative was not evaluated in 2011, assumptions as per 2009 evaluation		

#	Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
27	EnWin Green Suites	Program run exclusively in ENWIN Utilities Ltd. service territory; Initiative was not evaluated in 2011, assumptions as per 2010 evaluation		from the 2010 evaluated results (http://www.powerauthority.on.ca/evaluation-measurement-and-verification/evaluation-reports).

ERII Sector (C&I vs. Industrial Mapping)	
Building Type	**Sector**
Agribusiness - Cattle Farm	C&I
Agribusiness - Dairy Farm	C&I
Agribusiness - Greenhouse	C&I
Agribusiness - Other	C&I
Agribusiness - Other,Mixed-Use - Office/Retail	C&I
Agribusiness - Other,Office,Retail,Warehouse	C&I
Agribusiness - Other,Office,Warehouse	C&I
Agribusiness - Poultry	C&I
Agribusiness - Poultry,Hospitality - Motel	C&I
Agribusiness - Swine	C&I
Convenience Store	C&I
Education - College / Trade School	C&I
Education - College / Trade School,Multi-Residential - Condominium	C&I
Education - College / Trade School,Multi-Residential - Rental Apartment	C&I
Education - College / Trade School,Retail	C&I
Education - Primary School	C&I
Education - Primary School,Education - Secondary School	C&I
Education - Primary School,Multi-Residential - Rental Apartment	C&I
Education - Primary School,Not-for-Profit	C&I
Education - Secondary School	C&I
Education - University	C&I
Education - University,Office	C&I
Hospital/Healthcare - Clinic	C&I
Hospital/Healthcare - Clinic,Hospital/Healthcare - Long-term Care,Hospital/Healthcare - Medical Building	C&I
Hospital/Healthcare - Clinic,Industrial	C&I
Hospital/Healthcare - Clinic,Retail	C&I
Hospital/Healthcare - Long-term Care	C&I
Hospital/Healthcare - Long-term Care,Hospital/Healthcare - Medical Building	C&I
Hospital/Healthcare - Medical Building	C&I
Hospital/Healthcare - Medical Building,Mixed-Use - Office/Retail	C&I
Hospital/Healthcare - Medical Building,Mixed-Use - Office/Retail,Office	C&I
Hospitality - Hotel	C&I
Hospitality - Hotel,Restaurant - Dining	C&I
Hospitality - Motel	C&I
Industrial	Industrial
Mixed-Use - Office/Retail	C&I
Mixed-Use - Office/Retail,Industrial	Industrial
Mixed-Use - Office/Retail,Mixed-Use - Other	C&I
Mixed-Use - Office/Retail,Mixed-Use - Other,Not-for-Profit,Warehouse	C&I
Mixed-Use - Office/Retail,Mixed-Use - Residential/Retail	C&I
Mixed-Use - Office/Retail,Office,Restaurant - Dining,Restaurant - Quick Serve,Retail,Warehouse	C&I

Mixed-Use - Office/Retail,Office,Warehouse	C&I
Mixed-Use - Office/Retail,Retail	C&I
Mixed-Use - Office/Retail,Warehouse	C&I
Mixed-Use - Office/Retail,Warehouse,Industrial	Industrial
Mixed-Use - Other	C&I
Mixed-Use - Other,Industrial	Industrial
Mixed-Use - Other,Not-for-Profit,Office	C&I
Mixed-Use - Other,Office	C&I
Mixed-Use - Other,Other: Please specify	C&I
Mixed-Use - Other,Retail,Warehouse	C&I
Mixed-Use - Other,Warehouse	C&I
Mixed-Use - Residential/Retail	C&I
Mixed-Use - Residential/Retail,Multi-Residential - Condominium	C&I
Mixed-Use - Residential/Retail,Multi-Residential - Rental Apartment	C&I
Mixed-Use - Residential/Retail,Retail	C&I
Multi-Residential - Condominium	C&I
Multi-Residential - Condominium,Multi-Residential - Rental Apartment	C&I
Multi-Residential - Condominium,Other: Please specify	C&I
Multi-Residential - Rental Apartment	C&I
Multi-Residential - Rental Apartment,Multi-Residential - Social Housing Provider,Not-for-Profit	C&I
Multi-Residential - Rental Apartment,Not-for-Profit	C&I
Multi-Residential - Rental Apartment,Warehouse	C&I
Multi-Residential - Social Housing Provider	C&I
Multi-Residential - Social Housing Provider,Industrial	C&I
Multi-Residential - Social Housing Provider,Not-for-Profit	C&I
Not-for-Profit	C&I
Not-for-Profit,Office	C&I
Not-for-Profit,Other: Please specify	C&I
Not-for-Profit,Warehouse	C&I
Office	C&I
Office,Industrial	Industrial
Office,Other: Please specify	C&I
Office,Other: Please specify,Warehouse	C&I
Office,Restaurant - Dining	C&I
Office,Restaurant - Dining,Industrial	Industrial
Office,Retail	C&I
Office,Retail,Industrial	C&I
Office,Retail,Warehouse	C&I
Office,Warehouse	C&I
Office,Warehouse,Industrial	Industrial
Other: Please specify	C&I
Other: Please specify,Industrial	Industrial
Other: Please specify,Retail	C&I
Other: Please specify,Warehouse	C&I
Restaurant - Dining	C&I
Restaurant - Dining,Retail	C&I

Restaurant - Quick Serve	C&I
Restaurant - Quick Serve,Retail	C&I
Retail	C&I
Retail,Industrial	Industrial
Retail,Warehouse	C&I
Warehouse	C&I
Warehouse,Industrial	Industrial

Consumer Program Allocation Methodology

Results can be allocated based on average of 2008 & 2009 residential throughput for each LDC (below) when additional information is not available. Source: OEB Yearbook Data 2008 & 2009

