



October 16, 2015

Ontario Energy Board
2300 Yonge St. 27th Floor
Toronto, ON M4P 1E4

Attention: Kirsten Walli
Board Secretary

Dear Kirsten,

RE: Responses to Interrogatories related to Festival Hydro's 2016 IRM Rate Application (EB 2015-0069)

Enclosed please two copies of the Responses to Interrogatories related to Festival Hydro's 2016 IRM Application (EB-2015-0069). A copy of this document has been filed today via RESS.

Please contact me at 519-271-4703 ext. 268 if you have any questions regarding the information attached.

FESTIVAL HYDRO INC.

Debbie Reece
Chief Financial Officer

Festival Hydro Inc. (EB-2015-0069)
Responses to Interrogatories

Board Staff Interrogatory #1
Tab 7 – Tax Sharing

In its application, Festival Hydro calculated a tax sharing amount of \$6,803. Festival Hydro noted that as per its 2015 CoS PILs filing Festival’s effective tax rate is 24.18%.

In its 2015 cost of service application, Festival was approved for the following PILs tax provision, which shows a tax rate of 26.5%:

PILs Tax Provision - Test Year						
						Wires Only
	Regulatory Taxable Income					\$431,863 A
	Ontario Income Taxes					
	<i>Income</i> Ontario Income Tax	11.50%	B		\$ 49,664	C = A * B
	<i>Small b</i> Ontario Small Business Threshold	\$ -	D			
	Rate reduction	-7.00%	E		\$ -	F = D * E
	<i>Ontario Income tax</i>	15%			\$ 49,664	J = C + F
	Combined Effective Ontario Tax Rate			11.50%		K = J / A
	Federal tax rate			15.00%		L
	Combined tax rate				26.50%	M = K + L
	Total Income Taxes				\$ 114,444	N = A * M
	Investment Tax Credits				\$ 10,000	O
	Miscellaneous Tax Credits					P
	Total Tax Credits				\$ 10,000	Q = O + P
	Corporate PILs/Income Tax Provision for Test Year				\$ 104,444	R = N - Q
	Corporate PILs/Income Tax Provision Gross Up ¹			73.50%	\$ 37,657	S = 1 - M T = R / S - R
	Income Tax (grossed-up)				\$ 142,100	U = R + T
	Note:					
	be used for sufficiency/deficiency calculations.					

OEB staff provided a revised tax sharing amount using the following inputs on sheet 7 of the rate generator model.

Summary - Sharing of Tax Change Forecast Amounts

For the 2015 year, enter any Tax Credits from the Cost of Service Tax Calculation (Positive #)		10,000
1. Tax Related Amounts Forecast from Capital Tax Rate Changes	2015	2016
Taxable Capital (if you are not claiming capital tax, please enter your Board-Approved Rate Base)	\$ 61,778,759	\$ 61,778,759
Deduction from taxable capital up to \$15,000,000	\$ 15,000,000	\$ 15,000,000
Net Taxable Capital	\$ 46,778,759	\$ 46,778,759
Rate	0.00%	0.00%
Ontario Capital Tax (Deductible, not grossed-up)	\$ -	\$ -
2. Tax Related Amounts Forecast from Income Tax Rate Changes		
Regulatory Taxable Income	\$ 431,863	\$ 431,863
Corporate Tax Rate	26.50%	26.500%
Tax Impact	\$ 104,440	\$ 104,444
Grossed-up Tax Amount	\$ 142,100	\$ 142,100
Tax Related Amounts Forecast from Capital Tax Rate Changes	\$ -	\$ -
Tax Related Amounts Forecast from Income Tax Rate Changes	\$ 142,100	\$ 142,100
Total Tax Related Amounts	\$ 142,100	\$ 142,100
Incremental Tax Savings		\$ 0
Sharing of Tax Amount (50%)		\$ 0

- a) Please confirm that above PILs inputs are correct and update a revised version of the rate generator to reflect the latest OEB approved tax information.

RESPONSE:

Confirmed and Festival updated tab 7 of the rate generator model to insert the tax credits included in the COS application and replace the effective tax rate of 24.18% with the statutory tax rate of 26.5%.

Board Staff Interrogatory #2
Tab 3 – Continuity Schedule

OEB staff notes that Festival Hydro entered an amount of (\$191,884) in cell AK33 and (\$63,930) in cell AP33, indicating the disposition of these balances in account 1595 (2010) during the 2014 rate year. In the IRM decision EB-2013-0129 the OEB found that no disposition of DVA balances was required at that time.

- a) Please confirm that Festival agrees that these amounts should be recorded in columns AJ and AO as transactions and interest respectively and update the model accordingly.
- b) If the answer to a) is no, please provide an explanation.

RESPONSE:

- a) Agreed. Festival has updated the IRM model Tab 3 Continuity Schedule to move the (\$191,884) from cell AK33 to AJ33 and the (\$63,930) from cell AP 33 to AO33. Festival agrees these amounts were not approved for disposition during the 2014 rate year. They were dispositions approved as part of Festival's 2010 COS Application.

Please note that Tab 3 Continuity Schedule in the IRM model has been updated to reflect the final calculated LRAM claim based on the OPA Final 2014 CDM report. In early 2015, an LRAM estimate was calculated for the year ended December 31, 2014 based on the preliminary OPA reports available at that time. An amount of \$102,284 was recorded effective December 31, 2014. When the final OPA 2014 results (including TOU) were received in early September 2015, a final LRAM amount was calculated (by an independent third party) at \$155,879, as reported on pages 11 and 12 of Appendix A. In order to get the increase in the amount into the model, the difference of \$53,595 has been placed into cell AL43 "Adjustments during 2014" as there are no fields under the 2015 year to accommodate this amount. The final LRAM amount for the claim included in Tab 3 now totals \$155,879.

Board Staff Interrogatory #3
Tab 18 – Bill Impact

On page 9 of the *Filing Requirements for Electricity Distribution Rate Application, Chapter 3*, dated July 16, 2015, the OEB directed applicants to evaluate and provide the total bill impact for a residential customer at the distributor's 10th consumption percentile. OEB staff notes that Festival Hydro did not provide this calculation.

- a) Please provide a total bill impact calculation for the 10th consumption percentile.
- b) Please confirm that the total bill impact for these customers is below 10%. If not, please provide a mitigation plan for the whole residential customer class or indicate why such a plan is not required.

RESPONSE:

- a) Festival has included on tab 18 of the model the bill impacts for a residential customer at 275 kWh for both the RPP and non-RPP category.
- b) The total bill impact for both of these categories 10% & 9% respectively.

In the limited cases where the bill impact is over 10%, it is directly as a result of removing the OCEB. Ignoring the OCEB, all bill impacts are less than 10%. Festival is of the belief that the 10% mitigation should apply only to the changes in which Festival has direct control. Since elimination of the OCEB credit is a change outside of the control of Festival Hydro, Festival believes it should not be considered when assessing the 10% mitigation on cost.

Board Staff Interrogatory #4

Tab 18 – Bill Impact

On tab 18 of the rate generator, the OEB requests applicants to provide bill impacts.

- a) Please update tab 18 and identify non-RPP consumption in column H of the summary input table.
- b) Please update the rate generator to indicate which customer classes were eligible for the OCEB credit prior to January 1, 2016.
- c) Please indicate the rate classes applicable in the additional scenarios through the drop-down menu in column D.

RESPONSE:

- a) Festival added a residential 250 kWh class and 800 kWh class, both non-RPP to the bill impact tables.
- b) Festival has updated tab 18 with the classes eligible for the OCEB pre January 1, 2016.
- c) Festival has provided an updated model which now shows the additional rate classes added to column D of tab 18.

Board Staff Interrogatory #5

Managers summary, p. 7 – LRAMVA

On page 13 of the *Filing Requirements for Electricity Distribution Rate Application, Chapter 3*, dated July 16, 2015, the OEB requests the following information in relation to the disposition of the LRAMVA Account 1568.

- *Separate tables for each rate class showing the lost revenue amounts requested by the year they are associated with and the year the lost revenues occurred. Within each rate class table, include a list of all the CDM programs/initiatives applicable to that rate class and provide the energy savings (kWh) and peak demand (kW) savings assigned to those programs/initiatives*
- *Lost revenue calculations, determined by calculating the energy savings by customer class and valuing those energy savings using the distributor's OEB-approved variable distribution charge appropriate to the class*

- a) Please provide a table showing the above information.
- b) Please provide a table showing the rate rider calculation by rate class.
- c) Festival Hydro stated that the final OPA report will not be available until the end of August 2015 and that it will update the LRAMVA claim prior to finalization of the 2016 IRM rates. Please provide the final OPA results now and update the LRAMVA claim as necessary. If the final report is not available, please state when Festival Hydro expects to receive the final results.

RESPONSE:

- a) Attached under Appendix A is the 2014 LRAM Report which has been updated based on the final 2014 OPA results issued on September 2, 2015. On pages 11 to 12 of the report there is a table provided that shows the calculated lost revenue amounts by rate class for each year broken down by the OPA CDM program/initiative delivered to each rate class and the associated kWh and kW savings.
- b) On page 11 of the report is shown the details on how the amounts to be collected are derived for each rate class. Page 12 contains the summary of amounts to be collected by rate class, as summarized below. These amounts have been entered into Tab 4 Billing Determinants within the IRM model, which automatically calculates the rate riders for each rate class.

Rate Class	LRAM Claim
Residential	29,155.93
G.S. < 50 kW	74,066.48
G.S. > 50 kW	46,024.81
Large Use	6,632.09
Total LRAM Claim	155,879.31

- c) The final OPA 2014 CDM report is provided under Appendix B and the LRAM claims has been updated accordingly on Tab 4 of the IRM model.

Board Staff Interrogatory #6

Manager's summary, p. 10 – Rate Rider for Recovery of Permanent Bypass Expenditure

- a) Please provide detailed reasons for the delay in finalizing the final amount owing for the permanent bypass agreement between Festival Hydro and Hydro One Networks Inc. (HONI).
- b) Please provide any communication between the HONI and Festival Hydro regarding the finalization of the amount owing for the permanent bypass.
- c) Please provide the latest available estimate of the permanent bypass expenditure.
- d) Please calculate the adjusted rate rider based on the estimate in c) under two scenarios;
 - a. Implementation effective Jan 1 2016
 - b. Implementation effective Jan 1 2017
- e) Given the fixed sunset date of December 31, 2017, please explain whether and how Festival proposes to mitigate the effects of a shorter recovery period on its customers in the event that the rider is not adjusted until 2017 and the final amount is considerably different from the 1.23M initially adopted to calculate the rate rider.

RESPONSE

- a) The final amounts owing to Hydro One for both the St. Marys CCRA and the Permanent Bypass Agreement (PBA) includes a calculation taking into account the impact of CDM and Distributed Generation (DG) using Hydro One's CDM/DG Load Adjustment for CCRA True up Guidelines. The guidelines were first introduced in January 1, 2015. Early in 2015, Festival met with Hydro One to review the guidelines and subsequently submitted CDM and DG data based on the original guidelines. Hydro One then updated its guidelines effective August 14, 2015 and met with Festival Hydro on August 28, 2015 to go through their updated PBA amount owing and to discuss additional data required for the CDM/DG calculation based on the new guidelines. Being the CDM offset calculation is based on the OPA CDM results, the decision was made to wait until the final 2014 OPA results were available in early September 2015. On October 13, 2015, Festival supplied the final load data for the CDM/DG calculation and the final 2014 OPA results for Hydro One to finalize the calculation. The goal is to have the calculation finalized, agreed to and invoiced by Hydro One sometime before December 31, 2015.
- b) Appendix C includes the Minutes of the meeting held on August 28, 2015 with Hydro One which discusses the updated CDM/DG guidelines and the revised estimate value of the Permanent Bypass Agreement.
- c) Hydro One's updated their draft calculation and forwarded to Festival Hydro along with the meeting minutes on September 16, 2015. The revised draft calculation of the PBA amount owing is attached under Appendix D. A number of parameters have changed from the original calculation. Hydro One's revised estimate as presented in the minutes from the August 25, 2015 meeting is \$932,094.

- d) Hydro One has provided three estimates to date: the original \$1,230,026 in December 2013; subsequently at an amount of \$1,463,321 dated December 11, 2014 and the most recent draft calculation of \$932,094. Given there have been three widely varied amounts presented by Hydro One to date, it is still difficult to determine what the final amount will be.

Festival requests that the Board allow Festival to maintain the original value of the PBA at \$1,230,026 in determining the 2016 rate riders and allow Festival to continue with the May 1, 2015 approved rate riders for the January 1, 2016 rate year. Festival further requests that as part of the 2017 IRM application, Festival be allowed to adjust the rate riders to either collect the remaining amount owing or to return over-collected funds back to the customers. By maintaining the existing rate riders it will provide stability of rates to customers as it relates to the collection of the PBA rate rider.

If the May 1, 2015 rate riders for each rate class are maintained throughout the 2016 Rate year, over the 19 month period ending December 31, 2016 (June 2015 to Dec 2016), Festival will have collected approximately \$753,887. This is still less than the most recent valuation completed by Hydro One at \$932,094. So it would seem fair to continue to collect the same rate riders for the 2016 rate year.

When the 2017 IRM is completed in the fall of 2016, Festival will at that time know the final amount paid to Hydro One. Festival would prefer to adjust the rate riders as part of the 2017 IRM, with revised 2017 rate riders. The expectation is that there would still be a residual amount to collect in the 2017 rate year. As such, Festival request that the Board approve continuation of the 2015 PBA rate riders for the 2016 rate year.

VECC #1

Ref 1: Manager's Summary, Page 10, Rate Rider for Recovery of Permanent Bypass Expenditure

Ref 2: EB-2014-0073 Decision and Order dated April 30, 2015 Page 5

Preamble: At Reference #1, Festival indicates that at the time of filing this application the amount in question still has not been finalized with Hydro One. At reference #2, the Board notes in its Decision and Order that Festival was not aware at the time the OEB approved the ICM for the transformer station that a situation might call for a bypass agreement and therefore it did not make the OEB aware of this possibility.

