London Hydro

Exhibit 9 Interrogatories

Response to Interrogatories

EB-2016-0091

Rates Effective: May 1, 2017

Date Filed: January 17, 2017

London Hydro
111 Horton Street
P.O. Box 2700
London, ON
N6A 4H6

File Number: EB-2016-0091

Date Filed: January 17, 2017

Tab 1 of 5

Exh 9 Board Staff Interrogatories

9-Staff-54

LRAM VA
Ref: Tab "4. 2011-14 LRAM" of LRAMVA work form

a) Please file a copy of the 2014 CDM Annual Report, which includes the OPA's final verified results for London Hydro.

LH Response:

London Hydro received the "2011-2014 Final Results Report" including the OPA's final 2014 verified results for London Hydro, which is attached with this response. This is the only report issued to London Hydro with the 2014 verified results.

b) Please provide the 2014 initiative level net savings results and adjustments, which were verified by the OPA, in excel format. *Note:* The 2014 savings report will include the final OPA verified 2011-2014 net incremental results and savings adjustments by initiative and program.

LH Response:

Please find the 2014 initiative level net savings results and adjustments, which were verified by the OPA, in excel format, within the final OPA verified 2011-2014 net incremental results and savings adjustments by initiative and program. The relevant tabs are titled as *"LDC – Results (Net)"* and *"LDC - Adjustments (Net)"* in the attached *2011-2014 Final Results Report_HCLondon Hydro Inc.xlsx* Excel report.

File Number:EB-2016-0091

Tab: 1
Schedule: 1

Date Filed:January 17, 2017

Attachment 1 of 1

2014 CDM Annual Report

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

Table of Contents

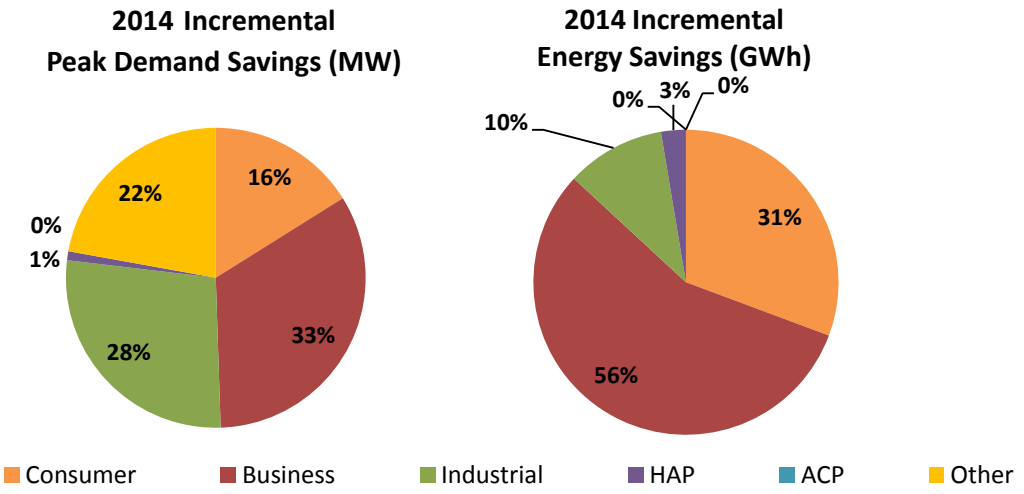
IESO-Contracted Province-Wide CDM Programs: 2011-2014 Final Results Report

LDC: London Hydro Inc.

Final 2014 Achievement Against Targets	2014 Incremental	2011-2014 Achievement Against Target	% of Target Achieved
Net Annual Peak Demand Savings (MW)	9.1	19.3	**46.6%**
Net Energy Savings (GWh)	29.1	194.1	**123.9%**