Local Distribution Company	Allocation
Algoma Power Inc.	0.2%
Atikokan Hydro Inc.	0.0%
Attawapiskat Power Corporation	0.0%
Bluewater Power Distribution Corporation	0.6%
Brant County Power Inc.	0.2%
Brantford Power Inc.	0.7%
Burlington Hydro Inc.	1.4%
Cambridge and North Dumfries Hydro Inc.	1.0%
Canadian Niagara Power Inc.	0.5%
Centre Wellington Hydro Ltd.	0.1%
Chapleau Public Utilities Corporation	0.0%
COLLUS Power Corporation	0.3%
Cooperative Hydro Embrun Inc.	0.0%
E.L.K. Energy Inc.	0.2%
Enersource Hydro Mississauga Inc.	3.9%
ENTEGRUS	0.6%
ENWIN Utilities Ltd.	1.6%
Erie Thames Powerlines Corporation	0.4%
Espanola Regional Hydro Distribution Corporation	0.1%
Essex Powerlines Corporation	0.7%
Festival Hydro Inc.	0.3%
Fort Albany Power Corporation	0.0%
Fort Frances Power Corporation	0.1%
Greater Sudbury Hydro Inc.	1.0%
Grimsby Power Inc.	0.2%
Guelph Hydro Electric Systems Inc.	0.9%
Haldimand County Hydro Inc.	0.4%
Halton Hills Hydro Inc.	0.5%
Hearst Power Distribution Company Limited	0.1%
Horizon Utilities Corporation	4.0%
Hydro 2000 Inc.	0.0%
Hydro Hawkesbury Inc.	0.1%
Hydro One Brampton Networks Inc.	2.8%

Hydro One Networks Inc.	30.0%
Hydro Ottawa Limited	5.6%
Innisfil Hydro Distribution Systems Limited	0.4%
Kashechewan Power Corporation	0.0%
Kenora Hydro Electric Corporation Ltd.	0.1%
Kingston Hydro Corporation	0.5%
Kitchener-Wilmot Hydro Inc.	1.6%
Lakefront Utilities Inc.	0.2%
Lakeland Power Distribution Ltd.	0.2%
London Hydro Inc.	2.7%
Middlesex Power Distribution Corporation	0.1%
Midland Power Utility Corporation	0.1%
Milton Hydro Distribution Inc.	0.6%
Newmarket - Tay Power Distribution Ltd.	0.7%
Niagara Peninsula Energy Inc.	1.0%
Niagara-on-the-Lake Hydro Inc.	0.2%
Norfolk Power Distribution Inc.	0.3%
North Bay Hydro Distribution Limited	0.5%
Northern Ontario Wires Inc.	0.1%
Oakville Hydro Electricity Distribution Inc.	1.5%
Orangeville Hydro Limited	0.2%
Orillia Power Distribution Corporation	0.3%
Oshawa PUC Networks Inc.	1.2%
Ottawa River Power Corporation	0.2%
Parry Sound Power Corporation	0.1%
Peterborough Distribution Incorporated	0.7%
PowerStream Inc.	6.6%
PUC Distribution Inc.	0.9%
Renfrew Hydro Inc.	0.1%
Rideau St. Lawrence Distribution Inc.	0.1%
Sioux Lookout Hydro Inc.	0.1%
St. Thomas Energy Inc.	0.3%
Thunder Bay Hydro Electricity Distribution Inc.	0.9%
Tillsonburg Hydro Inc.	0.1%
Toronto Hydro-Electric System Limited	12.8%
Veridian Connections Inc.	2.4%
Wasaga Distribution Inc.	0.2%
Waterloo North Hydro Inc.	1.0%
Welland Hydro-Electric System Corp.	0.4%
Wellington North Power Inc.	0.1%
West Coast Huron Energy Inc.	0.1%
Westario Power Inc.	0.5%
Whitby Hydro Electric Corporation	0.9%
Woodstock Hydro Services Inc.	0.3%

Reporting Glossary

Annual: the peak demand or energy savings that occur in a given year (includes resource savings from new program activity in a given year and resource savings persisting from previous years).

Cumulative Energy Savings: represents the sum of the annual energy savings that accrue over a defined period (in the context of this report the defined period is 2011 - 2014). This concept does not apply to peak demand savings.

End-User Level: resource savings in this report are measured at the customer level as opposed to the generator level (the difference being line losses).

Free-ridership: the percentage of participants who would have implemented the program measure or practice in the absence of the program.

Incremental: the new resource savings attributable to activity procured in a particular reporting period based on when the savings are considered to 'start' (please see table 5).

Initiative: a Conservation & Demand Management offering focusing on a particular opportunity or customer end-use (i.e. Retrofit, Fridge & Freezer Pickup).

Net-to-Gross Ratio: The ratio of net savings to gross savings, which takes into account factors such as free-ridership and spillover

Net Energy Savings (MWh): energy savings attributable to conservation and demand management activities net of free-riders, etc.

Net Peak Demand Savings (MW): peak demand savings attributable to conservation and demand management activities net of free-riders, etc.

Program: a group of initiatives that target a particular market sector (i.e. Consumer, Industrial).

Realization Rate: A comparison of observed or measured (evaluated) information to original reported savings which is used to adjust the gross savings estimates.

Settlement Account: the grouping of demand response facilities (contributors) into one contractual agreement

Spillover: Reductions in energy consumption and/or demand caused by the presence of the energy efficiency program, beyond the program-related gross savings of the participants. There can be participant and/or non-participant spillover.

Unit: for a specific initiative the relevant type of activity acquired in the market place (i.e. appliances picked up, projects completed, coupons redeemed).

Summary of LRAM and LRAMVA Claim and Rate Riders

PUC proposes to collect the LRAM and LRAMVA amounts relating to CDM savings as a volumetric rate rider for a one year period from May 1, 2013 to April 30, 2014. The calculation of the rate riders are included below.

Table 14 – LRAM Rate Rider Calculation

	Residential	General Service <50kW	General Service > 50kW	Total
Pre 2011 - LRAM 2005 to 2010 program with persisting losses in 2011($)	92,698	21,746	22,888	137,332
Carrying LRAM ($)	2,555	600	631	3,786
Sub Total	95,253	22,346	23,519	141,118
2011 LRAMVA ($)	12,804	12,203	11,734	36,741
Carrying Charges LRAMVA ($)	353	336	323	1,012
Sub Total	13,157	12,539	12,057	37,753
Grand Total	108,410	34,885	35,576	178,871
Annual Volume (2013 Forecast)	339,164,253	101,760,560	625,708	
Charge Parameter	kWh	kWh	kW	
Rate Rider	0.0003	0.0003	0.0569	

Bill Impacts

PUC has included revised bill impacts which include the proposed LRAM rate rider.