- a) Please confirm the bypass agreement with Hydro One is still valid and required.
- b) Please confirm Festival is currently in discussions with Hydro One to finalize an amount.
- c) Please confirm when Festival expects the amount to be finalized with Hydro One.

- d) Please summarize any changes that have occurred since the Board's Decision and Order in EB-2014-0073 that would impact the finalization of the amount with Hydro One.

RESPONSE:

- a) The permanent bypass agreement (PBA) is a valid and required agreement between Festival Hydro and Hydro One.
- b) Discussions are currently underway with Hydro One to finalize the amount. Details are provided in Festival's response to Board Staff Interrogatory # 6 (a & b).
- c) Both parties are committed having the calculation finalized, agreed to and the amount invoiced by Hydro One sometime before December 31, 2015.
- d) The Response to Board staff interrogatory # 6 provides a summary of changes which have occurred since the Board's Decision and Order EB-2014-0073. To date, Hydro One has provided three different estimates of amounts owing to Hydro One: the original \$1,230,026 in December 2013; subsequently at an amount of \$1,463,321 dated December 11, 2014 and the most recent draft calculation of \$932,094. Given there have been three widely varied amounts presented by Hydro One to date, it is still difficult to determine what the final amount owing will be.

Festival requests that the Board allow Festival to maintain the original value at \$1,230,026 in determining the rate riders and continue with the May 1, 2015 approved rate riders for each rate class for the January 1, 2016 rate year. Festival further requests that as part of the 2017 IRM application, Festival be allowed to adjust the rate riders to either collect the remaining amount owing or to return over collected funds back to the customers. By maintaining the existing rate riders for the 2016 rate year it will provide stability of rates for customers as it relates to collection of the PBA rate rider.

**Board Staff Interrogatory #7
Manager's summary, p. 6-7 – Global Adjustment**

Festival Hydro is requesting a rate rider for the disposition of Global Adjustment (2015) in the amount of \$1,442,080. This represents transaction and interest amounts during the 2014 rate year. In the 2013 rate year, Festival Hydro showed transactions in the amount of \$161,745.

- a) Please confirm that all balances in account 1589 were cleared during Festival Hydro's last cost of service proceeding EB-2014-0073.
- b) Please explain the large balance in account 1589 Global Adjustment (2015), which is about 8 times the per unit value relative to 2013 when assessed by transaction.

- c) Transactions in account 1588 show a debit of \$52,825 in 2013 and a credit of \$180,244 in 2014. Do any changes in billing patterns or settlement practices explain the four-fold change in the value from 2013 to 2014? Please explain any other reasons for the change in the balances.
- d) Please state if Festival Hydro’s systems or procedures have changed materially during the past two years.

RESPONSE:

- a) The balances in account 1589 up to the end of December 31, 2013 were included in the 2015 COS application and approved to be collected over 7 months ended December 31, 2015. The GA variance account 1589 being claimed as part of the 2016 IRM relates solely to the balance accumulated during the 2014 fiscal year.
- b) Festival Hydro, like most LDCs, charge the global adjustment (“GA”) to customers based on the 1st estimate (\$/MWh) as posted on the IESO website. The actual GA is determined and posted on the IESO website on or about the 10th business day after month end. In the table below are the IESO website posted amounts. There are a number of months, in particular April and May 2014, where the 1st estimate used for billing was substantially below the actual rate (\$/Mwh):

2014	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
1st Estimate (\$/MWh)	36.26	22.31	11.03	-9.65	53.56	71.90	59.76	61.08	80.49	74.92	99.01	73.18
2nd Estimate (\$/MWh)	18.06	11.18	-8.00	54.53	73.52	66.64	57.53	68.97	80.72	101.35	85.04	57.89
Actual Rate (\$/MWh)	12.61	13.30	-0.27	51.98	71.96	60.25	62.56	67.61	79.63	100.14	82.32	74.44
Difference	23.65	9.01	11.30	(61.63)	(18.40)	11.65	(2.80)	(6.53)	0.86	(25.22)	16.69	(1.26)

Appendix E provides the monthly spreadsheet used by Festival to keep track of the variance between the actual billed GA (at 1st estimate) and the amount which would have been billed using the actual published rate (\$/Mwh). As noted, the spread in April between the two rates accounted for most of the large GA variance balance in 2014.

Festival has a large industrial and commercial customer base with over 67% of Festival’s kWh sold in a year (2014 year) sold to customers who are subject to GA. So when the 1st estimate and the Actual GA rates vary substantially, it can create a large variance, as illustrated on Appendix E.

- c) There have been no changes in billing practices or procedures followed to settle with the IESO in recent years and, in particular, no changes in 2013 or 2014.

- d) Festival has improved its approach to determining the 1588 COP vs. 1589 GA variances over the past few years and in 2013 reviewed the variance balances in each resulting in 1589 GA variance adjustments and the resulting credit balance (\$52,825) appearing in 1588 COP variance 1588 in the 2013 year. Previous to 2013, the GA variance was calculated as a subset to the COP variance and reported separately on the quarterly RRR. It is now fully segregated and calculated as can be found on Appendix E.

As a further note, Festival attended an EDA Finance Council meeting earlier this year where the IESO was invited to discuss the Global Adjustment and billing based on the 1st estimate. The message from many LDCs was that differences between the 1st estimate and the Actual rate in 2014 had created larger than usual GA variance balances owing from customers. This is a concern by LDCs because the charges are not getting billed to the customers on a timely fashion (as they only get cleared as a variance account in subsequent years). The second concern was that the LDCs earns the prescribed interest rate on the variance balances but borrow money to cover this costs at rates well in excess of the prescribed rate. It is Festival's understanding that other LDCs experienced a similar result in their GA variance during 2014.

Respectfully submitted this 16th day of October 2015.
Regards,

Debbie Reece
Festival Hydro Inc.

Appendices attached:

Appendix A	2014 LRAM Report
Appendix B	2011 to 2014 OPA Final CDM Results
Appendix C	Hydro One Meeting Minutes Aug 25, 2015
Appendix D	Permanent Bypass Agreement Estimate Compensation Amount
Appendix E	Account # 1589 Global Adjustment Variance Account 2014 Continuity

APPENDIX A

FESTIVAL HYDRO INC.

LRAMVA SUPPORT

October 07, 2015

PREPARED BY: JARRETT URECH, CET

REVIEWED BY: BART BURMAN, MBA BA.SC. P.ENG

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Executive Summary

Burman Energy Consultants group has calculated Festival Hydro's LRAMVA value for the period of 2014 to be a total of \$155,879.31 . Festival Hydro did not forecast any CDM savings as a component of their 2010 approved cost of service application.

Introduction

Since the completion of Third Tranche CDM programs and reporting, LDCs across Ontario have sought to recover revenues lost to successful CDM programming. The mechanism that enables this recovery is the Lost Revenue Adjustment Mechanism (LRAM).

On April 26, 2012, new Board-issued CDM Guidelines were enacted that provide updated LRAM details. For CDM programs delivered within the 2011 to 2014 term, the Board established the Lost Revenue Adjustment Variance Account (LRAMVA). This account captures the variance between the Board-approved CDM forecast and the actual CDM results.

The variance calculated from this comparison must be recorded in separate sub-accounts per the applicable customer rate classes.

LDCs must apply for the disposition of the balance in the LRAMVA as part of their cost of service (COS) applications or on an annual basis, as part of their IRM rate applications.

The LRAM mechanism determines persistent CDM impacts realized after 2010, for those distributors whose load forecast has not been updated.

Festival Hydro Inc. has requested Burman Energy Consultants Group to propose fees to assist in the calculation of LRAMVA and LRAM amounts to be included in its filing with the OEB.

Terms

Term	Description
Persistence	CDM savings during the subsequent years after the first year savings.
Extension Framework	The conservation period between 2011 and 2015
Conservation First Framework	The conservation period between 2015 and 2020.
CDM	Conservation and Demand Management
LRAM	Lost Revenue Adjustment Mechanism
LRAMVA	Lost Revenue Adjustment Mechanism Variance Account
COS	Cost of Service
IRM	Incentive Regulation Model

About Burman Energy Consultants Group Inc.

Burman Energy is a vibrant, growing company, and has provided energy conservation program planning, administration and delivery services since the inception of OPA programs in 2007. Serving 39 CDM client LDCs in Ontario, we currently have over 30 staff with specialized expertise in CDM planning and program administration, marketing, technical review and support, quality control, and contractor management. In 2013, Bart Burman, President of Burman Energy, was inducted into Worldwide Who's Who for Excellence in Energy Consulting, and in 2014/15, Bart sits as chair of the EDA's Commercial Steering Committee.

Burman Energy has adopted a new structured approach to fulfilling its contracted obligations with our numerous and diverse LDC CDM clients. Recognizing, in practice, the significant peaks and valleys associated with sustaining a consistent high standard of service on time delivery, our organizational focus continues to be to ensure adequate and flexible staff resources. Cross training in several different aspects of program execution has historically enabled us to make this approach extremely effective in meeting our clients' timeliness criteria.

As a process centric organization, our starting point is to use stock, off the shelf, proven process designs, and adjust collaboratively, in discussion with you, our client, for your specific LDC protocols as required. From this common basis for understanding, identification of roles and associated accountabilities can be easily determined. In addition, this work, up front, provides for a more solid basis upon which to convey pricing options.

Burman Energy Consultants Group Inc. is headquartered at

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Scope of Work

Specifically, Burman Energy will perform the following in its work undertaking:

- 1) Collect and outline savings for the following data sets:
 - ii. CDM Results for programs as applicable for the LRAMVA period.
 - iv. Forecasted savings for Conservation and Demand Management programs (Last Approved).
- 2) Collect additional data as outlined:
 - i. LDC volumetric distribution rates for LRAMVA years.
 - ii. Completed Retrofit projects for years for which retrofit savings are reported.
- 3) Calculate by initiative and year the lost revenue values.
- 4) Calculate the currently recovered lost revenue from the load forecast.
- 5) Outline the net LRAMVA values by year and overall.
- 6) Provide summary report with supporting information.

Lost Revenue Adjustment Mechanism History

From 2005 to the end of 2010, distributors delivered CDM programs either through approved distribution rate funding by way of the third installment of their incremental market adjusted revenue requirement ("MARR"), or through contracts with the OPA. Some distributors received incremental distribution rate funding separate from MARR. To promote the participation in and the delivery of CDM programs by distributors, the Board made available an LRAM regardless of whether the CDM programs were funded by the OPA or through distribution rates.

Lost Revenue Adjustment Mechanism Outline

In preparation of this document, Burman Energy performed this analysis in compliance with Guidelines for Electricity Distributor Conservation and Demand Management EB-2012-0003 with specific reference to the following:

13.6 LRAM & Shared Savings Mechanism for Pre-CDM Code Activities

The Board notes that the Filing Requirements for Transmission and Distribution Applications state the following:

Distributors intending to file an LRAM or SSM application for CDM Programs funded through distribution rates, or an LRAM application for CDM Programs funded by the OPA between 2005 and 2010, shall do so as part of their 2012 rate application filings, either cost-of-service or IRM. If a distributor does not file for the recovery of LRAM or SSM amounts in its 2012 rate application, it will forego the opportunity to recover LRAM or SSM for this legacy period of CDM activity.

The 2008 CDM Guidelines state as follows: "lost revenues are only accruable until new rates (based on a new revenue requirement and load forecast) are set by the Board, as the CDM savings would be assumed to be incorporated in the load forecast at that time". The intent of the LRAM in the 2008 CDM Guidelines was to keep electricity distributors revenue neutral for CDM activities implemented by the distributor during the years in which its rates were set using the incentive regulation mechanism, and that future LRAM claims should be unnecessary once a distributor rebases and updates its load forecast.

The Board therefore expects that LRAM for pre-2011 CDM activities should be completed with the 2012 rate applications, outside of 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.

This summary is extracted from the "Guidelines for Electricity Distributor Conservation and Demand Management" (EB-2012-0003). This document can be found at:

http://www.ontarioenergyboard.ca/oeb/Documents/EB-2012-0003/CDM_Guidelines_Electricity_Distributor.pdf

Lost Revenue Adjustment Mechanism Variance Account Outline

With specific reference to the following:

13.2 LRAM Mechanism for 2011- 2014

The Board will adopt an approach for LRAM for the 2011-2014 CDM period that is similar to that adopted in relation to natural gas distributor DSM activities. The Board will authorize the establishment of an LRAM variance account ("LRAMVA") to capture, at the customer rate-class level, the difference between the following:

- i. The results of actual, verified impacts of authorized CDM activities undertaken by electricity distributors between 2011-2014 for both Board-Approved CDM programs and OPA-Contracted Province-Wide CDM programs in relation to activities undertaken by the distributor and/or delivered for the distributor by a third party under contract (in the distributor's franchise area); and
- ii. The level of CDM program activities included in the distributor's load forecast (i.e. the level embedded into rates).

Distributors will generally be expected to include a CDM component in their load forecast in cost of service proceedings to ensure that its customers are realizing the true effects of conservation at the earliest date possible date and to mitigate the variance between forecasted revenue losses and actual revenue losses. If the distributor has included a CDM load reduction in its distribution rates, the amount of the forecast that was adjusted for CDM at the rate class level would be compared to the actual DCM results verified by an independent third part for each year of the CDM program (i.e., 2011 to 2014) in accordance with the OPA's EM&V Protocols as set out in Section 6.1 of the CDM Code. The variance calculated from this comparison result in a credit or a debit to the ratepayers at the customer rate class level in the LRAMVA. The LRAM amount is determined by applying, by customer class, the distributor's Board-approved variable distribution charge applicable to the class to the volumetric variance (positive or negative) described in the paragraph above. The calculated lost revenues will be recorded in the LRAMVA. Distributors will be expected to report the balance in the LRAMVA as part of the reporting and record-keeping requirements on an annual basis.