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

Achievement by Sector



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

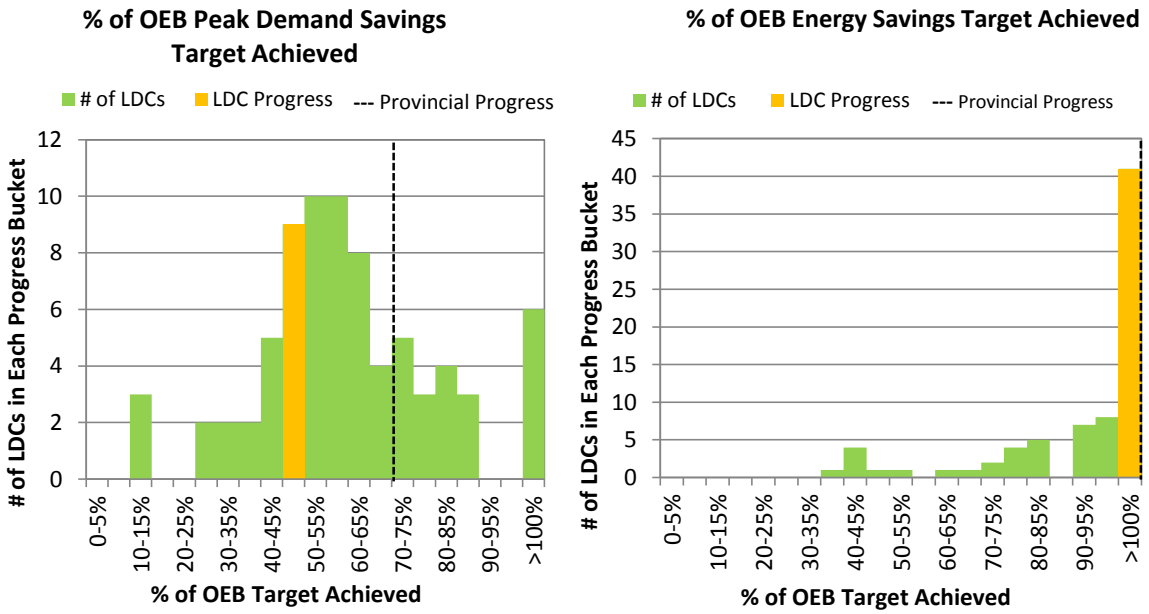


Table 1: London Hydro Inc. Initiative and Program Level Net Savings by Year

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)	
														2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
		2011*	2012*	2013*	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014	2014
Consumer Program															
Appliance Retirement	Appliances	2,458	2,370	1,970	2,267	167	179	175	218	1,002,610	855,873	711,246	807,735	724	8,796,376
Appliance Exchange	Appliances	118	65	108	120	12	10	22	25	15,910	17,215	39,900	44,333	62	233,272
HVAC Incentives	Equipment	3,318	3,029	3,025	3,675	1,052	652	591	716	1,901,868	1,100,981	993,659	1,317,950	3,011	14,215,685
Conservation Instant Coupon Booklet	Items	13,923	844	9,502	28,203	32	6	14	58	512,644	38,182	210,480	768,920	110	3,355,005
Bi-Annual Retailer Event	Items	26,002	28,971	25,800	131,756	46	40	32	220	802,521	731,361	469,152	3,356,262	338	9,698,733
Retailer Co-op	Items	0	0	0	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	0	0	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	28	0	0	0	4	0	0	0	58,335	4	58,335
Consumer Program Total						**1,309**	**887**	**835**	**1,240**	**4,235,553**	**2,743,613**	**2,424,437**	**6,353,534**	**4,250**	**36,357,406**
Business Program															
Retrofit	Projects	126	308	362	347	1,034	2,148	1,823	1,638	5,260,353	10,433,795	8,544,440	9,903,275	6,427	78,376,435
Direct Install Lighting	Projects	46	84	165	371	56	61	167	365	145,929	228,414	628,090	1,343,299	643	3,845,181
Building Commissioning	Buildings	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Construction	Buildings	0	2	1	0	0	5	6	0	0	19,535	9,175	0	11	76,957
Energy Audit	Audits	9	1	55	6	0	0	150	80	0	0	823,663	391,641	230	2,038,968
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	5	6	6	6	487	533	547	489	19,012	7,751	8,163	0	489	34,925
Business Program Total						**1,577**	**2,746**	**2,693**	**2,572**	**5,425,294**	**10,689,495**	**10,013,531**	**11,638,216**	**7,799**	**84,372,465**
Industrial Program															
Process & System Upgrades	Projects	0	0	2	0	0	0	0	0	0	0	0	0	0	0
Monitoring & Targeting	Projects	0	0	0	4	0	0	0	102	0	0	0	447,517	102	447,517
Energy Manager	Projects	0	17	22	13	0	1	273	302	0	30,445	2,171,119	1,724,297	313	4,033,714