Bill Impacts

Customer Class: Residential

Consumption 966 kWh ◉ May 1 - October 31 ○ November 1 - April 30 (Select this radio button for applications filed after

		Current Board-Approved			Proposed			Impact	
	Charge Unit	Rate ($)	Volume	Charge ($)	Rate ($)	Volume	Charge ($)	$ Change	% Change
Monthly Service Charge	Monthly	$ 8.8100	1	$ 8.81	$ 10.7200	1	$ 10.72	$ 1.91	21.68%
Smart Meter Disposition Rider	Monthly	$ 3.0300	1	$ 3.03		1	$ -	-$ 3.03	-100.00%
Stranded Meter Rate Rider	Monthly		1	$ -	$ 1.9900	1	$ 1.99	$ 1.99	
			1	$ -		1	$ -	$ -	
			1	$ -		1	$ -	$ -	
			1	$ -		1	$ -	$ -	
Distribution Volumetric Rate	per kWh	$ 0.0152	966	$ 14.68	$ 0.0185	966	$ 17.87	$ 3.19	21.71%
			966	$ -		966	$ -	$ -	
LRAM & SSM Rate Rider	per kWh	$ 0.0015	966	$ 1.45		966	$ -	-$ 1.45	-100.00%
LRAM Rate Rider	per kWh		966	$ -	$ 0.0003	966	$ 0.29	$ 0.29	
			966	$ -		966	$ -	$ -	
			966	$ -		966	$ -	$ -	
			966	$ -		966	$ -	$ -	
			966	$ -		966	$ -	$ -	
			966	$ -		966	$ -	$ -	
			966	$ -		966	$ -	$ -	
Sub-Total A				$ 27.97			$ 30.87	**$ 2.90**	**10.36%**
Deferral/Variance Account Disposition Rate Rider	per kWh	-$ 0.0013	966	-$ 1.26	-$ 0.0040	966	-$ 3.86	-$ 2.61	207.69%
			966	$ -		966	$ -	$ -	
			966	$ -		966	$ -	$ -	
			966	$ -		966	$ -	$ -	
Low Voltage Service Charge			966	$ -		966	$ -	$ -	
Smart Meter Entity Charge						966	$ -	$ -	
Sub-Total B - Distribution (includes Sub-Total A)				**$ 26.72**			**$ 27.01**	**$ 0.29**	**1.09%**
RTSR - Network	per kWh	$ 0.0066	1010	$ 6.67	$ 0.0058	1013	$ 5.88	-$ 0.79	-11.83%
RTSR - Line and Transformation Connection			1010	$ -		1013	$ -	$ -	
Sub-Total C - Delivery (including Sub-Total B)				**$ 33.38**			**$ 32.88**	**-$ 0.50**	**-1.49%**
Wholesale Market Service Charge (WMSC)	per kWh	$ 0.0052	1010	$ 5.25	$ 0.0052	1013	$ 5.27	$ 0.02	0.33%
Rural and Remote Rate Protection (RRRP)	per kWh	$ 0.0011	1010	$ 1.11	$ 0.0011	1013	$ 1.11	$ 0.00	0.33%
Standard Supply Service Charge	Monthly	$ 0.2500	1	$ 0.25	$ 0.2500	1	$ 0.25	$ -	0.00%
Debt Retirement Charge (DRC)		$ 0.0020	1010	$ 2.02	$ 0.0020	1013	$ 2.03	$ 0.01	0.33%
Energy - RPP - Tier 1		$ 0.0750	600	$ 45.00	$ 0.0750	600	$ 45.00	$ -	0.00%
Energy - RPP - Tier 2		$ 0.0880	410	$ 36.07	$ 0.0880	413	$ 36.36	$ 0.30	0.82%
TOU - Off Peak		$ 0.0650	646	$ 42.01	$ 0.0650	648	$ 42.15	$ 0.14	0.33%
TOU - Mid Peak		$ 0.1000	182	$ 18.18	$ 0.1000	182	$ 18.24	$ 0.06	0.33%
TOU - On Peak		$ 0.1170	182	$ 21.27	$ 0.1170	182	$ 21.34	$ 0.07	0.33%
Total Bill on RPP (before Taxes)				**$ 123.08**			**$ 122.91**	**-$ 0.17**	**-0.14%**
HST		13%		$ 16.00	13%		$ 15.98	-$ 0.02	-0.14%
Total Bill (including HST)				$ 139.08			$ 138.89	-$ 0.19	-0.14%
Ontario Clean Energy Benefit [1]				-$ 13.91			-$ 13.89	$ 0.02	-0.14%
Total Bill on RPP (including OCEB)				**$ 125.17**			**$ 125.00**	**-$ 0.17**	**-0.14%**
Total Bill on TOU (before Taxes)				**$ 123.47**			**$ 123.27**	**-$ 0.20**	**-0.16%**
HST		13%		$ 16.05	13%		$ 16.03	-$ 0.03	-0.16%
Total Bill (including HST)				$ 139.52			$ 139.30	-$ 0.22	-0.16%
Ontario Clean Energy Benefit [1]				-$ 13.95			-$ 13.93	$ 0.02	-0.14%
Total Bill on TOU (including OCEB)				**$ 125.57**			**$ 125.37**	**-$ 0.20**	**-0.16%**
Loss Factor (%)		4.5400%			4.8900%				

Bill Impacts

Customer Class: Residential

Consumption 800 kWh ◉ May 1 - October 31 ○ November 1 - April 30 (Select this radio button for applications filed after