This summary is extracted from the "Guidelines for Electricity Distributor Conservation and Demand Management" (EB-2012-0003). This document can be found at:

http://www.ontarioenergyboard.ca/oeb/ Documents/EB-2012-0003/CDM_Guidelines_Electricity_Distributor.pdf

Summary of Calculated Annual LRAMVA Details

Burman Energy Consultants Group Inc. (Burman Energy) has prepared the following LRAMVA tables, representing the variance amount to be recorded in the LRAM Variance Account. The amount is the calculated result of the lost revenues by customer class based on the volumetric impact of the load reductions arising from the CDM measures implemented, multiplied by Festival Hydro's Board-approved variable distribution changes applicable to the customer rate class in which the volumetric variance occurred. The calculations provided by Burman Energy do not include carrying charges or adjustments based on CDM reductions as included in any CDM Load reduction forecast.

Results Year	Lost Revenue Adjustment Mechanism Year					
	2014					
2014	\$ 43,507					
2013	\$ 44,130					
2012	\$ 33,722					
2011	\$ 34,520					
Total	\$ 155,879					
Forecast	\$ -					
Net	\$ 155,879					
Variance		\$ 155,879				

Reference Material

The following OPA documents were used to prepare the LRAMVA calculations:

- i. [2006-2014]_RATES_DATABASE_FROM TARIFFS.xls
- ii. 2011-2014 Festival Hydro Results with Persistence.xls
- iii. Festival Hydro [2014] Retrofit Project Lists
- iv. Final Verified Annual 2014 CDM Report_Festival Hydro Inc.xls

Methodology

Burman Energy would like to present a summary of the methodology used to calculate the LRAMVA figures in this report for the purposes of auditing.

Burman Energy collects the following information as the sources for the values calculated in this report:

- Rate Database documents from the Ontario Energy Board (OEB) website for all years that are being calculated.
- Final CDM results and their persistence into future years received directly from the IESO or from the Local Distributor.
- Retrofit & High Performance New Constuction (HPNC) project data with kW, kWh and Rate Class information for each project.
- The forecasted CDM results from the distributors most recently approved Cost of Service application (COS).

Burman Energy takes the results of each initiative where the savings for the LRAMVA report period are not equal to zero and enters the figures into the report. The values entered into the report are organized by results year, rate class, and then initiative.

Results from 2013
Residential
HVAC Incentives
RESIDENTIAL TOTAL
GS Less Than 50 kW
Retrofit
GS LESS THAN 50 KW TOTAL
GS Greater Than 50 kW
Retrofit
GS GREATER THAN 50 KW TOTAL
Large Use
Retrofit
LARGE USE TOTAL
RESULTS FROM 2013 TOTAL

The results for Retrofit and HPNC items are initially collected for all rate classes then using verified project savings the result savings are divided into the appropriate rate classes.

Year	Application Type	LDC	Demand Savings	Energy Savings	Rate Class	Sector
2014	Retrofit	Festival Hyd	9.53	68,384	GS>50	Industrial
2014	Retrofit	Festival Hyd	3.58	2,502	GS<50	Business
2014	Retrofit	Festival Hyd	49.534627	279445.35	Large Use	LargeUse

kW	GS>50	15.22%	GS<50	5.71%	Large Use	79.07%
kWh		19.52%		0.71%		79.77%

Volumetric distribution rates are derived by using the rate database provided on the OEB website directly as they appear. These volumetric distribution rates are collected for each rate class for the years during the LRAMVA reporting period and one year prior are entered into the report along with their effective date. Burman Energy uses the effective date to create a weighted volumetric rate for each of the calendar years (Jan1st through Dec 31st) years in the reporting period. A summary of the calculation is presented below:

$$\text{Weighted Rate (kWh)} = \left(\frac{\text{Old Rate}}{\left(\frac{\text{Months at Old Rate}}{12} \right)} \right) + \left(\frac{\text{New Rate}}{\left(\frac{\text{Months at New Rate}}{12} \right)} \right)$$

The weighted volumetric rate is multiplied by the savings metric selected by rate class (the Residential and GS<50 metric is kWh and the GS>50 and Large Use metric is kW). The resulting figure is then subject to global modifiers based on initiative (eg. Demand Response 3 is taken at a factor of 0% due to the type of savings it provides).

$$\text{LRAM(kW)} = \text{Weighted Rate} * \text{Modifier}\%_{\text{If Applicable}} * \left((\text{kW}_{\text{Per Month}} * \text{Months at old Rate}) + (\text{kW}_{\text{Per Month}} * \text{Months at New Rate}) \right)$$

$$\text{LRAM (kWh)} = \text{Weighted Rate} * \text{Modifier}\%_{\text{If Applicable}} * \text{kWh}_{\text{Annual}}$$

The totals are outlined at the bottom of each section with a summary by rate class presented near the bottom of the table for comparison to the forecasted figures.

If the distributor had forecasted CDM savings Burman Energy takes the values and applies same methods outlined for the savings results to calculate the total lost revenue that has already been recovered for the reporting period.

The recovered lost revenue is subtracted from the calculated LRAM resulting in the net figures or Variance. These figures are outlined by reporting period year and as an overall.

Supporting Attachments

Festival Hydro Inc. LRAMVA CALCULATIONS
OPA Conservation & Demand Management Programs
Initiative Results at End-User Level

Initiative Name	2013	2014			2014 LRAMVA
	Volumetric Rate	Net Summer Peak Demand Savings (kW)	Net Energy Savings (kWh)	Distribution Volumetric Rate (Effective Date: May 1)	
LRAM CDM Results and Persistence					
Results from 2014					
Residential					
Appliance Exchange	0.01645	10.15	18,102.55	0.01665	\$ 300.20
Appliance Retirement	0.01645	12.15	74,711.91	0.01665	\$ 1,238.97
HAP	0.01645	8.50	73,548.27	0.01665	\$ 1,219.68
HVAC	0.01645	90.82	169,591.75	0.01665	\$ 2,812.40
RESIDENTIAL TOTAL		121.62	335,954		\$ 5,571.25
GS Less Than 50 kW					
Audit Funding	0.0147	54.06	264,024.44	0.0149	\$ 3,916.36
Capital Incentive	0.0147	51.09	447,640.00	0.0149	\$ 6,639.99
EEM	0.0147	0.18	10,467.69	0.0149	\$ 155.27
New Construction	0.0147	71.86	194,388.11	0.0149	\$ 2,883.42
Retrofit	0.0147	40.57	175,152.38	0.0149	\$ 2,598.09
SBL	0.0147	60.99	229,865.54	0.0149	\$ 3,409.67
GS LESS THAN 50 KW TOTAL		278.75	1,321,538		\$ 19,602.82
GS Greater Than 50 kW					
Retrofit	2.3045	657.47	2,818,224.43	2.3333	\$ 18,333.18
GS GREATER THAN 50 KW TOTAL		657.47	2,818,224		\$ 18,333.18
RESULTS FROM 2014 TOTAL		1,057.84	4,475,717		\$ 43,507.25
Results from 2013					
Residential					
Annual Coupons	0.01645	1.81	26,961.63	0.01665	\$ 447.11
Appliance Exchange	0.01645	6.22	11,083.20	0.01665	\$ 183.80
Appliance Retirement	0.01645	15.70	103,624.87	0.01665	\$ 1,718.45
Bi-Annual Retailer Events	0.01645	4.14	60,096.28	0.01665	\$ 996.60
Home Assistance Program	0.01645	21.12	187,059.63	0.01665	\$ 3,102.07
HVAC	0.01645	75.75	136,597.39	0.01665	\$ 2,265.24
RESIDENTIAL TOTAL		124.73	525,423		\$ 8,713.26
GS Less Than 50 kW					
Energy Audit Funding	0.0147	17.63	96,901.54	0.0149	\$ 1,437.37
Program Enabled Savings	0.0147	125.10	1,142,449.68	0.0149	\$ 16,946.34
Retrofit	0.0147	64.76	534,434.31	0.0149	\$ 7,927.44
Small Business Lighting	0.0147	37.70	131,294.23	0.0149	\$ 1,947.53
GS LESS THAN 50 KW TOTAL		245.18	1,905,080		\$ 28,258.68
GS Greater Than 50 kW					
Retrofit	2.3045	256.69	1,502,369.92	2.3333	\$ 7,157.66
GS GREATER THAN 50 KW TOTAL		256.69	1,502,370		\$ 7,157.66
RESULTS FROM 2013 TOTAL		626.60	3,932,873		\$ 44,129.61
Results from 2012					
Residential					
Appliance Exchange	0.01645	7.79	13,733.90	0.01665	\$ 227.75
Appliance Retirement	0.01645	16.67	113,760.79	0.01665	\$ 1,886.53
Bi-Annual Retailer Event	0.01645	5.18	93,684.17	0.01665	\$ 1,553.60
Conservation Instant Coupon Booklet	0.01645	0.81	4,891.01	0.01665	\$ 81.11
Home Assistance Program	0.01645	0.28	4,983.00	0.01665	\$ 82.63
HVAC	0.01645	1.39	2,908.25	0.01665	\$ 48.23
HVAC Incentives	0.01645	68.14	122,477.57	0.01665	\$ 2,031.09
RESIDENTIAL TOTAL		100.25	356,439		\$ 5,910.94
GS Less Than 50 kW					
Direct Install Lighting	0.0147	60.90	239,057.31	0.0149	\$ 3,546.02
Energy Audit	0.0147	10.35	50,352.51	0.0149	\$ 746.90
Retrofit	0.0147	217.43	1,157,490.15	0.0149	\$ 17,169.44
GS LESS THAN 50 KW TOTAL		288.68	1,446,900		\$ 21,462.35
GS Greater Than 50 kW					
Retrofit	2.3045	217.43	1,157,490.15	2.3333	\$ 6,062.89
High Performance New Construction	2.3045	10.25	35,869.74	2.3333	\$ 285.85
GS GREATER THAN 50 KW TOTAL		227.68	1,193,360		\$ 6,348.74
RESULTS FROM 2012 TOTAL		616.61	2,996,699		\$ 33,722.03
Results from 2011					
Residential					
Appliance Exchange	0.01645	2.19	3,907.11	0.01665	\$ 64.79
Appliance Retirement	0.01645	18.58	134,875.38	0.01665	\$ 2,236.68
Bi-Annual Retailer Event	0.01645	6.26	110,437.07	0.01665	\$ 1,831.41
Conservation Instant Coupon Booklet	0.01645	4.09	66,362.87	0.01665	\$ 1,100.52
HVAC Incentives	0.01645	118.15	224,747.84	0.01665	\$ 3,727.07
RESIDENTIAL TOTAL		149.26	540,330		\$ 8,960.48
GS Less Than 50 kW					
Direct Install Lighting	0.0147	106.28	272,188.69	0.0149	\$ 4,037.47
Energy Audit	0.0147	5.18	25,176.25	0.0149	\$ 373.45
Retrofit	0.0147	4.59	22,363.06	0.0149	\$ 331.72
GS LESS THAN 50 KW TOTAL		116.05	319,728		\$ 4,742.63
GS Greater Than 50 kW					
Retrofit	2.3045	269.96	1,313,923.44	2.3333	\$ 7,527.76
High Performance New Construction	2.3045	238.75	1,342,359.67	2.3333	\$ 6,657.47
GS GREATER THAN 50 KW TOTAL		508.72	2,656,283		\$ 14,185.23
Large Use					
High Performance New Construction	0.9975	549.47	2,080,596.81	1.01	\$ 6,632.09
LARGE USE TOTAL		549.47	2,080,597		\$ 6,632.09
RESULTS FROM 2011 TOTAL		1,323.50	5,596,938		\$ 34,520.42

Initiative Name	2013	2014			2014 LRAMVA
	Volumetric Rate	Net Summer Peak Demand Savings (kW)	Net Energy Savings (kWh)	Distribution Volumetric Rate (Effective Date: May 1)	
Summary By Rate Class					
Residential	0.01645	495.86	1,758,146.43	0.01665	\$ 29,155.93
General Service Less Than 50 kW	0.0147	928.66	4,993,245.89	0.0149	\$ 74,066.48
General Service Greater Than 50 kW	2.3045	1,650.56	8,170,237.36	2.3333	\$ 46,024.81
Large use Customers		549.47	2,080,596.81		\$ 6,632.09
SUMMARY BY RATE CLASS TOTAL		3,624.55	17,002,226		\$ 155,879.31
LRAM CDM RESULTS AND PERSISTENCE TOTAL		3,624.55	17,002,226.48		\$ 155,879.31
Lost Revenue Adjustment Mechanism Variance					\$155,879.31

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 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 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	
4	Conservation Instant Coupon Booklet	LDC-coded coupons directly attributed to LDC; Otherwise results are allocated based on average of 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. 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 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 residential throughput.	Savings are considered to begin in the year of the home visit and installation date.	
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.

#	Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
8	Residential New Construction	Results are directly attributed to LDC based on LDC identified in application in the saveONenergy CRM system; 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				
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).
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).
11	Existing Building Commissioning Incentive	Results are directly attributed to LDC based on LDC identified in the application.	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.	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 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).
13	Energy Audit	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 of the relevant year, 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				
16	Process & System Upgrades	Results are directly attributed to LDC based on LDC identified in application in the saveONenergy CRM system.	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.	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.	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).
20	Demand Response 3	Results are attributed to LDCs based on the total contracted megawatts at the contributor level as of December 31st of the relevant year, 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 result 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; 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.
Legacy Programs Completed in Current Year				
22	Electricity Retrofit Incentive Program	Results are directly attributed to LDC based on LDC identified in the application.	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 (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 the gas utility.	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	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
25	Multifamily Energy Efficiency Rebates	Results are directly attributed to LDC based on LDC identified in the application	Savings are considered to begin in the year in which a project was completed.	<p>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 (http://www.powerauthority.on.ca/evaluation-measurement-and-verification/evaluation-reports).</p>
26	Data Centre Incentive Program	Program run exclusively in PowerStream Inc. service territory		
27	EnWin Green Suites	Program run exclusively in ENWIN Utilities Ltd. service territory		

REPLACE WITH LDC RESULTS PDFS

APPENDIX B



Message from the Vice President:

The IESO is pleased to provide the enclosed 2011-2014 Final Results Report. This report is designed to help populate LDC Annual Reports that will be submitted to the Ontario Energy Board (OEB) in September 2015.