Retrofit	Projects	17	0	0	0	128	0	0	0	756,174	0	0	0	127	3,021,719
Demand Response 3	Facilities	4	4	6	7	2,137	994	1,905	1,706	125,454	23,964	43,378	0	1,706	192,796
Industrial Program Total						**2,265**	**996**	**2,178**	**2,110**	**881,628**	**54,409**	**2,214,498**	**2,171,814**	**2,247**	**7,695,746**
Home Assistance Program															
Home Assistance Program	Homes	0	337	498	701	0	29	42	74	0	304,467	427,264	544,314	145	2,312,244
Home Assistance Program Total						**0**	**29**	**42**	**74**	**0**	**304,467**	**427,264**	**544,314**	**145**	**2,312,244**
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	130	0	0	0	1,359	0	0	0	9,726,531	0	0	0	1,359	38,906,125
High Performance New Construction	Projects	5	3	0	0	169	95	0	0	865,905	273,104	0	0	263	4,282,930
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						**1,528**	**95**	**0**	**0**	**10,592,436**	**273,104**	**0**	**0**	**1,623**	**43,189,055**
Other															
Program Enabled Savings	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time-of-Use Savings	Homes	0	0	0	n/a	0	0	0	1,707	0	0	0	0	1,707	0
LDC Pilots	Projects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Total						**0**	**0**	**0**	**1,707**	**0**	**0**	**0**	**0**	**1,707**	**0**
Adjustments to 2011 Verified Results							**-23**	**0**	**2**		**336,008**	**0**	**10,998**	**-32**	**1,355,475**
Adjustments to 2012 Verified Results								**180**	**302**			**758,668**	**1,899,133**	**458**	**7,897,029**
Adjustments to 2013 Verified Results									**1,096**				**6,449,345**	**1,096**	**10,931,530**
Energy Efficiency Total						**4,054**	**3,225**	**3,295**	**5,509**	**20,990,445**	**14,033,373**	**15,028,189**	**20,707,878**	**15,577**	**173,699,195**
Demand Response Total (Scenario 1)						**2,624**	**1,528**	**2,452**	**2,194**	**144,465**	**31,715**	**51,541**	**0**	**2,194**	**227,721**
Adjustments to Previous Years' Verified Results Total						**0**	**-23**	**180**	**1,400**	**0**	**336,008**	**758,668**	**8,359,477**	**1,523**	**20,184,035**
OPA-Contracted LDC Portfolio Total (inc. Adjustments)						**6,678**	**4,730**	**5,927**	**9,103**	**21,134,911**	**14,401,096**	**15,838,399**	**29,067,354**	**19,293**	**194,110,950**
													Full OEB Target:	**41,440**	**156,640,000**
													% of Full OEB Target Achieved to Date (Scenario 1):	**46.6%**	**123.9%**