		Current Board-Approved			Proposed			Impact	
	Charge Unit	Rate ($)	Volume	Charge ($)	Rate ($)	Volume	Charge ($)	$ Change	% Change
Monthly Service Charge	Monthly	$ 8.8100	1	$ 8.81	$ 10.7200	1	$ 10.72	$ 1.91	21.68%
Smart Meter Disposition Rider	Monthly	$ 3.0300	1	$ 3.03		1	$ -	-$ 3.03	-100.00%
Stranded Meter Rate Rider	Monthly		1	$ -	$ 1.9900	1	$ 1.99	$ 1.99	
			1	$ -		1	$ -	$ -	
			1	$ -		1	$ -	$ -	
			1	$ -		1	$ -	$ -	
Distribution Volumetric Rate	per kWh	$ 0.0152	800	$ 12.16	$ 0.0185	800	$ 14.80	$ 2.64	21.71%
			800	$ -		800	$ -	$ -	
LRAM & SSM Rate Rider	per kWh	$ 0.0015	800	$ 1.20		800	$ -	-$ 1.20	-100.00%
LRAM Rate Rider	per kWh		800	$ -	$ 0.0003	800	$ 0.24	$ 0.24	
			800	$ -		800	$ -	$ -	
			800	$ -		800	$ -	$ -	
			800	$ -		800	$ -	$ -	
			800	$ -		800	$ -	$ -	
			800	$ -		800	$ -	$ -	
			800	$ -		800	$ -	$ -	
Sub-Total A				$ 25.20			$ 27.75	**$ 2.55**	**10.12%**
Deferral/Variance Account Disposition Rate Rider	per kWh	-$ 0.0013	800	-$ 1.04	-$ 0.0040	800	-$ 3.20	-$ 2.16	207.69%
			800	$ -		800	$ -	$ -	
			800	$ -		800	$ -	$ -	
			800	$ -		800	$ -	$ -	
Low Voltage Service Charge			800	$ -		800	$ -	$ -	
Smart Meter Entity Charge						800	$ -	$ -	
Sub-Total B - Distribution (includes Sub-Total A)				**$ 24.16**			**$ 24.55**	**$ 0.39**	**1.61%**
RTSR - Network	per kWh	$ 0.0066	836	$ 5.52	$ 0.0058	839	$ 4.87	-$ 0.65	-11.83%
RTSR - Line and Transformation Connection			836	$ -		839	$ -	$ -	
Sub-Total C - Delivery (including Sub-Total B)				**$ 29.68**			**$ 29.42**	**-$ 0.26**	**-0.89%**
Wholesale Market Service Charge (WMSC)	per kWh	$ 0.0052	836	$ 4.35	$ 0.0052	839	$ 4.36	$ 0.01	0.33%
Rural and Remote Rate Protection (RRRP)	per kWh	$ 0.0011	836	$ 0.92	$ 0.0011	839	$ 0.92	$ 0.00	0.33%
Standard Supply Service Charge	Monthly	$ 0.2500	1	$ 0.25	$ 0.2500	1	$ 0.25	$ -	0.00%
Debt Retirement Charge (DRC)		$ 0.0020	836	$ 1.67	$ 0.0020	839	$ 1.68	$ 0.01	0.33%
Energy - RPP - Tier 1		$ 0.0750	600	$ 45.00	$ 0.0750	600	$ 45.00	$ -	0.00%
Energy - RPP - Tier 2		$ 0.0880	236	$ 20.80	$ 0.0880	239	$ 21.04	$ 0.25	1.18%
TOU - Off Peak		$ 0.0650	535	$ 34.79	$ 0.0650	537	$ 34.91	$ 0.12	0.33%
TOU - Mid Peak		$ 0.1000	151	$ 15.05	$ 0.1000	151	$ 15.10	$ 0.05	0.33%
TOU - On Peak		$ 0.1170	151	$ 17.61	$ 0.1170	151	$ 17.67	$ 0.06	0.33%
Total Bill on RPP (before Taxes)				**$ 102.67**			**$ 102.67**	**$ 0.01**	**0.01%**
HST		13%		$ 13.35	13%		$ 13.35	$ 0.00	0.01%
Total Bill (including HST)				$ 116.01			$ 116.02	$ 0.01	0.01%
Ontario Clean Energy Benefit [1]				-$ 11.60			-$ 11.60	$ -	0.00%
Total Bill on RPP (including OCEB)				**$ 104.41**			**$ 104.42**	**$ 0.01**	**0.01%**
Total Bill on TOU (before Taxes)				**$ 104.33**			**$ 104.32**	**-$ 0.01**	**-0.01%**
HST		13%		$ 13.56	13%		$ 13.56	-$ 0.00	-0.01%
Total Bill (including HST)				$ 117.89			$ 117.88	-$ 0.02	-0.01%
Ontario Clean Energy Benefit [1]				-$ 11.79			-$ 11.79	$ -	0.00%
Total Bill on TOU (including OCEB)				**$ 106.10**			**$ 106.09**	**-$ 0.02**	**-0.01%**
Loss Factor (%)		4.5400%			4.8900%				

Bill Impacts

Customer Class: General Service < 50

Consumption 2493 kWh ◉ May 1 - October 31 ○ November 1 - April 30 (Select this radio button for applications filed after