2011-2014 Conservation Framework Highlights:

- LDCs have made significant achievements against dual energy and peak demand savings targets. Collectively, the LDCs have achieved 109% of the energy target and 70% of the peak demand target.
- Momentum has built as we transition to the Conservation First Framework. 2014 demonstrated an achievement of over 1 TWh of net incremental energy savings, positioning us well for average net incremental energy savings of 1.2 TWh required in the new framework to meet our 2020 CDM targets.
- Throughout the past framework, program results have become more predictable year over year as noted in the increasingly smaller variance between quarterly preliminary results and verified final results.
- Customer engagement continued to increase in both the Consumer and Business Programs. Between 2011 - 2014 consumers have purchased over 10 million energy efficient products through the saveONenergy COUPONS program. Customers in RETROFIT continue to declare a positive experience participating in the program with 86% likely to recommend.
- saveONenergy has seen a steady and significant increase in unaided brand awareness by 33% from 2011-2014
- Conservation is becoming even more cost-effective as programs become more efficient and effective. 2014 proved early investments in long lead time projects will pay off with the high savings now being realized in programs like PROCESS & SYSTEMS and RETROFIT. Within 4 cents per kWh, Conservation programs continue to be a valuable and cost effective resource for customers across the province.

The 2011-2014 Final Results within this report vary from the Draft 2011-2014 Final Results Report for the following reasons:

- Savings from Time of Use pricing are included in the Final Results Report. Overall the province saved 55 MWs from Time-of-Use pricing in 2014, or 0.73% of residential summer peak demand.
- Between August 4th and August 28th, the IESO and LDCs have worked collaboratively to reconcile projects from 2011-2014 Final Results Report to ensure every eligible project was captured and accurately reported.
- Verified savings from Innovation Fund pilots are also included for participating LDCs.

All results will be considered final for the 2011-2014 Conservation Framework. Any additional program activity not captured in the 2011-2014 Final Results Report will not be included as part of a future adjustment process.

Please continue to monitor saveONenergy E-blasts for future updates and should you have any other questions or comments please contact LDC.Support@ieso.ca.

We appreciate your collaboration and cooperation throughout the reporting and evaluation process and we look forward to the success ahead in the Conservation First Framework.

Sincerely,

Terry Young

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LDC-Specific Performance (LDC Level Results)			
Table 1	LDC Initiative and Program Level Net Savings	Provides LDC-specific initiative-level results (activity, net peak demand and energy savings, and how each initiative contributes to targets).	4
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IESO-Contracted Province-Wide CDM Programs: 2011-2014 Final Results Report

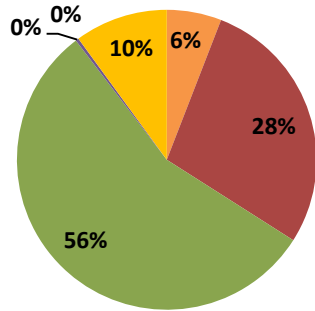
LDC: Festival Hydro Inc.

Final 2014 Achievement Against Targets	2014 Incremental	2011-2014	
		Achievement Against Target	% of Target Achieved
Net Annual Peak Demand Savings (MW)	2.9	5.3	85.8%
Net Energy Savings (GWh)	6.2	45.6	155.9%

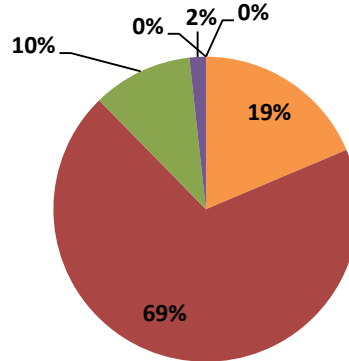
Unless otherwise noted, results are presented using scenario 1 which assumes that demand response resources have a persistence of 1 year

Achievement by Sector

2014 Incremental Peak Demand Savings (MW)



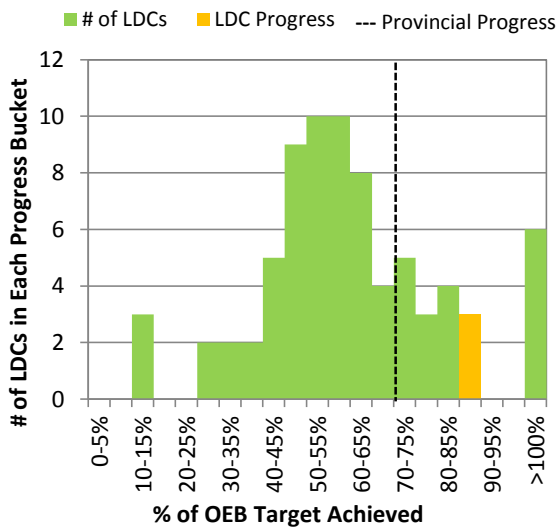
2014 Incremental Energy Savings (GWh)



■ Consumer
 ■ Business
 ■ Industrial
 ■ HAP
 ■ ACP
 ■ Other

Comparison: LDC Achievement vs. LDC Community Achievement (Progress to Target)

% of OEB Peak Demand Savings Target Achieved



% of OEB Energy Savings Target Achieved

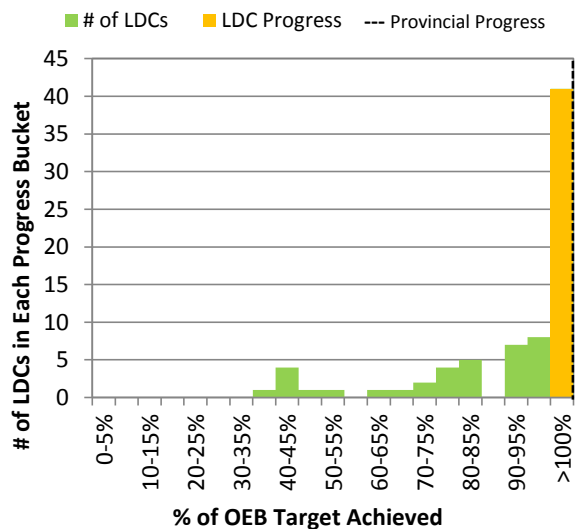


Table 1: Festival Hydro Inc. Initiative and Program Level Net Savings by Year

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)				Program-to-Date Verified Progress to Target (excludes DR)	
		2011*	2012*	2013*	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
														2014	2014
Consumer Program															
Appliance Retirement	Appliances	329	287	245	173	20	17	16	12	136,087	113,761	103,625	74,733	63	1,166,401
Appliance Exchange	Appliances	52	53	30	49	5	8	6	10	6,763	13,734	11,083	18,103	26	105,668
HVAC Incentives	Equipment	388	285	344	415	136	68	76	89	259,654	122,478	136,597	165,748	369	1,844,992
Conservation Instant Coupon Booklet	Items	1,780	108	1,217	3,613	4	1	2	7	65,399	4,891	26,962	98,495	14	428,686
Bi-Annual Retailer Event	Items	3,331	3,711	3,305	16,877	6	5	4	28	102,799	93,684	60,096	429,922	43	1,242,365
Retailer Co-op	Items	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Residential Demand Response	Devices	117	0	0	12	66	0	0	4	0	0	0	0	4	0
Residential Demand Response (IHD)	Devices	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Residential New Construction	Homes	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consumer Program Total						237	99	104	151	570,702	348,547	338,363	787,002	520	4,788,111
Business Program															
Retrofit	Projects	13	58	93	71	52	436	322	517	192,530	2,318,860	2,039,349	2,230,123	1,326	14,027,285
Direct Install Lighting	Projects	123	80	25	66	128	62	38	61	335,087	242,528	131,294	229,866	261	2,480,917
Building Commissioning	Buildings	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Construction	Buildings	2	3	1	4	0	10	0	38	0	35,487	0	194,388	48	300,848
Energy Audit	Audits	1	2	2	4	0	10	18	53	0	50,353	96,902	261,094	81	605,955
Small Commercial Demand Response	Devices	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Commercial Demand Response (IHD)	Devices	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Demand Response 3	Facilities	1	1	1	1	68	68	69	50	2,665	995	927	0	50	4,587
Business Program Total						248	586	447	719	530,281	2,648,223	2,268,471	2,915,471	1,766	17,419,593
Industrial Program															
Process & System Upgrades	Projects	0	0	0	1	0	0	0	51	0	0	0	447,640	51	447,640
Monitoring & Targeting	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Energy Manager	Projects	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Retrofit	Projects	8	0	0	0	66	0	0	0	427,748	0	0	0	66	1,710,993
Demand Response 3	Facilities	0	0	2	4	0	0	334	1,372	0	0	7,597	0	1,372	7,597
Industrial Program Total						66	0	334	1,423	427,748	0	7,597	447,640	1,488	2,166,230
Home Assistance Program															
Home Assistance Program	Homes	0	8	310	92	0	0	21	9	0	4,983	189,557	73,548	30	465,114
Home Assistance Program Total						0	0	21	9	0	4,983	189,557	73,548	30	465,114
Aboriginal Program															
Home Assistance Program	Homes	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Direct Install Lighting	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aboriginal Program Total						0	0	0	0	0	0	0	0	0	0
Pre-2011 Programs completed in 2011															
Electricity Retrofit Incentive Program	Projects	23	0	0	0	154	0	0	0	714,841	0	0	0	154	2,859,364
High Performance New Construction	Projects	0	0	0	0	0	0	0	0	1,841	383	0	0	1	8,514
Toronto Comprehensive	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Multifamily Energy Efficiency Rebates	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LDC Custom Programs	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pre-2011 Programs completed in 2011 Total						155	0	0	0	716,682	383	0	0	155	2,867,877
Other															
Program Enabled Savings	Projects	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Time-of-Use Savings	Homes	0	0	0	n/a	0	0	0	257	0	0	0	0	257	0
LDC Pilots	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Total						0	0	0	257	0	0	0	0	257	0
Adjustments to 2011 Verified Results							783	0	0		3,432,735	0	1,222	783	13,735,828
Adjustments to 2012 Verified Results								1	27			2,908	108,464	29	334,271
Adjustments to 2013 Verified Results									319				1,914,503	319	3,829,084
Energy Efficiency Total						572	617	502	1,132	2,242,749	3,001,141	2,795,465	4,223,661	2,789	27,694,741
Demand Response Total (Scenario 1)						134	68	403	1,426	2,665	995	8,524	0	1,426	12,185
Adjustments to Previous Years' Verified Results Total						0	783	1	346	0	3,432,735	2,908	2,024,189	1,130	17,899,182
OPA-Contracted LDC Portfolio Total (inc. Adjustments)						706	1,468	907	2,904	2,245,414	6,434,871	2,806,897	6,247,851	5,346	45,606,107
Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (reported cumulatively).												Full OEB Target:		6,230	29,250,000
*Includes adjustments after Final Reports were issued												% of Full OEB Target Achieved to Date (Scenario 1):		85.8%	155.9%
Results presented using scenario 1 which assumes that demand response resources have a persistence of 1 year															

Table 2: Adjustments to Festival Hydro Inc. Net Verified Results due to Variances

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)				Program-to-Date Verified Progress to Target (excludes DR)	
		2011*	2012*	2013*	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
															2014
Consumer Program															
Appliance Retirement	Appliances	0	0	0		0	0	0		0	0	0		0	0
Appliance Exchange	Appliances	0	0	0		0	0	0		0	0	0		0	0
HVAC Incentives	Equipment	-60	6	10		-18	1	2		-34,906	2,908	3,844		-15	-123,213
Conservation Instant Coupon Booklet	Items	29	0	4		0	0	0		964	0	82		0	4,021
Bi-Annual Retailer Event	Items	286	0	0		0	0	0		7,638	0	0		0	30,551
Retailer Co-op	Items	0	0	0		0	0	0		0	0	0		0	0
Residential Demand Response	Devices	0	0	0		0	0	0		0	0	0		0	0
Residential Demand Response (IHD)	Devices	0	0	0		0	0	0		0	0	0		0	0
Residential New Construction	Homes	0	0	0		0	0	0		0	0	0		0	0
Consumer Program Total						-18	1	2		-26,304	2,908	3,926		-14	-88,641
Business Program															
Retrofit	Projects	1	4	24		2	25	156		1,168	101,453	661,801		183	1,632,631
Direct Install Lighting	Projects	6	0	0		5	0	0		11,580	0	0		5	46,320
Building Commissioning	Buildings	0	0	0		0	0	0		0	0	0		0	0
New Construction	Buildings	2	0	1		788	0	34		3,421,115	0	83,715		822	13,851,892
Energy Audit	Audits	1	0	0		5	0	0		26,398	1,708	64		6	110,846
Small Commercial Demand Response	Devices	0	0	0		0	0	0		0	0	0		0	0
Small Commercial Demand Response (IHD)	Devices	0	0	0		0	0	0		0	0	0		0	0
Demand Response 3	Facilities	0	0	0		0	0	0		0	0	0		0	0
Business Program Total						801	26	190		3,460,261	103,161	745,580		1,016	15,641,689
Industrial Program															
Process & System Upgrades	Projects	0	0	0		0	0	0		0	0	0		0	0
Monitoring & Targeting	Projects	0	0	0		0	0	0		0	0	0		0	0
Energy Manager	Projects	0	0	1		0	0	0		0	0	10,468		0	20,935
Retrofit	Projects	0	0	0		0	0	0		0	0	0		0	0
Demand Response 3	Facilities	0	0	0		0	0	0		0	0	0		0	0
Industrial Program Total						0	0	0		0	0	10,468		0	20,935
Home Assistance Program															
Home Assistance Program	Homes	0	2	11		0	1	2		0	5,380	12,157		3	40,300
Home Assistance Program Total						0	1	2		0	5,380	12,157		3	40,300
Aboriginal Program															
Home Assistance Program	Homes	0	0	0		0	0	0		0	0	0		0	0
Direct Install Lighting	Projects	0	0	0		0	0	0		0	0	0		0	0
Aboriginal Program Total						0	0	0		0	0	0		0	0
Pre-2011 Programs completed in 2011															
Electricity Retrofit Incentive Program	Projects	0	0	0		0	0	0		0	0	0		0	0
High Performance New Construction	Projects	0	0	0		0	0	0		0	0	0		0	0
Toronto Comprehensive	Projects	0	0	0		0	0	0		0	0	0		0	0
Multifamily Energy Efficiency Rebates	Projects	0	0	0		0	0	0		0	0	0		0	0
LDC Custom Programs	Projects	0	0	0		0	0	0		0	0	0		0	0
Pre-2011 Programs completed in 2011 Total						0	0	0		0	0	0		0	0
Other															
Program Enabled Savings	Projects	0	0	1		0	0	125		0	0	1,142,450		125	2,284,899
Time-of-Use Savings	Homes	0	0	0		0	0	0		0	0	0		0	0
LDC Pilots	Projects	0	0	0		0	0	0		0	0	0		0	0
Other Total						0	0	125		0	0	1,142,450		125	2,284,899
Adjustments to 2011 Verified Results						783				3,433,957				783	13,735,828
Adjustments to 2012 Verified Results							29				111,449			29	334,271
Adjustments to 2013 Verified Results								319				1,914,580		319	3,829,084
Total Adjustments to Previous Years' Verified Results						783	29	319		3,433,957	111,449	1,914,580		1,130	17,899,182

Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (reported cumulatively).