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

Table 2: Adjustments to London 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)	
														2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
		2011*	2012*	2013*	2014	2011	2012	2013	2014	2011	2012	2013	2014	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	-508	36	136		-137	7	31		-245,124	13,783	55,844		-99	-827,460
Conservation Instant Coupon Booklet	Items	224	0	29		0	0	0		7,528	0	644		0	31,399
Bi-Annual Retailer Event	Items	2,234	0	0		3	0	0		59,625	0	0		3	238,498
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						**-134**	**7**	**31**		**-177,972**	**13,783**	**56,488**		**-95**	**-557,563**
Business Program															
Retrofit	Projects	8	47	38		56	269	376		297,630	1,433,256	1,579,036		637	8,400,148
Direct Install Lighting	Projects	6	10	11		9	6	3		23,308	23,807	11,414		12	169,771
Building Commissioning	Buildings	0	0	0		0	0	0		0	0	0		0	0
New Construction	Buildings	0	0	0		0	0	0		0	0	0		0	0
Energy Audit	Audits	9	1	38		49	5	335		237,585	26,030	1,842,897		389	4,714,223
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						**114**	**281**	**715**		**558,523**	**1,483,093**	**3,433,347**		**1,039**	**13,284,142**
Industrial Program															
Process & System Upgrades	Projects	0	0	2		0	0	59		0	0	624,036		59	1,248,072
Monitoring & Targeting	Projects	0	0	0		0	0	0		0	0	0		0	0
Energy Manager	Projects	0	11	1		0	192	65		0	1,149,812	368,314		521	6,310,220
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**	**192**	**124**		**0**	**1,149,812**	**992,350**		**580**	**7,558,292**
Home Assistance Program															
Home Assistance Program	Homes	0	7	0		0	1	0		0	11,114	0		1	33,342
Home Assistance Program Total						**0**	**1**	**0**		**0**	**11,114**	**0**		**1**	**33,342**
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		-2	0	0		-33,545	0	0		-2	-134,179
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						**-2**	**0**	**0**		**-33,545**	**0**	**0**		**-2**	**-134,179**
Other															
Program Enabled Savings	Projects	0	0	0		0	0	0		0	0	0		0	0
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**	**0**		**0**	**0**	**0**		**0**	**0**
Adjustments to 2011 Verified Results						**-21**				**347,006**				**-32**	**1,355,475**
Adjustments to 2012 Verified Results							**482**				**2,657,801**			**458**	**7,897,029**
Adjustments to 2013 Verified Results								**870**				**4,482,185**		**1,096**	**10,931,530**
Total Adjustments to Previous Years' Verified Results						**-21**	**482**	**870**		**347,006**	**2,657,801**	**4,482,185**		**1,523**	**20,184,035**

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. Adjustements in Table 1 reflect persisted savings in the year in which that adjustment is verified.

Table 3: London 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	0.49	0.43	0.42	0.42	1.00	1.00	n/a	n/a	0.52	0.46	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	0.61	0.50	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	1.27	n/a	n/a	n/a	0.63	n/a	n/a	n/a	0.86	n/a	n/a	n/a	0.63
Business Program																
Retrofit	0.92	0.95	0.94	0.73	0.73	0.77	0.76	0.73	1.23	1.10	1.10	0.97	0.75	0.77	0.77	0.73
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	0.97	0.53	n/a	n/a	0.49	0.54	n/a	n/a	1.52	0.73	n/a	n/a	0.49	0.54	n/a
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	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
Monitoring & Targeting	n/a	n/a	n/a	1.02	n/a	n/a	n/a	1.00	n/a	n/a	n/a	0.85	n/a	n/a	n/a	1.00
Energy Manager	n/a	0.46	0.90	0.91	n/a	0.90	0.90	0.90	n/a	0.46	0.90	0.96	n/a	0.90	0.90	0.90
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	1.11	1.04	0.94	n/a	1.00	1.00	1.00	n/a	1.00	0.88	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	0.94	n/a	n/a	n/a	0.60	n/a	n/a	n/a	0.95	n/a	n/a	n/a	0.60	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	6.7	4.1	4.1	4.0
2012 - Verified†	0.0	4.7	3.1	3.1
2013 - Verified†	0.0	0.2	5.9	3.1
2014 - Verified†	0.0	0.2	1.2	9.1
Verified Net Annual Peak Demand Savings Persisting in 2014:				**19.3**
London Hydro Inc. 2014 Annual CDM Capacity Target:				**41.4**
Verified Portion of Peak Demand Savings Target Achieved in 2014 (%):				**46.6%**

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

Implementation Period	Annual				Cumulative
	2011	2012	2013	2014	2011-2014
2011 - Verified	21.1	21.0	21.0	20.9	84.0
2012 - Verified†	0.3	14.4	14.1	13.9	42.7
2013 - Verified†	0.0	1.5	15.8	13.4	30.7
2014 - Verified†	0.0	1.2	6.39	29.1	36.7
Verified Net Cumulative Energy Savings 2011-2014:					**194.1**
London Hydro Inc. 2011-2014 Annual CDM Energy Target:					**156.6**
Verified Portion of Cumulative Energy Target Achieved in 2014 (%):					**123.9%**

†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)	
														2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
		2011*	2012*	2013*	2014	2011	2012	2013	2014	2011	2012	2013	2014	2014	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	2,973	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**
													Full OEB Target:	**1,330,000**	**6,000,000,000**
													% of Full OEB Target Achieved to Date (Scenario 1):	**70%**	**109%**

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

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)	
														2014 Net Annual Peak Demand Savings (kW)	2011-2014 Net Cumulative Energy Savings (kWh)
		2011*	2012*	2013*	2014	2011	2012	2013	2014	2011	2012	2013	2014	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. Adjustements 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	**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 and 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)**
Adjustments to Previous Years' Verified Results	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.