		Current Board-Approved			Proposed			Impact	
	Charge Unit	Rate ($)	Volume	Charge ($)	Rate ($)	Volume	Charge ($)	$ Change	% Change
Monthly Service Charge	Monthly	$ 15.0000	1	$ 15.00	$ 18.2300	1	$ 18.23	$ 3.23	21.53%
Smart Meter Disposition Rider	Monthly	$ 18.3800	1	$ 18.38		1	$ -	-$ 18.38	-100.00%
Stranded Meter Rate Rider	Monthly		1	$ -	$ 6.5100	1	$ 6.51	$ 6.51	
			1	$ -		1	$ -	$ -	
			1	$ -		1	$ -	$ -	
			1	$ -		1	$ -	$ -	
Distribution Volumetric Rate	per kWh	$ 0.0180	2493	$ 44.87	$ 0.0218	2493	$ 54.35	$ 9.47	21.11%
			2493	$ -		2493	$ -	$ -	
LRAM & SSM Rate Rider	per kWh	$ 0.0001	2493	$ 0.25		2493	$ -	-$ 0.25	-100.00%
LRAM Rate Rider	per kWh		2493	$ -	$ 0.0003	2493	$ 0.75	$ 0.75	
			2493	$ -		2493	$ -	$ -	
			2493	$ -		2493	$ -	$ -	
			2493	$ -		2493	$ -	$ -	
			2493	$ -		2493	$ -	$ -	
			2493	$ -		2493	$ -	$ -	
			2493	$ -		2493	$ -	$ -	
			2493	$ -		2493	$ -	$ -	
Sub-Total A				$ 78.50			$ 79.84	**$ 1.33**	**1.70%**
Deferral/Variance Account Disposition Rate Rider	per kWh	-$ 0.0013	2493	-$ 3.24	-$ 0.0037	2493	-$ 9.22	-$ 5.98	184.62%
			2493	$ -		2493	$ -	$ -	
			2493	$ -		2493	$ -	$ -	
			2493	$ -		2493	$ -	$ -	
Low Voltage Service Charge			2493	$ -		2493	$ -	$ -	
Smart Meter Entity Charge						2493	$ -	$ -	
Sub-Total B - Distribution (includes Sub-Total A)				**$ 75.26**			**$ 70.61**	**-$ 4.65**	**-6.18%**
RTSR - Network	per kWh	$ 0.0061	2606	$ 15.90	$ 0.0054	2615	$ 14.12	-$ 1.78	-11.18%
RTSR - Line and Transformation Connection			2606	$ -		2615	$ -	$ -	
Sub-Total C - Delivery (including Sub-Total B)				**$ 91.16**			**$ 84.73**	**-$ 6.43**	**-7.05%**
Wholesale Market Service Charge (WMSC)	per kWh	$ 0.0052	2606	$ 13.55	$ 0.0052	2615	$ 13.60	$ 0.05	0.33%
Rural and Remote Rate Protection (RRRP)	per kWh	$ 0.0011	2606	$ 2.87	$ 0.0011	2615	$ 2.88	$ 0.01	0.33%
Standard Supply Service Charge	Monthly	$ 0.2500	1	$ 0.25	$ 0.2500	1	$ 0.25	$ -	0.00%
Debt Retirement Charge (DRC)		$ 0.0020	2606	$ 5.21	$ 0.0020	2615	$ 5.23	$ 0.02	0.33%
Energy - RPP - Tier 1		$ 0.0750	600	$ 45.00	$ 0.0750	600	$ 45.00	$ -	0.00%
Energy - RPP - Tier 2		$ 0.0880	2006	$ 176.54	$ 0.0880	2015	$ 177.31	$ 0.77	0.43%
TOU - Off Peak		$ 0.0650	1668	$ 108.42	$ 0.0650	1674	$ 108.78	$ 0.36	0.33%
TOU - Mid Peak		$ 0.1000	469	$ 46.91	$ 0.1000	471	$ 47.07	$ 0.16	0.33%
TOU - On Peak		$ 0.1170	469	$ 54.89	$ 0.1170	471	$ 55.07	$ 0.18	0.33%
Total Bill on RPP (before Taxes)				**$ 334.59**			**$ 329.00**	**-$ 5.59**	**-1.67%**
HST		13%		$ 43.50	13%		$ 42.77	-$ 0.73	-1.67%
Total Bill (including HST)				$ 378.08			$ 371.77	-$ 6.31	-1.67%
Ontario Clean Energy Benefit [1]				-$ 37.81			-$ 37.18	$ 0.63	-1.67%
Total Bill on RPP (including OCEB)				**$ 340.27**			**$ 334.59**	**-$ 5.68**	**-1.67%**
Total Bill on TOU (before Taxes)				**$ 323.26**			**$ 317.60**	**-$ 5.65**	**-1.75%**
HST		13%		$ 42.02	13%		$ 41.29	-$ 0.73	-1.75%
Total Bill (including HST)				$ 365.28			$ 358.89	-$ 6.39	-1.75%
Ontario Clean Energy Benefit [1]				-$ 36.53			-$ 35.89	$ 0.64	-1.75%
Total Bill on TOU (including OCEB)				**$ 328.75**			**$ 323.00**	**-$ 5.75**	**-1.75%**
Loss Factor (%)		4.5400%			4.8900%				

Bill Impacts

Customer Class: General Service < 50

Consumption 2000 kWh ◉ May 1 - October 31 ○ November 1 - April 30 (Select this radio button for applications filed after