Adjustments to previous years' results shown in this table will not align to adjustments shown in Table 1 as the information presented above is presented in the implementation year. Adjustments in Table 1 reflect persisted savings in the year in which that adjustment is verified.

Table 3: Festival Hydro Inc. Realization Rate & NTG

Initiative	Peak Demand Savings								Energy Savings							
	Realization Rate				Net-to-Gross Ratio				Realization Rate				Net-to-Gross Ratio			
	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
Consumer Program																
Appliance Retirement	1.00	1.00	n/a	n/a	0.50	0.46	0.42	0.42	1.00	1.00	n/a	n/a	0.52	0.47	0.44	0.44
Appliance Exchange	1.00	1.00	1.00	1.00	0.52	0.52	0.53	0.53	1.00	1.00	1.00	1.00	0.52	0.52	0.53	0.53
HVAC Incentives	1.00	1.00	n/a	1.00	0.60	0.49	0.48	0.51	1.00	1.00	n/a	1.00	0.60	0.49	0.48	0.51
Conservation Instant Coupon Booklet	1.00	1.00	1.00	1.00	1.14	1.00	1.11	1.69	1.00	1.00	1.00	1.00	1.11	1.05	1.13	1.73
Bi-Annual Retailer Event	1.00	1.00	1.00	1.00	1.13	0.91	1.04	1.74	1.00	1.00	1.00	1.00	1.10	0.92	1.04	1.75
Retailer Co-op	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Residential Demand Response	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Residential Demand Response (IHD)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Residential New Construction	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Business Program																
Retrofit	0.95	0.97	0.91	0.95	0.73	0.75	0.71	0.72	1.23	1.07	0.99	1.01	0.74	0.75	0.71	0.72
Direct Install Lighting	1.08	0.68	0.81	0.78	0.93	0.94	0.94	0.94	0.90	0.85	0.84	0.83	0.93	0.94	0.94	0.94
Building Commissioning	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
New Construction	n/a	0.70	n/a	0.37	n/a	0.49	n/a	0.54	n/a	0.61	n/a	0.52	n/a	0.49	n/a	0.54
Energy Audit	n/a	n/a	1.02	0.96	n/a	n/a	0.66	0.68	n/a	n/a	0.97	1.00	n/a	n/a	0.66	0.67
Small Commercial Demand Response	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Small Commercial Demand Response (IHD)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Demand Response 3	0.76	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Industrial Program																
Process & System Upgrades	n/a	n/a	n/a	1.00	n/a	n/a	n/a	0.62	n/a	n/a	n/a	1.00	n/a	n/a	n/a	0.62
Monitoring & Targeting	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Energy Manager	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Retrofit																
Demand Response 3	0.84	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Home Assistance Program																
Home Assistance Program	n/a	1.34	0.14	0.93	n/a	1.00	1.00	1.00	n/a	1.00	0.91	0.80	n/a	1.00	1.00	1.00
Aboriginal Program																
Home Assistance Program	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Direct Install Lighting	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Pre-2011 Programs completed in 2011																
Electricity Retrofit Incentive Program	0.77	n/a	n/a	n/a	0.52	n/a	n/a	n/a	0.77	n/a	n/a	n/a	0.52	n/a	n/a	n/a
High Performance New Construction	1.00	1.00	1.00	1.00	0.50	0.50	0.50	0.50	1.00	1.00	1.00	1.00	0.50	0.50	0.50	0.50
Toronto Comprehensive	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Multifamily Energy Efficiency Rebates	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
LDC Custom Programs	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Other																
Program Enabled Savings	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Time-of-Use Savings	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
LDC Pilots	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Summary Achievement Against CDM Targets

Results are recognized using current IESO 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 (Scenario 1). Please see methodology tab for more detailed information.

Table 4: Net Peak Demand Savings at the End User Level (MW) (Scenario 1)

Implementation Period	Annual			
	2011	2012	2013	2014
2011 - Verified	0.7	0.6	0.6	0.5
2012 - Verified†	0.8	1.5	1.4	1.4
2013 - Verified†	0.0	0.0	0.9	0.5
2014 - Verified†	0.0	0.0	0.3	2.9
Verified Net Annual Peak Demand Savings Persisting in 2014:				5.3
Festival Hydro Inc. 2014 Annual CDM Capacity Target:				6.2
Verified Portion of Peak Demand Savings Target Achieved in 2014 (%):				85.8%

Table 5: Net Energy Savings at the End User Level (GWh)

Implementation Period	Annual				Cumulative
	2011	2012	2013	2014	2011-2014
2011 - Verified	2.2	2.2	2.2	2.2	8.9
2012 - Verified†	3.4	6.4	6.4	6.4	22.7
2013 - Verified†	0.0	0.0	2.8	2.8	5.6
2014 - Verified†	0.0	0.1	2.02	6.2	8.4
Verified Net Cumulative Energy Savings 2011-2014:					45.6
Festival Hydro Inc. 2011-2014 Annual CDM Energy Target:					29.3
Verified Portion of Cumulative Energy Target Achieved in 2014 (%):					155.9%

†Includes adjustments to previous years' verified results

Results presented using scenario 1 which assumes that demand response resources have a persistence of 1 year

Table 6: Province-Wide Initiatives and Program Level Net Savings by Year (Scenario 1)

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)				Program-to-Date Verified Progress to Target (excludes DR)	
		2011*	2012*	2013*	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
															2014
Consumer Program															
Appliance Retirement	Appliances	56,110	34,146	20,952	22,563	3,299	2,011	1,433	1,617	23,005,812	13,424,518	8,713,107	9,497,343	8,221	159,100,415
Appliance Exchange	Appliances	3,688	3,836	5,337	5,685	371	556	1,106	1,178	450,187	974,621	1,971,701	2,100,266	2,273	10,556,192
HVAC Incentives	Equipment	92,748	87,540	96,286	113,002	32,037	19,060	19,552	23,106	59,437,670	32,841,283	33,923,592	42,888,217	93,755	447,009,930
Conservation Instant Coupon Booklet	Items	567,678	30,891	347,946	1,208,108	1,344	230	517	2,440	21,211,537	1,398,202	7,707,573	32,802,537	4,531	137,258,436
Bi-Annual Retailer Event	Items	952,149	1,060,901	944,772	4,824,751	1,681	1,480	1,184	8,043	29,387,468	26,781,674	17,179,841	122,902,769	12,389	355,157,348
Retailer Co-op	Items	152	0	0	0	0	0	0	0	2,652	0	0	0	0	10,607
Residential Demand Response	Devices	19,550	98,388	171,733	241,381	10,947	49,038	93,076	117,513	24,870	359,408	390,303	8,379	117,513	782,960
Residential Demand Response (IHD)	Devices	0	49,689	133,657	188,577	0	0	0	0	0	0	0	0	0	0
Residential New Construction	Homes	27	21	279	2,367	0	2	18	369	743	17,152	163,690	2,330,865	390	2,712,676
Consumer Program Total						49,681	72,377	116,886	154,267	133,520,941	75,796,859	70,049,807	212,530,376	239,772	1,112,588,565
Business Program															
Retrofit	Projects	2,828	6,481	9,746	10,925	24,467	61,147	59,678	70,662	136,002,258	314,922,468	345,346,008	462,903,521	213,493	2,631,401,223
Direct Install Lighting	Projects	20,741	18,691	17,833	23,784	23,724	15,284	18,708	23,419	61,076,701	57,345,798	64,315,558	84,503,302	73,304	604,196,658
Building Commissioning	Buildings	0	0	0	5	0	0	0	988	0	0	0	1,513,377	988	1,513,377
New Construction	Buildings	25	98	158	226	123	764	1,584	6,432	411,717	1,814,721	4,959,266	20,381,204	8,904	37,390,767
Energy Audit	Audits	222	357	589	473	0	1,450	2,811	6,323	0	7,049,351	15,455,795	30,874,399	10,583	82,934,042
Small Commercial Demand Response	Devices	132	294	1,211	3,652	84	187	773	2,116	157	1,068	373	319	2,116	1,916
Small Commercial Demand Response (IHD)	Devices	0	0	378	820	0	0	0	0	0	0	0	0	0	0
Demand Response 3	Facilities	145	151	175	180	16,218	19,389	23,706	23,380	633,421	281,823	346,659	0	23,380	1,261,903
Business Program Total						64,617	98,221	107,261	133,319	198,124,253	381,415,230	430,423,659	600,176,121	332,769	3,358,699,887
Industrial Program															
Process & System Upgrades	Projects	0	0	5	10	0	0	294	9,692	0	0	2,603,764	72,053,255	9,986	77,260,782
Monitoring & Targeting	Projects	0	1	3	5	0	0	0	102	0	0	0	502,517	102	502,517
Energy Manager	Projects	1	132	306	379	0	1,086	3,558	5,191	0	7,372,108	21,994,263	40,436,427	8,384	95,324,998
Retrofit	Projects	433	0	0	0	4,615	0	0	0	28,866,840	0	0	0	4,613	115,462,282
Demand Response 3	Facilities	124	185	281	336	52,484	74,056	162,543	166,082	3,080,737	1,784,712	4,309,160	0	166,082	9,174,609
Industrial Program Total						57,098	75,141	166,395	181,066	31,947,577	9,156,820	28,907,187	112,992,199	189,168	297,725,188
Home Assistance Program															
Home Assistance Program	Homes	46	5,920	29,654	25,424	2	566	2,361	2,466	39,283	5,442,232	20,987,275	19,582,658	5,370	77,532,571
Home Assistance Program Total						2	566	2,361	2,466	39,283	5,442,232	20,987,275	19,582,658	5,370	77,532,571
Aboriginal Program															
Home Assistance Program	Homes	0	0	717	1,125	0	0	267	549	0	0	1,609,393	3,101,207	816	6,319,993
Direct Install Lighting	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aboriginal Program Total						0	0	267	549	0	0	1,609,393	3,101,207	816	6,319,993
Pre-2011 Programs completed in 2011															
Electricity Retrofit Incentive Program	Projects	2,028	0	0	0	21,662	0	0	0	121,138,219	0	0	0	21,662	484,552,876
High Performance New Construction	Projects	182	73	19	3	5,098	3,251	772	134	26,185,591	11,901,944	3,522,240	688,738	9,255	148,181,415
Toronto Comprehensive	Projects	577	15	4	5	15,805	0	0	281	86,964,886	0	0	2,479,840	16,086	350,339,385
Multifamily Energy Efficiency Rebates	Projects	110	0	0	0	1,981	0	0	0	7,595,683	0	0	0	1,981	30,382,733
LDC Custom Programs	Projects	8	0	0	0	399	0	0	0	1,367,170	0	0	0	399	5,468,679
Pre-2011 Programs completed in 2011 Total						44,945	3,251	772	415	243,251,550	11,901,944	3,522,240	3,168,578	49,382	1,018,925,088
Other															
Program Enabled Savings	Projects	33	71	46	43	0	2,304	3,692	5,500	0	1,188,362	4,075,382	19,035,337	11,496	30,751,187
Time-of-Use Savings	Homes	0	0	0	n/a	0	0	0	54,795	0	0	0	0	54,795	0
LDC Pilots	Projects	0	0	0	1,174	0	0	0	1,170	0	0	0	5,061,522	1,170	5,061,522
Other Total						0	2,304	3,692	61,466	0	1,188,362	4,075,382	24,096,859	67,462	35,812,709
Adjustments to 2011 Verified Results							1,406	641	1,418		18,689,081	1,736,381	7,319,857	3,215	110,143,550
Adjustments to 2012 Verified Results								6,260	9,221			41,947,840	37,080,215	15,401	238,780,637
Adjustments to 2013 Verified Results									24,391				150,785,808	24,391	296,465,211
Energy Efficiency Total						136,610	109,191	117,536	224,457	603,144,419	482,474,435	554,528,447	975,639,300	575,647	5,896,382,612
Demand Response Total (Scenario 1)						79,733	142,670	280,099	309,091	3,739,185	2,427,011	5,046,495	8,698	309,091	11,221,389
Adjustments to Previous Years' Verified Results Total						0	1,406	6,901	35,030	0	18,689,081	43,684,221	195,185,880	43,006	645,389,397
OPA-Contracted LDC Portfolio Total (inc. Adjustments)						216,343	253,267	404,536	568,578	606,883,604	503,590,526	603,259,163	1,170,833,878	927,745	6,552,993,397
Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (reported cumulatively).												*Includes adjustments after Final Reports were issued			
Results presented using scenario 1 which assumes that demand response resources have a persistence of 1 year												Full OEB Target:			
												1,330,000	6,000,000,000		
												% of Full OEB Target Achieved to Date (Scenario 1):			
												70%	109%		