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
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).
Demand Response 3	Results are attributed to LDCs based on the total contracted megawatts at the contributor level as of December 31st, applying the provincial ex ante to contracted ratio (ex ante estimate/contracted megawatts); Ex post energy savings are attributed to the LDC based on their proportion of the total contracted megawatts at the contributor level.	Savings are considered to begin in the year in which the contributor signed up to participate in demand response.	Peak demand savings are ex ante estimates based on the load reduction capability that can be expected for the purposes of planning. The ex ante estimates factor in both scheduled non-performances (i.e. maintenance) and historical performance. Energy savings are based on an ex post estimate which reflects the savings that actually occurred as a results of activations in the year. Savings are assumed to persist for 1 year, reflecting that savings will not occur if the resource is not activated and additional costs are incurred to activate the resource.

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: London 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	350	179	415	525	1,967,720	855,873	1,577,135	1,804,087
Appliance Exchange**	Appliances	24	10	43	47	30,871	17,215	75,807	84,229
HVAC Incentives	Equipment	1,739	1,304	1,211	1,501	3,173,112	2,236,842	2,075,157	2,772,849
Conservation Instant Coupon Booklet	Items	28	6	13	34	465,107	36,208	186,850	445,391
Bi-Annual Retailer Event	Items	41	44	31	126	734,572	798,004	448,984	1,918,528
Retailer Co-op	Items	0	0	0	0	0	0	0	0
Residential Demand Response	Devices	0	0	0	0	0	0	0	0
Residential Demand Response (IHD)	Devices	0	0	0	0	0	0	0	0
Residential New Construction	Homes	0	0	0	6	0	0	0	92,596
Consumer Program Total		**2,182**	**1,543**	**1,713**	**2,239**	**6,371,383**	**3,944,142**	**4,363,933**	**7,117,681**
Business Program									
Retrofit	Projects	1,408	2,596	2,510	2,203	7,035,154	11,974,267	11,542,947	13,242,447
Direct Install Lighting	Projects	52	81	177	387	157,160	274,518	665,441	1,423,182
Building Commissioning	Buildings	0	0	0	0	0	0	0	0
New Construction	Buildings	0	10	11	0	0	26,314	16,992	0
Energy Audit	Audits	0	0	228	119	0	0	1,246,282	583,668
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	487	533	547	489	19,012	7,751	8,163	0
Business Program Total		**1,948**	**3,221**	**3,473**	**3,197**	**7,211,326**	**12,282,850**	**13,479,824**	**15,249,297**
Industrial Program									
Process & System Upgrades	Projects	0	0	0	0	0	0	0	0
Monitoring & Targeting	Projects	0	0	0	102	0	0	0	447,517
Energy Manager	Projects	0	3	303	336	0	73,423	2,412,355	1,915,885
Retrofit	Projects	172	0	0	0	986,857	0	0	0
Demand Response 3	Facilities	2,137	994	1,905	1,706	125,454	23,964	43,378	0
Industrial Program Total		**2,309**	**998**	**2,208**	**2,144**	**1,112,311**	**97,387**	**2,455,733**	**2,363,402**
Home Assistance Program									
Home Assistance Program	Homes	0	26	42	74	0	304,467	427,264	544,314
Home Assistance Program Total		**0**	**26**	**42**	**74**	**0**	**304,467**	**427,264**	**544,314**
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	2,288	0	0	0	16,207,519	0	0	0
High Performance New Construction	Projects	337	190	0	0	1,731,809	546,208	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		**2,625**	**190**	**0**	**0**	**17,939,328**	**546,208**	**0**	**0**
Other									
Program Enabled Savings	Projects	0	0	0	0	0	0	0	0
Time-of-Use Savings	Homes	0	0	0	1,707	0	0	0	0
LDC Pilots	Projects	0	0	0	0	0	0	0	0
Other Total		**0**	**0**	**0**	**1,707**	**0**	**0**	**0**	**0**
Adjustments to 2011 Verified Results			**254**	**0**	**3**		**739,195**	**0**	**16,207**
Adjustments to 2012 Verified Results				**249**	**371**			**987,313**	**2,302,168**
Adjustments to 2013 Verified Results					**1,479**				**8,313,465**
Energy Efficiency Total		**6,440**	**4,450**	**4,984**	**7,168**	**32,489,882**	**17,143,339**	**20,675,213**	**25,274,693**
Demand Response Total		**2,624**	**1,528**	**2,452**	**2,194**	**144,465**	**31,715**	**51,541**	**0**
Adjustments to Previous Years' Verified Results Total		**0**	**254**	**249**	**1,853**	**0**	**739,195**	**987,313**	**10,631,840**
OPA-Contracted LDC Portfolio Total (inc. Adjustments)		**9,064**	**6,231**	**7,685**	**11,215**	**32,634,347**	**17,914,249**	**21,714,068**	**35,906,533**