		Current Board-Approved			Proposed			Impact	
	Charge Unit	Rate ($)	Volume	Charge ($)	Rate ($)	Volume	Charge ($)	$ Change	% Change
Monthly Service Charge	Monthly	$ 15.0000	1	$ 15.00	$ 18.2300	1	$ 18.23	$ 3.23	21.53%
Smart Meter Disposition Rider	Monthly	$ 18.3800	1	$ 18.38		1	$ -	-$ 18.38	-100.00%
Stranded Meter Rate Rider	Monthly		1	$ -	$ 6.5100	1	$ 6.51	$ 6.51	
			1	$ -		1	$ -	$ -	
			1	$ -		1	$ -	$ -	
			1	$ -		1	$ -	$ -	
Distribution Volumetric Rate	per kWh	$ 0.0180	2000	$ 36.00	$ 0.0218	2000	$ 43.60	$ 7.60	21.11%
			2000	$ -		2000	$ -	$ -	
LRAM & SSM Rate Rider	per kWh	$ 0.0001	2000	$ 0.20		2000	$ -	-$ 0.20	-100.00%
LRAM Rate Rider	per kWh		2000	$ -	$ 0.0003	2000	$ 0.60	$ 0.60	
			2000	$ -		2000	$ -	$ -	
			2000	$ -		2000	$ -	$ -	
			2000	$ -		2000	$ -	$ -	
			2000	$ -		2000	$ -	$ -	
			2000	$ -		2000	$ -	$ -	
			2000	$ -		2000	$ -	$ -	
Sub-Total A				$ 69.58			$ 68.94	**-$ 0.64**	**-0.92%**
Deferral/Variance Account Disposition Rate Rider	per kWh	-$ 0.0013	2000	-$ 2.60	-$ 0.0037	2000	-$ 7.40	-$ 4.80	184.62%
			2000	$ -		2000	$ -	$ -	
			2000	$ -		2000	$ -	$ -	
			2000	$ -		2000	$ -	$ -	
Low Voltage Service Charge			2000	$ -		2000	$ -	$ -	
Smart Meter Entity Charge						2000	$ -	$ -	
Sub-Total B - Distribution (includes Sub-Total A)				**$ 66.98**			**$ 61.54**	**-$ 5.44**	**-8.12%**
RTSR - Network	per kWh	$ 0.0061	2091	$ 12.75	$ 0.0054	2098	$ 11.33	-$ 1.43	-11.18%
RTSR - Line and Transformation Connection			2091	$ -		2098	$ -	$ -	
Sub-Total C - Delivery (including Sub-Total B)				**$ 79.73**			**$ 72.87**	**-$ 6.87**	**-8.61%**
Wholesale Market Service Charge (WMSC)	per kWh	$ 0.0052	2091	$ 10.87	$ 0.0052	2098	$ 10.91	$ 0.04	0.33%
Rural and Remote Rate Protection (RRRP)	per kWh	$ 0.0011	2091	$ 2.30	$ 0.0011	2098	$ 2.31	$ 0.01	0.33%
Standard Supply Service Charge	Monthly	$ 0.2500	1	$ 0.25	$ 0.2500	1	$ 0.25	$ -	0.00%
Debt Retirement Charge (DRC)		$ 0.0020	2091	$ 4.18	$ 0.0020	2098	$ 4.20	$ 0.01	0.33%
Energy - RPP - Tier 1		$ 0.0750	600	$ 45.00	$ 0.0750	600	$ 45.00	$ -	0.00%
Energy - RPP - Tier 2		$ 0.0880	1491	$ 131.19	$ 0.0880	1498	$ 131.81	$ 0.62	0.47%
TOU - Off Peak		$ 0.0650	1338	$ 86.98	$ 0.0650	1343	$ 87.27	$ 0.29	0.33%
TOU - Mid Peak		$ 0.1000	376	$ 37.63	$ 0.1000	378	$ 37.76	$ 0.13	0.33%
TOU - On Peak		$ 0.1170	376	$ 44.03	$ 0.1170	378	$ 44.18	$ 0.15	0.33%
Total Bill on RPP (before Taxes)				**$ 273.53**			**$ 267.34**	**-$ 6.19**	**-2.26%**
HST		13%		$ 35.56	13%		$ 34.75	-$ 0.80	-2.26%
Total Bill (including HST)				$ 309.09			$ 302.09	-$ 7.00	-2.26%
Ontario Clean Energy Benefit [1]				-$ 30.91			-$ 30.21	$ 0.70	-2.26%
Total Bill on RPP (including OCEB)				**$ 278.18**			**$ 271.88**	**-$ 6.30**	**-2.26%**
Total Bill on TOU (before Taxes)				**$ 265.98**			**$ 259.74**	**-$ 6.24**	**-2.35%**
HST		13%		$ 34.58	13%		$ 33.77	-$ 0.81	-2.35%
Total Bill (including HST)				$ 300.56			$ 293.50	-$ 7.05	-2.35%
Ontario Clean Energy Benefit [1]				-$ 30.06			-$ 29.35	$ 0.71	-2.36%
Total Bill on TOU (including OCEB)				**$ 270.50**			**$ 264.15**	**-$ 6.34**	**-2.35%**
Loss Factor (%)		4.5400%			4.8900%				

Bill Impacts

Customer Class: General Service > 50kW

Consumption 52339 kWh ◉ May 1 - October 31 ○ November 1 - April 30 (Select this radio button for applications filed after (
131 kW