Table 7: Adjustments to Province-Wide Net Verified Results due to Variances

Initiative	Unit	Incremental Activity (new program activity occurring within the specified reporting period)				Net Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Net Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)				Program-to-Date Verified Progress to Target (excludes DR)	
		2011*	2012*	2013*	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
														2014	2014
Consumer Program															
Appliance Retirement	Appliances	0	0	0		0	0	0		0	0	0		0	0
Appliance Exchange	Appliances	0	0	0		0	0	0		0	0	0		0	0
HVAC Incentives	Equipment	-18,839	2,319	4,705		-5,270	479	1,037		-9,707,002	955,512	1,838,408		-3,754	-32,284,656
Conservation Instant Coupon Booklet	Items	8,216	0	1,050		16	0	2		275,655	0	23,571		18	1,149,763
Bi-Annual Retailer Event	Items	81,817	0	0		108	0	0		2,183,391	0	0		108	8,733,563
Retailer Co-op	Items	0	0	0		0	0	0		0	0	0		0	0
Residential Demand Response	Devices	0	0	0		0	0	0		0	0	0		0	0
Residential Demand Response (IHD)	Devices	0	0	0		0	0	0		0	0	0		0	0
Residential New Construction	Homes	20	2	193		1	1	72		14,667	985	441,938		74	945,497
Consumer Program Total						-5,145	480	1,111		-7,233,290	956,497	2,303,917		-3,555	-21,664,975
Business Program															
Retrofit	Projects	312	876	961		3,208	7,233	11,961		16,266,129	42,498,052	78,146,280		22,056	347,545,386
Direct Install Lighting	Projects	444	197	51		501	204	46		1,250,388	736,541	164,667		620	7,158,143
Building Commissioning	Buildings	0	0	0		0	0	0		0	0	0		0	0
New Construction	Buildings	15	29	72		850	1,304	2,241		3,604,553	4,825,774	8,636,179		4,401	46,187,216
Energy Audit	Audits	119	77	270		604	439	2,383		2,945,189	2,145,367	13,100,635		3,426	44,418,129
Small Commercial Demand Response	Devices	0	0	0		0	0	0		0	0	0		0	0
Small Commercial Demand Response (IHD)	Devices	0	0	0		0	0	0		0	0	0		0	0
Demand Response 3	Facilities	0	0	0		0	0	0		0	0	0		0	0
Business Program Total						5,162	9,181	16,631		24,066,259	50,205,734	100,047,761		30,503	385,148,444
Industrial Program															
Process & System Upgrades	Projects	0	0	2		0	0	324		0	0	968,659		324	1,937,318
Monitoring & Targeting	Projects	0	1	3		0	0	54		0	528,000	639,348		54	2,862,696
Energy Manager	Projects	1	93	101		27	1,067	2,395		241,515	8,266,841	25,814,853		4,345	81,853,489
Retrofit	Projects	0	0	0		0	0	0		0	0	0		0	0
Demand Response 3	Facilities	0	0	0		0	0	0		0	0	0		0	0
Industrial Program Total						27	1,067	2,774		241,515	8,794,841	27,422,860		4,723	61,215,516
Home Assistance Program															
Home Assistance Program	Homes	0	887	2,898		0	222	791		0	1,316,749	4,321,794		1,009	12,515,300
Home Assistance Program Total						0	222	791		0	1,316,749	4,321,794		1,009	8,581,177
Aboriginal Program															
Home Assistance Program	Homes	0	0	133		0	0	134		0	0	563,715		134	1,127,430
Direct Install Lighting	Projects	0	0	0		0	0	0		0	0	0		0	0
Aboriginal Program Total						0	0	134		0	0	563,715		134	1,127,430
Pre-2011 Programs completed in 2011															
Electricity Retrofit Incentive Program	Projects	12	0	0		138	0	0		545,536	0	0		138	2,182,145
High Performance New Construction	Projects	37	4	15		1,507	363	-184		2,398,941	2,832,533	-993,596		1,686	16,106,171
Toronto Comprehensive	Projects	0	15	4		0	672	185		0	4,523,517	1,324,388		857	16,219,327
Multifamily Energy Efficiency Rebates	Projects	0	0	0		0	0	0		0	0	0		0	0
LDC Custom Programs	Projects	0	0	0		0	0	0		0	0	0		0	0
Pre-2011 Programs completed in 2011 Total						1,645	1,035	2		2,944,477	7,356,050	330,792		2,682	11,104,528
Other															
Program Enabled Savings	Projects	33	55	33		1,776	3,712	2,020		7,727,573	11,481,687	10,688,564		7,509	86,732,481
Time-of-Use Savings	Homes	0	0	0		0	0	0		0	0	0		0	0
LDC Pilots	Projects	0	0	0		0	0	0		0	0	0		0	0
Other Total						1,776	3,712	2,020		7,727,573	11,481,687	10,688,564		7,509	86,732,481
Adjustments to 2011 Verified Results						3,465				27,746,535				3,215	110,143,550
Adjustments to 2012 Verified Results							15,697				80,111,558			15,401	238,780,637
Adjustments to 2013 Verified Results								23,463				145,679,403		24,391	296,465,211
Adjustments to Previous Years' Verified Results Total						3,465	15,697	23,463		27,746,535	80,111,558	145,679,403		43,006	645,389,397

Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (reported cumulatively).

Adjustments to previous years' results shown in this table will not align to adjustments shown in Table 1 as the information presented above is presented in the implementation year. Adjustments in Table 1 reflect persisted savings in the year in which that adjustment is verified.

Table 8: Province-Wide Realization Rate & NTG

Initiative	Peak Demand Savings								Energy Savings							
	Realization Rate				Net-to-Gross Ratio				Realization Rate				Net-to-Gross Ratio			
	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
Consumer Program																
Appliance Retirement	1.00	1.00	1.00	1.00	0.51	0.46	0.42	0.45	1.00	1.00	1.00	1.00	0.46	0.47	0.44	0.47
Appliance Exchange	1.00	1.00	1.00	1.00	0.51	0.52	0.53	0.53	1.00	1.00	1.00	1.00	0.52	0.52	0.53	0.53
HVAC Incentives	1.00	1.00	1.00	1.00	0.60	0.50	0.48	0.48	1.00	1.00	1.00	1.00	0.50	0.49	0.48	0.48
Conservation Instant Coupon Booklet	1.00	1.00	1.00	1.00	1.14	1.00	1.11	1.69	1.00	1.00	1.00	1.00	1.00	1.05	1.13	1.73
Bi-Annual Retailer Event	1.00	1.00	1.00	1.00	1.12	0.91	1.04	1.74	1.00	1.00	1.00	1.00	0.91	0.92	1.04	1.75
Retailer Co-op	1.00	n/a	n/a	n/a	0.68	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Residential Demand Response	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Residential Demand Response (IHD)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Residential New Construction	1.00	3.65	0.78	1.03	0.41	0.49	0.63	0.63	3.65	7.17	3.09	0.62	0.49	0.49	0.63	0.63
Business Program																
Retrofit	1.06	0.93	0.92	0.84	0.72	0.75	0.73	0.71	0.93	1.05	1.01	0.98	0.75	0.76	0.73	0.72
Direct Install Lighting	1.08	0.69	0.82	0.78	1.08	0.94	0.94	0.94	0.69	0.85	0.84	0.83	0.94	0.94	0.94	0.94
Building Commissioning	n/a	n/a	n/a	1.97	n/a	n/a	n/a	1.00	n/a	n/a	n/a	1.16	n/a	n/a	n/a	1.00
New Construction	0.50	0.98	0.68	0.71	0.50	0.49	0.54	0.54	0.98	0.99	0.76	0.79	0.49	0.49	0.54	0.54
Energy Audit	n/a	n/a	1.02	0.96	n/a	n/a	0.66	0.68	n/a	n/a	0.97	1.00	n/a	n/a	0.66	0.67
Small Commercial Demand Response	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Small Commercial Demand Response (IHD)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Demand Response 3	0.76	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Industrial Program																
Process & System Upgrades	n/a	n/a	0.85	0.96	n/a	n/a	0.94	0.79	n/a	n/a	0.87	0.96	n/a	n/a	0.93	0.80
Monitoring & Targeting	n/a	n/a	n/a	0.59	n/a	n/a	n/a	1.00	n/a	n/a	n/a	0.36	n/a	n/a	n/a	1.00
Energy Manager	n/a	1.16	0.90	0.91	n/a	0.90	0.90	0.90	1.16	1.16	0.90	0.96	0.90	0.90	0.90	0.85
Retrofit	1.11	n/a	n/a	n/a	0.72	n/a	n/a	n/a	0.91	n/a	n/a	n/a	0.75	n/a	n/a	n/a
Demand Response 3	0.84	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Home Assistance Program																
Home Assistance Program	1.00	0.32	0.26	0.49	0.70	1.00	1.00	1.00	0.32	0.99	0.88	0.78	1.00	1.00	1.00	1.00
Aboriginal Program																
Home Assistance Program	n/a	n/a	0.05	0.15	n/a	n/a	1.00	1.00	n/a	n/a	0.95	0.97	n/a	n/a	1.00	1.00
Direct Install Lighting	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Pre-2011 Programs completed in 2011																
Electricity Retrofit Incentive Program	0.80	n/a	n/a	n/a	0.54	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
High Performance New Construction	1.00	1.00	1.00	n/a	0.49	0.50	0.50	0.50	1.00	1.00	1.00	n/a	0.50	0.50	0.50	0.50
Toronto Comprehensive	1.13	n/a	n/a	n/a	0.50	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Multifamily Energy Efficiency Rebates	0.93	n/a	n/a	n/a	0.78	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
LDC Custom Programs	1.00	n/a	n/a	n/a	1.00	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Other																
Program Enabled Savings	n/a	1.06	1.00	0.86	n/a	1.00	1.00	1.00	n/a	2.26	1.00	0.98	n/a	1.00	1.00	1.00
Time-of-Use Savings	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
LDC Pilots	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Summary Provincial Progress Towards CDM Targets

Table 9: Province-Wide Net Peak Demand Savings at the End User Level (MW)

Implementation Period	Annual			
	2011	2012	2013	2014
2011	216.3	136.6	135.8	129.0
2012†	1.4	253.3	109.8	108.2
2013†	0.6	7.0	404.5	122.0
2014†	1.4	10.8	34.2	568.6
Verified Net Annual Peak Demand Savings in 2014:				927.7
2014 Annual CDM Capacity Target:				1,330
Verified Portion of Peak Demand Savings Target Achieved in 2014 (%):				69.8%

Table 10: Province-Wide Net Energy Savings at the End-User Level (GWh)

Implementation Period	Annual				Cumulative
	2011	2012	2013	2014	2011-2014
2011	606.9	603.0	601.0	582.3	2,393.1
2012†	18.7	503.6	498.4	492.6	1,513.3
2013†	1.7	44.4	603.3	583.4	1,232.8
2014†	7.3	44.8	191.0	1,170.8	1,413.9
Verified Net Cumulative Energy Savings 2011-2014:					6,553.0
2011-2014 Cumulative CDM Energy Target:					6,000
Verified Portion of Cumulative Energy Target Achieved in 2014 (%):					109.2%

†Includes adjustments to previous years' verified results

Results presented using scenario 1 which assumes that demand response resources have a persistence of 1 year

METHODOLOGY

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

EQUATIONS	
Prescriptive Measures and Projects	<p>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)</p>
Engineered and Custom Projects	<p>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)</p>
Demand Response	<p>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)</p>
Adjustments to Previous Years' Verified Results	<p>All variances from the Final Annual Results Reports from prior years will be adjusted within this report. Any variances with regards to projects counts, data lag, and calculations etc., will be made within this report. Considers the cumulative effect of energy savings.</p>

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Consumer Program			
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.
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.	
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
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.
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.	
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.
Residential Demand Response	Results are directly attributed to LDC based on data provided to IESO 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.

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Residential New Construction	Results are directly attributed to LDC based on LDC identified in application in the iCon 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 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.
Business Program			
Efficiency: Equipment Replacement	Results are directly attributed to LDC based on LDC identified at the facility level in the iCon system. Projects in the Application Status: "Post-Stage Submission" are included (excluding "Payment denied by LDC"); Please see page for Building type to Sector mapping.	Savings are considered to begin in the year of the actual project completion date in the iCON system.	Peak demand and energy savings are determined by the total savings for a given project as reported in the iCON 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 invalid statuses (e.g. Post-Project Submission - Payment denied by LDC) and only including projects with an "Actual Project Completion Date" in 2014)		

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
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).
Existing Building Commissioning Incentive	Results are directly attributed to LDC based on LDC identified in the application.	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).
New Construction and Major Renovation Incentive	Results are directly attributed to LDC based on LDC identified in the application.	Savings are considered to begin in the year of the actual project completion date.	
Energy Audit	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
Commercial Demand Response (part of the Residential program schedule)	Results are directly attributed to LDC based on data provided to IESO 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.
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			
Process & System Upgrades	Results are directly attributed to LDC based on LDC identified in application.	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).