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 London 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	-226	16	65		-408,659	28,053	117,864	
Conservation Instant Coupon Booklet	Items	0	0	0		6,990	0	564	
Bi-Annual Retailer Event	Items	3	0	0		64,819	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		**-223**	**16**	**65**		**-336,850**	**28,053**	**118,428**	
Business Program									
Retrofit	Projects	76	221	512		394,879	1,921,040	2,089,945	
Direct Install Lighting	Projects	10	7	4		25,101	25,272	12,093	
Building Commissioning	Buildings	0	0	0		0	0	0	
New Construction	Buildings	10	0	0		26,314	0	0	
Energy Audit	Audits	47	5	511		226,586	26,435	2,788,480	
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		**143**	**233**	**1,026**		**672,881**	**1,972,746**	**4,890,518**	
Industrial Program									
Process & System Upgrades	Projects	0	0	74		0	0	742,900	
Monitoring & Targeting	Projects	0	0	0		0	0	0	
Energy Manager	Projects	0	75	72		0	1,277,569	409,238	
Retrofit	Projects	0	0	0		0	0	0	
Demand Response 3	Facilities	0	0	0		0	0	0	
Industrial Program Total		**0**	**75**	**147**		**0**	**1,277,569**	**1,152,138**	
Home Assistance Program									
Home Assistance Program	Homes	0	0	0		0	11,114	0	
Home Assistance Program Total		**0**	**0**	**0**		**0**	**11,114**	**0**	
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	334	0	0		403,164	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		**334**	**0**	**0**		**403,164**	**0**	**0**	
Other									
Program Enabled Savings	Projects	0	0	0		0	0	0	
Time-of-Use Savings	Homes	0	0	0		0	0	0	
LDC Pilots	Projects	0	0	0		0	0	0	
Other Total		**0**	**0**	**0**		**0**	**0**	**0**	
Adjustments to 2011 Verified Results		**254**				**739,195**			
Adjustments to 2012 Verified Results			**325**				**3,289,482**		
Adjustments to 2013 Verified Results				**1,237**				**6,161,084**	
Total Adjustments to Previous Years' Verified Results		**254**	**325**	**1,237**		**739,195**	**3,289,482**	**6,161,084**	

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

9-Staff-55

LRAM VA
Ref: Tab "2. CDM Allocation" of LRAMVA work form

The approved 2013 LRAMVA threshold confirmed in Table 2 below are consistent with the approved LRAMVA threshold levels in the Settlement Agreement (EB-2012-0146/EB-2012-0380). However, the LRAMVA threshold (45,191,286 kWh) applied in the LRAMVA calculation only pertained to the 2013 year. This is confirmed in Tables 3A of the LRAMVA work form.