		Current Board-Approved			Proposed			Impact	
	Charge Unit	Rate ($)	Volume	Charge ($)	Rate ($)	Volume	Charge ($)	$ Change	% Change
Monthly Service Charge	Monthly	$ 146.7400	1	$ 146.74	$ 177.4400	1	$ 177.44	$ 30.70	20.92%
Smart Meter Disposition Rider	Monthly	$ 37.3500	1	$ 37.35		1	$ -	-$ 37.35	-100.00%
Stranded Meter Rate Rider	Monthly		1	$ -	$ 80.7000	1	$ 80.70	$ 80.70	
			1	$ -		1	$ -	$ -	
			1	$ -		1	$ -	$ -	
			1	$ -		1	$ -	$ -	
Distribution Volumetric Rate	per kW	$ 4.4234	131	$ 579.47	$ 5.3209	131	$ 697.04	$ 117.57	20.29%
			52339	$ -		52339	$ -	$ -	
LRAM & SSM Rate Rider			52339	$ -		52339	$ -	$ -	
LRAM Rate Rider	per kW		52339	$ -	$ 0.0569	131	$ 7.45	$ 7.45	
			52339	$ -		52339	$ -	$ -	
			52339	$ -		52339	$ -	$ -	
			52339	$ -		52339	$ -	$ -	
			52339	$ -		52339	$ -	$ -	
			52339	$ -		52339	$ -	$ -	
			52339	$ -		52339	$ -	$ -	
Sub-Total A				$ 763.56			$ 962.63	**$ 199.08**	**26.07%**
Deferral/Variance Account Disposition Rate Rider	per kW	-$ 0.4259	131	-$ 55.79	-$ 1.4454	131	-$ 189.35	-$ 133.55	239.38%
			52339	$ -		52339	$ -	$ -	
			52339	$ -		52339	$ -	$ -	
			52339	$ -		52339	$ -	$ -	
Low Voltage Service Charge			52339	$ -		52339	$ -	$ -	
Smart Meter Entity Charge						52339	$ -	$ -	
Sub-Total B - Distribution (includes Sub-Total A)				**$ 707.76**			**$ 773.28**	**$ 65.52**	**9.26%**
RTSR - Network	per kW	$ 2.4921	137	$ 341.29	$ 2.2063	131	$ 289.03	-$ 52.26	-15.31%
RTSR - Line and Transformation Connection			54715	$ -			$ -	$ -	
Sub-Total C - Delivery (including Sub-Total B)				**$ 1,049.05**			**$1,062.31**	**$ 13.26**	**1.26%**
Wholesale Market Service Charge (WMSC)	per kWh	$ 0.0052	54715	$ 284.52	$ 0.0052	52339	$ 272.16	-$ 12.36	-4.34%
Rural and Remote Rate Protection (RRRP)	per kWh	$ 0.0011	54715	$ 60.19	$ 0.0011	131	$ 0.14	-$ 60.04	-99.76%
Standard Supply Service Charge	Monthly	$ 0.2500	1	$ 0.25	$ 0.2500	1	$ 0.25	$ -	0.00%
Debt Retirement Charge (DRC)		$ 0.0020	54715	$ 109.43	$ 0.0020	131	$ 0.26	-$ 109.17	-99.76%
Energy - RPP - Tier 1		$ 0.0750	600	$ 45.00	$ 0.0750	600	$ 45.00	$ -	0.00%
Energy - RPP - Tier 2		$ 0.0880	54115	$ 4,762.14	$ 0.0880	54298	$4,778.26	$ 16.12	0.34%
TOU - Off Peak		$ 0.0650	35018	$ 2,276.15	$ 0.0650	35135	$2,283.77	$ 7.62	0.33%
TOU - Mid Peak		$ 0.1000	9849	$ 984.87	$ 0.1000	9882	$ 988.17	$ 3.30	0.33%
TOU - On Peak		$ 0.1170	9849	$ 1,152.30	$ 0.1170	9882	$1,156.16	$ 3.86	0.33%
Total Bill on RPP (before Taxes)				**$ 6,310.57**			**$6,158.39**	**-$ 152.19**	**-2.41%**
HST		13%		$ 820.37	13%		$ 800.59	-$ 19.78	-2.41%
Total Bill (including HST)				$ 7,130.95			$6,958.98	-$ 171.97	-2.41%
Ontario Clean Energy Benefit [1]				-$ 713.09			-$ 695.90	$ 17.19	-2.41%
Total Bill on RPP (including OCEB)				**$ 6,417.86**			**$6,263.08**	**-$ 154.78**	**-2.41%**
Total Bill on TOU (before Taxes)				**$ 5,916.76**			**$5,763.23**	**-$ 153.53**	**-2.59%**
HST		13%		$ 769.18	13%		$ 749.22	-$ 19.96	-2.59%
Total Bill (including HST)				$ 6,685.94			$6,512.45	-$ 173.49	-2.59%
Ontario Clean Energy Benefit [1]				-$ 668.59			-$ 651.25	$ 17.34	-2.59%
Total Bill on TOU (including OCEB)				**$ 6,017.35**			**$5,861.20**	**-$ 156.15**	**-2.59%**
Loss Factor (%)		4.5400%			4.8900%				

Revised Proposed Tariff of Rates and Charges

Schedule of Distribution Rates and Charges
Effective May 1, 2013

Customer Class	Item Description	Unit	Rate ($)
Residential			
	Monthly Rates and Charges - Delivery Component		
	Service Charge	per month	10.72
	Distribution Volumetric Rate	per kWh	0.0185
	Rate Rider for Stranded Meters - Effective until April 30, 2014	per month	1.9900
	Rate Rider for Global Adjustment Sub-Account (2013) - Effective until April 30, 2014 - Applicable only to Non-RPP Customers	per kWh	0.0016
	Rate Rider for Deferral/Variance Account Dispostion (2013) - Effective until April 30, 2014	per kWh	(0.0040)
	Rate Rider for Lost Revenue Adjustment Mechanism (LRAM) (2011) - Effective until April 30, 2014	per kWh	0.0003
	Retail Transmission Rate - Network Service Rate	per kWh	0.0058
	Monthly Rates and Charges - Regulatory Componenet		
	Wholesale Market Service Rate	per kWh	0.0052
	Rural Rate Protection Charge	per kWh	0.0011
	Standard Supply Service - Administrative Charge (if applicable)	per month	0.2500
GS < 50 kW			
	Monthly Rates and Charges - Delivery Component		
	Service Charge	per month	18.23
	Distribution Volumetric Rate	per kWh	0.0218
	Rate Rider for Stranded Meters - Effective until April 30, 2014	per month	6.5100
	Rate Rider for Global Adjustment Sub-Account (2013) - Effective until April 30, 2014 - Applicable only to Non-RPP Customers	per kWh	0.0016
	Rate Rider for Deferral/Variance Account Dispostion (2013) - Effective until April 30, 2014	per kWh	(0.0037)
	Rate Rider for Lost Revenue Adjustment Mechanism (LRAM) (2011) - Effective until April 30, 2014	per kWh	0.0003
	Retail Transmission Rate - Network Service Rate	per kWh	0.0054
	Monthly Rates and Charges - Regulatory Componenet		
	Wholesale Market Service Rate	per kWh	0.0052
	Rural Rate Protection Charge	per kWh	0.0011
	Standard Supply Service - Administrative Charge (if applicable)	per month	0.2500
GS >50 kW			
	Monthly Rates and Charges - Delivery Component		
	Service Charge	per month	177.44
	Distribution Volumetric Rate	per kW	5.3209
	Rate Rider for Stranded Meters - Effective until April 30, 2014	per month	80.7000
	Rate Rider for Global Adjustment Sub-Account (2013) - Effective until April 30, 2014 - Applicable only to Non-RPP Customers	per kW	0.5011
	Rate Rider for Deferral/Variance Account Dispostion (2013) - Effective until April 30, 2014	per kW	(1.4454)
	Retail Transmission Rate - Network Service Rate	per kW	2.2063
	Retail Transmission Rate - Network Service Rate - Interval Metered	per kW	2.7747
	Rate Rider for Lost Revenue Adjustment Mechanism (LRAM) (2011) - Effective until April 30, 2014	per kW	0.0569
	Monthly Rates and Charges - Regulatory Componenet		
	Wholesale Market Service Rate	per kWh	0.0052
	Rural Rate Protection Charge	per kWh	0.0011
	Standard Supply Service - Administrative Charge (if applicable)	per month	0.2500