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Monitoring & Targeting	Results are directly attributed to LDC based on LDC identified in the application.	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).
Energy Manager	Results are directly attributed to LDC based on LDC identified in the application.	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
<p>Efficiency: Equipment Replacement Incentive (part of the C&I program schedule)</p>	<p>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.</p>	<p>Savings are considered to begin in the year of the actual project completion date on the iCON CRM system.</p>	<p>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).</p>
<p>Demand Response 3</p>	<p>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.</p>	<p>Savings are considered to begin in the year in which the contributor signed up to participate in demand response.</p>	<p>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.</p>

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Home Assistance Program			
Home Assistance Program	Results are directly attributed to LDC based on LDC identified in the application.	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.
Aboriginal Program			
Aboriginal Program	Results are directly attributed to LDC based on LDC identified in the application.	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.

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Pre-2011 Programs completed in 2011			
Electricity Retrofit Incentive Program	Results are directly attributed to LDC based on LDC identified in the application; Initiative was not evaluated in 2011, 2012, 2013 or 2014 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. 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).
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, 2012, 2013 or 2014, assumptions as per 2010 evaluation.	Savings are considered to begin in the year in which a project was completed.	
Toronto Comprehensive	Program run exclusively in Toronto Hydro-Electric System Limited service territory; Initiative was not evaluated in 2011, 2012, 2013 or 2014, assumptions as per 2010 evaluation.		

Initiative	Attributing Savings to LDCs	Savings 'start' Date	Calculating Resource Savings
Multifamily Energy Efficiency Rebates	Results are directly attributed to LDC based on LDC identified in the application; Initiative was not evaluated in 2011, 2012, 2013 or 2014, 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).
Data Centre Incentive Program	Program run exclusively in PowerStream Inc. service territory; Initiative was not evaluated in 2011, assumptions as per 2009 evaluation.		
EnWin Green Suites	Program run exclusively in ENWIN Utilities Ltd. service territory; Initiative was not evaluated in 2011 or 2012, assumptions as per 2010 evaluation.		

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 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'.

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 (e.g. 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).

Table 11: Festival Hydro Inc. Initiative and Program Level Gross Savings by Year

Initiative	Unit	Gross Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Gross Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)			
		2011	2012	2013	2014	2011	2012	2013	2014
Consumer Program									
Appliance Retirement**	Appliances	40	17	34	27	267,345	113,761	219,610	159,245
Appliance Exchange**	Appliances	10	8	12	19	13,123	13,734	21,057	34,394
HVAC Incentives	Equipment	227	138	158	186	435,131	250,834	288,512	349,065
Conservation Instant Coupon Booklet	Items	4	1	2	4	59,377	4,638	23,935	57,053
Bi-Annual Retailer Event	Items	5	6	4	16	94,096	102,221	57,513	245,755
Retailer Co-op	Items	0	0	0	0	0	0	0	0
Residential Demand Response	Devices	66	0	0	4	0	0	0	0
Residential Demand Response (IHD)	Devices	0	0	0	0	0	0	0	0
Residential New Construction	Homes	0	0	0	0	0	0	0	0
Consumer Program Total		352	169	209	257	869,073	485,188	610,627	845,511
Business Program									
Retrofit	Projects	72	542	459	715	259,788	2,818,519	2,902,213	3,026,461
Direct Install Lighting	Projects	119	83	40	65	360,875	291,481	139,102	243,535
Building Commissioning	Buildings	0	0	0	0	0	0	0	0
New Construction	Buildings	0	29	0	70	0	118,578	0	359,978
Energy Audit	Audits	0	10	27	79	0	50,353	146,621	389,112
Small Commercial Demand Response	Devices	0	0	0	0	0	0	0	0
Small Commercial Demand Response (IHD)	Devices	0	0	0	0	0	0	0	0
Demand Response 3	Facilities	68	68	69	50	2,665	995	927	0
Business Program Total		259	733	595	979	623,328	3,279,925	3,188,864	4,019,087
Industrial Program									
Process & System Upgrades	Projects	0	0	0	82	0	0	0	722,000
Monitoring & Targeting	Projects	0	0	0	0	0	0	0	0
Energy Manager	Projects	0	0	0	0	0	0	0	0
Retrofit	Projects	89	0	0	0	601,032	0	0	0
Demand Response 3	Facilities	0	0	334	1,372	0	0	7,597	0
Industrial Program Total		89	0	334	1,454	601,032	0	7,597	722,000
Home Assistance Program									
Home Assistance Program	Homes	0	0	21	9	0	4,983	189,557	73,548
Home Assistance Program Total		0	0	21	9	0	4,983	189,557	73,548
Aboriginal Program									
Home Assistance Program	Homes	0	0	0	0	0	0	0	0
Direct Install Lighting	Projects	0	0	0	0	0	0	0	0
Aboriginal Program Total		0	0	0	0	0	0	0	0
Pre-2011 Programs completed in 2011									
Electricity Retrofit Incentive Program	Projects	297	0	0	0	1,374,694	0	0	0
High Performance New Construction	Projects	1	1	0	0	3,682	766	0	0
Toronto Comprehensive	Projects	0	0	0	0	0	0	0	0
Multifamily Energy Efficiency Rebates	Projects	0	0	0	0	0	0	0	0
LDC Custom Programs	Projects	0	0	0	0	0	0	0	0
Pre-2011 Programs completed in 2011 Total		298	1	0	0	1,378,376	766	0	0
Other									
Program Enabled Savings	Projects	0	0	0	0	0	0	0	0
Time-of-Use Savings	Homes	0	0	0	257	0	0	0	0
LDC Pilots	Projects	0	0	0	0	0	0	0	0
Other Total		0	0	0	257	0	0	0	0
Adjustments to 2011 Verified Results			1,623	0	0		7,102,512	0	1,801
Adjustments to 2012 Verified Results				3	37			5,963	137,848
Adjustments to 2013 Verified Results					420				2,315,809
Energy Efficiency Total		864	834	756	1,529	3,469,144	3,769,867	3,988,120	5,660,146
Demand Response Total		134	68	403	1,426	2,665	995	8,524	0
Adjustments to Previous Years' Verified Results Total		0	1,623	3	457	0	7,102,512	5,963	2,455,457
OPA-Contracted LDC Portfolio Total (inc. Adjustments)		998	2,526	1,163	3,412	3,471,809	10,873,374	4,002,608	8,115,603

Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (reported cumulatively).

*Includes adjustments after Final Reports were issued
Results presented using scenario 1 which assumes that demand response resources have a persistence of 1 year

Gross results are presented for informational purposes only and are not considered official 2014 Final Verified Results
**Net results substituted for gross results due to unavailability of data

Table 12: Adjustments to Festival Hydro Inc. Gross Verified Results due to Variances

Initiative	Unit	Gross Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Gross Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)			
		2011	2012	2013	2014	2011	2012	2013	2014
Consumer Program									
Appliance Retirement	Appliances	0	0	0		0	0	0	
Appliance Exchange	Appliances	0	0	0		0	0	0	
HVAC Incentives	Equipment	-30	3	4		-58,739	5,963	8,130	
Conservation Instant Coupon Booklet	Items	0	0	0		895	0	72	
Bi-Annual Retailer Event	Items	0	0	0		8,303	0	0	
Retailer Co-op	Items	0	0	0		0	0	0	
Residential Demand Response	Devices	0	0	0		0	0	0	
Residential Demand Response (IHD)	Devices	0	0	0		0	0	0	
Residential New Construction	Homes	0	0	0		0	0	0	
Consumer Program Total		-30	3	4		-49,541	5,963	8,202	
Business Program									
Retrofit	Projects	4	0	227		2,153	130,028	986,321	
Direct Install Lighting	Projects	5	0	0		12,471	0	0	
Building Commissioning	Buildings	0	0	0		0	0	0	
New Construction	Buildings	1,638	0	63		7,112,252	0	155,028	
Energy Audit	Audits	5	0	0		25,176	2,517	97	
Small Commercial Demand Response	Devices	0	0	0		0	0	0	
Small Commercial Demand Response (IHD)	Devices	0	0	0		0	0	0	
Demand Response 3	Facilities	0	0	0		0	0	0	
Business Program Total		1,653	0	291		7,152,052	132,545	1,141,446	
Industrial Program									
Process & System Upgrades	Projects	0	0	0		0	0	0	
Monitoring & Targeting	Projects	0	0	0		0	0	0	
Energy Manager	Projects	0	0	0		0	0	11,631	
Retrofit	Projects	0	0	0		0	0	0	
Demand Response 3	Facilities	0	0	0		0	0	0	
Industrial Program Total		0	0	0		0	0	11,631	
Home Assistance Program									
Home Assistance Program	Homes	0	0	2		0	5,380	12,157	
Home Assistance Program Total		0	0	2		0	5,380	12,157	
Aboriginal Program									
Home Assistance Program	Homes	0	0	0		0	0	0	
Direct Install Lighting	Projects	0	0	0		0	0	0	
Aboriginal Program Total		0	0	0		0	0	0	
Pre-2011 Programs completed in 2011									
Electricity Retrofit Incentive Program	Projects	0	0	0		0	0	0	
High Performance New Construction	Projects	0	0	0		0	0	0	
Toronto Comprehensive	Projects	0	0	0		0	0	0	
Multifamily Energy Efficiency Rebates	Projects	0	0	0		0	0	0	
LDC Custom Programs	Projects	0	0	0		0	0	0	
Pre-2011 Programs completed in 2011 Total		0	0	0		0	0	0	
Other									
Program Enabled Savings	Projects	0	0	125		0	0	1,142,450	
Time-of-Use Savings	Homes	0	0	0		0	0	0	
LDC Pilots	Projects	0	0	0		0	0	0	
Other Total		0	0	125		0	0	1,142,450	
Adjustments to 2011 Verified Results		1,623				7,102,512			
Adjustments to 2012 Verified Results			3				143,888		
Adjustments to 2013 Verified Results				422				2,315,886	
Total Adjustments to Previous Years' Verified Results		1,623	3	422		7,102,512	143,888	2,315,886	

Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (reported cumulatively).

Gross results are presented for informational purposes only and are not considered official 2014 Final Verified Results

Table 13: Province-Wide Initiatives and Program Level Gross Savings by Year

Initiative	Unit	Gross Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Gross Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)			
		2011	2012	2013	2014	2011	2012	2013	2014
Consumer Program									
Appliance Retirement**	Appliances	6,750	2,011	3,151	3,579	45,971,627	13,424,518	18,616,239	20,315,770
Appliance Exchange**	Appliances	719	556	2,101	2,238	873,531	974,621	3,746,106	3,990,372
HVAC Incentives	Equipment	53,209	38,346	40,418	48,467	99,413,430	66,929,213	71,225,037	90,274,814
Conservation Instant Coupon Booklet	Items	1,184	231	464	1,442	19,192,453	1,325,898	6,842,244	19,000,254
Bi-Annual Retailer Event	Items	1,504	1,622	1,142	4,626	26,899,265	29,222,072	16,441,329	70,254,471
Retailer Co-op	Items	0	0	0	0	3,917	0	0	0
Residential Demand Response	Devices	10,390	49,038	93,076	117,513	23,597	359,408	390,303	8,379
Residential Demand Response (IHD)	Devices	0	0	0	0	0	0	0	0
Residential New Construction	Homes	0	1	29	587	1,813	4,884	259,826	3,699,786
Consumer Program Total		73,757	91,805	140,380	178,452	192,379,633	112,240,615	117,521,084	207,543,846
Business Program									
Retrofit	Projects	34,201	78,965	82,896	98,849	184,070,265	387,817,248	478,410,896	642,515,421
Direct Install Lighting	Projects	22,155	20,469	19,807	24,794	65,777,197	68,896,046	68,140,249	89,528,509
Building Commissioning	Buildings	0	0	0	988	0	0	0	1,513,377
New Construction	Buildings	247	1,596	2,934	11,911	823,434	3,755,869	9,183,826	37,742,970
Energy Audit	Audits	0	1,450	4,283	9,367	0	7,049,351	23,386,108	46,012,517
Small Commercial Demand Response	Devices	55	187	773	2,116	131	1,068	373	319
Small Commercial Demand Response (IHD)	Devices	0	0	0	0	0	0	0	0
Demand Response 3	Facilities	21,390	19,389	23,706	23,380	633,421	281,823	346,659	0
Business Program Total		78,048	122,056	134,399	171,405	251,304,448	467,801,406	579,468,111	817,313,113
Industrial Program									
Process & System Upgrades	Projects	0	0	313	12,287	0	0	2,799,746	90,463,617
Monitoring & Targeting	Projects	0	0	0	102	0	0	0	502,517
Energy Manager	Projects	0	1,034	3,953	5,767	0	7,067,535	24,438,070	44,929,364
Retrofit	Projects	6,372	0	0	0	38,412,408	0	0	0
Demand Response 3	Facilities	176,180	74,056	162,543	166,082	4,243,958	1,784,712	4,309,160	0
Industrial Program Total		182,552	75,090	166,809	184,238	42,656,366	8,852,247	31,546,976	135,895,498
Home Assistance Program									
Home Assistance Program	Homes	4	1,777	2,361	2,466	56,119	5,524,230	20,987,275	19,582,658
Home Assistance Program Total		4	1,777	2,361	2,466	56,119	5,524,230	20,987,275	19,582,658
Aboriginal Program									
Home Assistance Program	Homes	0	0	267	549	0	0	1,609,393	3,101,207
Direct Install Lighting	Projects	0	0	0	0	0	0	0	0
Aboriginal Program Total		0	0	267	549	0	0	1,609,393	3,101,207
Pre-2011 Programs completed in 2011									
Electricity Retrofit Incentive Program	Projects	40,418	0	0	0	223,956,390	0	0	0
High Performance New Construction	Projects	10,197	6,501	772	268	52,371,183	23,803,888	3,522,240	1,377,475
Toronto Comprehensive	Projects	33,467	0	0	802	174,070,574	0	0	7,085,257
Multifamily Energy Efficiency Rebates	Projects	2,553	0	0	0	9,774,792	0	0	0
LDC Custom Programs	Projects	534	0	0	0	649,140	0	0	0
Pre-2011 Programs completed in 2011 Total		87,169	6,501	772	1,070	460,822,079	23,803,888	3,522,240	8,462,733
Other									
Program Enabled Savings	Projects	0	2,177	3,692	5,500	0	525,011	4,075,382	19,035,337
Time-of-Use Savings	Homes	0	0	0	54,795	0	0	0	0
LDC Pilots	Projects	0	0	0	1,170	0	0	0	5,061,522
Other Total		0	2,177	3,692	60,296	0	525,011	4,075,382	19,035,337
Adjustments to 2011 Verified Results									
			13,266	645	1,601		48,705,294	20,581	6,028
Adjustments to 2012 Verified Results									
				8,632	13,449			54,301,893	59,098,939
Adjustments to 2013 Verified Results									
					34,727				206,413,158
Energy Efficiency Total		213,515	156,735	168,583	289,384	942,317,539	616,320,385	753,683,966	1,210,925,694
Demand Response Total		208,015	142,670	280,099	309,091	4,901,107	2,427,011	5,046,495	8,698
Adjustments to Previous Years' Verified Results Total		0	13,266	9,277	49,777	0	48,705,294	54,322,474	265,518,125
OPA-Contracted LDC Portfolio Total (inc. Adjustments)		421,530	312,671	457,958	648,252	947,218,646	667,452,690	813,052,934	1,476,452,516

Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (reported cumulatively).

Gross results are presented for informational purposes only and are not considered official 2014 Final Verified Results
 **Net results substituted for gross results due to unavailability of data

Table 14: Adjustments to Province-Wide Gross Verified Results due to Variances

Initiative	Unit	Gross Incremental Peak Demand Savings (kW) (new peak demand savings from activity within the specified reporting period)				Gross Incremental Energy Savings (kWh) (new energy savings from activity within the specified reporting period)			
		2011	2012	2013	2014	2011	2012	2013	2014
Consumer Program									
Appliance Retirement	Appliances	0	0	0		0	0	0	
Appliance Exchange	Appliances	0	0	0		0	0	0	
HVAC Incentives	Equipment	-8,759	1,091	2,157		-16,241,086	1,952,473	3,873,449	
Conservation Instant Coupon Booklet	Items	15	0	1		255,975	0	20,668	
Bi-Annual Retailer Event	Items	117	0	0		2,373,616	0	0	
Retailer Co-op	Items	0	0	0		0	0	0	
Residential Demand Response	Devices	0	0	0		0	0	0	
Residential Demand Response (IHD)	Devices	0	0	0		0	0	0	
Residential New Construction	Homes	1	1	115		330,093	2,009	701,488	
Consumer Program Total		-8,628	1,092	2,273		-13,281,402	1,954,483	4,595,605	
Business Program									
Retrofit	Projects	4,511	10,114	16,584		22,046,931	58,528,789	108,677,566	
Direct Install Lighting	Projects	541	217	49		1,346,618	781,858	174,460	
Building Commissioning	Buildings	0	0	0		0	0	0	
New Construction	Buildings	3,287	2,673	4,151		11,323,593	9,884,305	15,992,924	
Energy Audit	Audits	656	488	3,631		2,391,744	2,386,374	19,822,524	
Small Commercial Demand Response	Devices	0	0	0		0	0	0	
Small Commercial Demand Response (IHD)	Devices	0	0	0		0	0	0	
Demand Response 3	Facilities	0	0	0		0	0	0	
Business Program Total		8,996	13,491	24,414		37,108,886	71,581,326	144,667,473	
Industrial Program									
Process & System Upgrades	Projects	0	0	426		0	0	1,232,785	
Monitoring & Targeting	Projects	0	0	54		0	528,000	639,348	
Energy Manager	Projects	29	1,071	2,687		0	8,968,007	28,893,596	
Retrofit	Projects	0	0	0		0	0	0	
Demand Response 3	Facilities	0	0	0		0	0	0	
Industrial Program Total		29	1,071	3,168		0	9,496,007	30,765,729	
Home Assistance Program									
Home Assistance Program	Homes	0	222	791		0	1,316,749	4,321,794	
Home Assistance Program Total		0	222	791		0	1,316,749	4,321,794	
Aboriginal Program									
Home Assistance Program	Homes	0	0	134		0	0	563,715	
Direct Install Lighting	Projects	0	0	0		0	0	0	
Aboriginal Program Total		0	0	134		0	0	563,715	
Pre-2011 Programs completed in 2011									
Electricity Retrofit Incentive Program	Projects	266	0	0		1,049,108	0	0	
High Performance New Construction	Projects	13,072	727	405		23,905,663	5,665,066	1,535,048	
Toronto Comprehensive	Projects	0	1,920	529		0	12,924,335	3,783,965	
Multifamily Energy Efficiency Rebates	Projects	0	0	0		0	0	0	
LDC Custom Programs	Projects	0	0	0		0	0	0	
Pre-2011 Programs completed in 2011 Total		13,337	2,647	934		24,954,771	18,589,400	5,319,013	
Other									
Program Enabled Savings	Projects	1,776	3,712	2,020		1,673,712	11,481,687	10,688,564	
Time-of-Use Savings	Homes	0	0	0		0	0	0	
LDC Pilots	Projects	0	0	0		0	0	0	
Other Total		1,776	3,712	2,020		1,673,712	11,481,687	10,688,564	
Adjustments to 2011 Verified Results		15,511				50,455,967			
Adjustments to 2012 Verified Results			22,235				114,419,652		
Adjustments to 2013 Verified Results				33,734				200,921,892	
Adjustments to Previous Years' Verified Results Total		15,511	22,235	33,734		50,455,967	114,419,652	200,921,892	

Activity and savings for Demand Response resources for each year represent the savings from all active facilities or devices contracted since January 1, 2011 (reported cumulatively).

*Includes adjustments after Final Reports were issued
Results presented using scenario 1 which assumes that demand response resources have a persistence of 1 year

Gross results are presented for informational purposes only and are not considered official 2014 Final Verified Results

APPENDIX C

Meeting Minutes

Date: August 25, 2015
Location: Festival Hydro office.
Attendees: Ysni Semsedini, Jeff Graham, Debbie Reece and Doug Fraser.

This meeting was to discuss revising the Bypass Compensation Agreement pertaining to Stratford TS; the St Mary's CCRA 10 year true up; the Hydro One CDM guidelines and how they apply to each scenario.

Various costs associated with H1's Stratford TS were illustrated. These updated costs were formulated to allow the Bypass Compensation Agreement to be revised. Attached is the spreadsheet that was presented along with a draft updated Schedule B for the agreement.



Stratford TS -
Festival Hydro - Bypa



Festival Hydro
Bypass - REVISED SC

Festival Hydro posed a few questions...

- At 5 year true up, (for Festival MTS), is the evaluation based on total station load and growth in Stratford study area... or is it strictly at the MTS?
 - The true up looks at the study area, which entails both Stratford TS and the MTS
- Festival Hydro are seeing *new* load increase from ~~Customer A~~, but it is being applied at both MTS and Stratford TS (~~Customer A~~)
 - This load will be applied to both TS' in the study area (Stratford TS and Festival MTS) – so no impact to MTS' future true up.
- Assigned capacity in MTS' CCRA is identified as 77.7MW...
 - is this used to determine what *new load* occurred in system study area
 - The assigned capacity is used as the base load for the study area... and any load above that value is considered *new load*.
- Weather normalization – can this be inquired about again, to see if any movement can be had, in order to reduce the 'inflated' bypassed load

- Discussed internally and was given the same answer... Not taken into account.
- Festival Hydro would appreciate that if an invoice is submitted for true ups, that they are submitted at year end... so that FH can off-set payment until 2016
 - Not an issue
- Festival Hydro require H1 to provide clarity on what is required for LDC Peak Load, for use in determining CDM calculation
 - Hydro One's Decision Support require annual non-coincident peak values for all stations (see below chart for example)

Stations	2014	2015
Station 1 Annual Peak	10	12
Station 2 Annual Peak	15	18
Station 3 Annual Peak	20	25
TOTAL	45	55

APPENDIX D

REVISED SCHEDULE “B” – September 2015:

Part I:

Assigned Capacity - Estimate: 77.7 MW

Assigned Capacity – Actual: 77.6 MW (“AC”)

Existing Load - Estimate: 77.7 MW

Existing Load - Actual: 77.6 MW (“EL”)

Total Normal Supply Capacity – Estimate for Transformation / Line: 117 / 394 MW

Total Normal Supply Capacity – Actual: 117 / 394 MW (“TNSC_T / TNSC_L”)

Bypassed Capacity – Estimate: 20 MW

Bypassed Capacity – Actual: EL – avg monthly peak (June-August 2014) ~ 23.77MW (“BC”)

Part II:

Estimate of the Net Book Value of the Station & Line Assets, including a Salvage Credit and Reasonable Decommissioning (i.e. Removal and Environmental Remediation) Costs:

Decommissioning of Transformation (i.e. Station) / Line connection facilities (including Environmental Remediation)	\$1,900,000 (“DC _T ”)
Salvage Credit of Transformation (i.e. Station) / Line connection facilities	\$1,216,000 (“SC _T ”)
Net Book Values:	
Transformation connection facilities (i.e. Station)	\$3,915,688 (“NBV _T ”)
Line connection facilities	N/A (“NBV _L ”)

Bypass Compensation – Estimate:

\$784,261

Bypass Compensation – Actual:

\$932,094 = [NBV_T + DC_T – SC_T] x [BC/TNSC_T] + [NBV_L + DC_L – SC_L] x [BC/TNSC_L]

APPENDIX E

Festival Hydro
 Account # 1589 GA Variance Account
 CUSOTMER BILLED KWH AND DOLLARS

Actual GA billed at first estimate:

GA BASED ON FINAL PRICE ON IESO BILL:

<u>Account # 1589</u>		<u>GA Variance Acct</u>	
Opening Dec 31, 20:		1,056,009.00	OEB Approved Disposition
		<u>Over (underbilled)</u>	
<u>Mth</u>	<u>Rate</u>	<u>kWh</u>	<u>Dollars</u>
Feb-14	0.02231	33,106,212.07	738,578.17
Mar-14	0.01103	36,528,510.08	402,888.15
Apr-14	-0.00965	33,656,051.72	- 324,750.23
May-14	0.05356	34,984,736.48	1,873,751.89
Jun-14	0.0719	35,027,213.73	2,518,435.82
Jul-14	0.05976	35,565,937.22	2,125,399.77
Aug-14	0.06108	36,150,825.62	2,208,071.83
Sep-14	0.08049	35,802,604.15	2,881,731.30
Oct-14	0.07492	36,954,653.02	2,768,612.68
Nov-14	0.09901	35,739,537.59	3,538,541.78
Dec-14	0.07318	33,790,581.46	2,472,774.59
			22,528,363.20

		<u>Actual GA</u>		<u>Difference -</u>		<u>Over (underbilled)</u>	
<u>Mth</u>	<u>Rate</u>	<u>Dollars</u>	<u>check</u>	<u>Mth</u>	<u>Rate</u>	<u>Dollars</u>	<u>to Actual</u>
Feb-14	0.01330	440,312.62		Feb-14	0.01330	440,312.62	- 298,265.55
Mar-14	(0.00027)	(9,862.70)		Mar-14	(0.00027)	(9,862.70)	- 412,750.85
Apr-14	0.05198	1,749,441.57		Apr-14	0.05198	1,749,441.57	2,074,191.80
May-14	0.07196	2,517,501.64		May-14	0.07196	2,517,501.64	643,749.75
Jun-14	0.06025	2,110,389.63		Jun-14	0.06025	2,110,389.63	- 408,046.19
Jul-14	0.06256	2,225,005.03		Jul-14	0.06256	2,225,005.03	99,605.26
Aug-14	0.06761	2,444,157.32		Aug-14	0.06761	2,444,157.32	236,085.49
Sep-14	0.07963	2,850,961.37		Sep-14	0.07963	2,850,961.37	- 30,769.93
Oct-14	0.10014	3,700,638.95		Oct-14	0.10014	3,700,638.95	932,026.27
Nov-14	0.08232	2,942,078.73		Nov-14	0.08232	2,942,078.73	- 596,463.05
Dec-14	0.07444	2,515,370.88		Dec-14	0.07444	2,515,370.88	42,596.29
		23,946,558.74				23,946,558.74	1,418,195.54

<u>YTD Total</u>	<u>Principal O/S</u>	<u>Interest</u>	<u>Balance'</u>	<u>Int Rate</u>	<u>Mth</u>
1,162,029.31	106,020.31	235.50	104,491.20	1.47	Feb-14
1,574,780.16	518,771.16	129.87	517,371.92	1.47	Mar-14
499,411.64	1,555,420.64	635.49	1,556,184.38	1.47	Apr-14
1,143,161.39	2,199,170.39	1,905.39	2,201,839.52	1.47	May-14
735,115.19	1,791,124.19	2,693.98	1,796,487.31	1.47	Jun-14
834,720.46	1,890,729.46	2,194.13	1,898,286.70	1.47	Jul-14
1,070,805.95	2,126,814.95	2,316.14	2,136,688.33	1.47	Aug-14
1,040,036.01	2,096,045.01	2,605.35	2,108,523.75	1.47	Sep-14
1,972,062.29	3,028,071.29	2,567.66	3,043,117.68	1.47	Oct-14
1,375,599.24	2,431,608.24	3,709.39	2,450,364.02	1.47	Nov-14
1,418,195.54	2,474,204.54	2,978.72	2,495,939.03	1.47	Dec-14
	2014 YTD Interest	21,734.50			

<u>Account # 1589</u>		<u>GA Variance Acct</u>	
Bal Dec 31, 2014		2,495,939.03	