Sentinel Lights			
	Monthly Rates and Charges - Delivery Component		
	Service Charge (Per Connection)	per month	3.18
	Distribution Volumetric Rate	per kW	29.6919
	Rate Rider for Deferral/Variance Account Dispostion (2013) - Effective until April 30, 2014	per kW	(4.5288)
	Retail Transmission Rate - Network Service Rate	per kW	1.6724
	Monthly Rates and Charges - Regulatory Componenet		
	Wholesale Market Service Rate	per kWh	0.0052
	Rural Rate Protection Charge	per kWh	0.0011
	Standard Supply Service - Administrative Charge (if applicable)	per month	0.2500

Street Lighting			
	Monthly Rates and Charges - Delivery Component		
	Service Charge (Per Connection)	per month	3.14
	Distribution Volumetric Rate	per kW	20.4295
	Rate Rider for Deferral/Variance Account Dispostion (2013) - Effective until April 30, 2014	per kW	(3.5213)
	Retail Transmission Rate - Network Service Rate	per kW	1.6639
	Monthly Rates and Charges - Regulatory Componenet		
	Wholesale Market Service Rate	per kWh	0.0052
	Rural Rate Protection Charge	per kWh	0.0011
	Standard Supply Service - Administrative Charge (if applicable)	per month	0.2500

USL			
	Monthly Rates and Charges - Delivery Component		
	Service Charge (Per Connection)	per month	13.52
	Distribution Volumetric Rate	per kWh	0.0332
	Rate Rider for Deferral/Variance Account Dispostion (2013) - Effective until April 30, 2014	per kWh	(0.0036)
	Retail Transmission Rate - Network Service Rate	per kWh	0.0054
	Monthly Rates and Charges - Regulatory Componenet		
	Wholesale Market Service Rate	per kWh	0.0052
	Rural Rate Protection Charge	per kWh	0.0011
	Standard Supply Service - Administrative Charge (if applicable)	per month	0.2500

MicroFIT			
	Monthly Rates and Charges - Delivery Component		
	Service Charge	per month	5.40

Allowances			
	Transformer Allowance for Ownership - per KW of billing demand/month	$/kW	(0.60)
	Primary Metering Allowance for transformer losses - applied to measured demand and energy	%	(1.00)

ISSUE #2

Regardless of the accounting standard used in the application, PUC must provide a summary of changes to its depreciation/amortization policy made since PUC's last cost of service filing.

PUC RESPONSE

PUC follows the Canadian Generally Accepted Accounting Principles (CGAAP), in particular the CICA Handbook Section 3060, capital assets as well as the guidelines as set out in the OEB Accounting Procedures Handbook. For financial reporting purposes, PUC has remained on CGAAP and has deferred implementation to international Financial Reporting Standards (IFRS) until January 1, 2014. There have been no changes under CGAAP in the depreciation/amortization policy since PUC's last cost of service rate application in 2008.

For the purpose of Regulatory accounting and the 2013 cost of service rate application, PUC has changed the depreciation/amortization policy to be consistent with IFRS.

A summary of the changes are listed below:

	CGAAP	IFRS
Accounting Guidelines	Generally Accepted Accounting principles, CICA handbook Section 3060 - Capital Assets, and guidelines in OEB Accounting Procedure Handbook.	Generally Accepted Accounting Principles, CICA Handbook IAS 16-Property, Plant and Equipment, and guidelines in OEB Accounting Procedure Handbook.
Definition of Capital Expenditure	No Change	No Change
Definition of Improvement	No Change	No Change
Definition of Repairs and Maintenance	No Change	No Change
Component Accounting	Componentization of PP&E done when practical and available.	Component of PP&E are determined and depreciated separately for each significant component or part. Component accounting is required if the useful life and/or depreciation method for the component is different from the remainder of the assets.
Depreciation	Based on the greater of (1) its cost less its residual value over its estimated useful life; and (2) its cost less its salvage value (estimated net realizable value at the end of its life) over its estimated life.	Based on asset cost less residual value over the estimated useful life.
Estimates of Residual Values	No explicit guidance on inclusion of future inflation.	Reflects the prices at the reporting date, based on the condition that the asset is expected to be in at the end of the useful life. Inflationary effects are

		not taken into account when determining the residual value.
Reviews of Estimated Useful Life and Residual Values	Useful life and method of depreciation are reviewed regularly, and residual value is reviewed only when events or changes in circumstances indicate that the current estimates may no longer be appropriate.	Estimated useful life, residual value, and method of depreciation are reviewed each annual reporting date or where expectations differ from previous estimates.
Directly Attributed Costs	No change – costs include all expenditures directly attributable to bringing the asset to the location and working condition for its intended use.	No change – costs include all expenditures directly attributable to bringing the asset to the location and working condition for its intended use
General Overhead and Administrative Costs	General overhead and administrative costs may be included in the cost of the assets.	General overhead and administrative costs are specifically excluded from the cost of the assets.
Materiality limits for capitalization	No Change	No change

For the purpose of Regulatory accounting and the 2013 cost of service rate application, PUC has changed the depreciation/amortization estimated useful life to be consistent with the changes in IFRS accounting policy. A summary of the changes in the useful lives are listed below:

Description	OEB Account #	Existing estimated useful life	Proposed Estimated useful life
Poles	1830	25	45
Conductors	1835	25	60
Overhead transformers and voltage regulators	1850	25	40
Switches and reclosers	1835	25	60
Distribution Station transformers and switchgear	1820/1815	30/40	40
Batteries	1825	30	15
Station buildings	1808	50	50
Services	1855	25	40
Underground primary cable	1845	25	40
Underground secondary cable	1845	25	40
Ducts	1840	25	50
Transformers (padmount and submersible)	1850	25	40
Switchgear and junction cubicle	1845	25	40
Industrial and commercial meters	1860	25	25
Smart meters	1860	15	15
Smart meters- repeaters	1860	15	15
Smart meters- data concentrators	1860	15	15
Computer hardware	1920	5	5
Computer software	1925	5	5
System supervisory equipment	1980	15	20
Contributions and grants	1995	25	40