Table 2. Amount used for CDM Threshold for LRAMVA

Forecast Year	kWh	kW	kWh (check)
2011	21,134,911	-62,262	-45,191,286
2012	33,090,805	-62,262	-45,191,286
2013	45,191,286	-62,262	-45,191,286
2014	57,222,998	-62,262	-45,191,286
2015	35,386,333	-62,262	-45,191,286
2016	65,172,667	-62,262	-45,191,286
2017	94,959,000	-62,262	-45,191,286

a) Please confirm the LRAMVA threshold applied against the 2013 load forecast.

LH Response:

London Hydro had adjusted its load forecast for Year 2013, in its 2013 cost of service rate application, by 28,645,883 kWh for CDM activities according to the settlement. The adjustment reflects a half year of 2011 programs and the full year of 2012 programs persisting into 2013 in addition of the 2013 programs with the half year rule applied.

London Hydro used 45,191,286 kWh as the threshold for comparison to the actual savings in the LRAMVA calculations, for Year 2013, as set out on pages 22-24 in the Decision and Rate Order (EB-2012-0146) of the 2013 cost of service rate application.

Reference from Decision and Rate Order, dated April 11, 2013, - EB-2012-0146, Page 21:
"For the purposes of settlement, the Parties agree that the manual CDM adjustment for 2013 has been reduced from the gross level to the net level. The adjustment also reflects a half year

of 2011 programs ((i.e. 50% of 20,990,325 (kWh) or 10,495,162 (kWh)) and a full year of 2012 programs (i.e 12,100,480 (kWh)) persisting into 2013 along with the half year rule being applied to 2013 programs ((i.e. 50% of 12,100,480 (kWh) or 6,050,240 (kWh)). As a result, the Parties have agreed for the purposes of settlement to use a total of 28,645,883 (kWh) and 39,354 kW as the manual adjustments for CDM in 2013."

b) Please provide rationale for the CDM threshold used for comparison purposes against actual savings in the LRAMVA calculation.

LH Response:

According to the settlement agreement, as set out on pages 22-24 in the Decision and Rate Order (EB-2012-0146) of the 2013 cost of service rate application, London Hydro is to use the 45,191,286 kWh as the threshold for comparison to the actual savings in the LRAMVA calculations for Year 2013 to measure savings on a full year annualized basis, the same manner as the verified annual savings are measured by the IESO (previously by OPA).

Reference from Decision and Rate Order, dated April 11, 2013, - EB-2012-0146, Pages 22-23:
*"For the purposes of settlement, the Parties agree the 2013 LRAMVA amount of **45,191,286** kWh and 62,262 kW has been calculated using the OPA's 2011-2014 CDM targets assigned to London Hydro, which reflects the actual 2011 CDM results and the persistence of 2011 into 2013. The LRAMVA amount differs from the CDM adjustment of 28,645,883 kWh and 39,354 kW in order to have the LRAMVA measured in the same manner as the OPA measured results which are on a full year annualized basis. As a result, the full year persistent savings from 2011 and a full year savings from 2013 programs must be included in the calculation in order to capture the correct amount of targets assigned to London Hydro for 2013. Therefore, the 2013 LRAMVA includes the 2011 full year persistent savings of 20,990,325 kWh as provided by the OPA's 2011 Final Annual Report, 2012 full year persistent savings of 12,100,480 kWh and the full year 2013 forecasted savings of 12,140,480 kWh."*

9-Staff-56

DVA Continuity Schedules
Ref: E9/T1/S2, p.2
Ref: E9/T1/S8, p.4
Ref: DVA Continuity Schedule
Ref: DVA Additional Calculations

In Exhibit 9, it's indicated that the $766k difference for Account 1589 between the DVA Continuity Schedule and the RRR for 2015 is mainly due to new Class A customers. However, in Tab 2 of the DVA Additional Calculations spreadsheet, the portion of Account 1589 that was allocated to new Class A customers is calculated to be a credit of $16k, based on an Account 1589 credit balance of $533k. It's also indicated that the amount allocated to new Class A customers should be a debit of $279k based on analysis of actual transactions.

a) Please explain how the variance of $766k reconciles with the $279k that London Hydro is requesting to allocate to new Class A customers.

b) Please confirm the total Account 1589 balance requested for disposition and the split between the amounts allocated to new Class A customers and remaining Class B customers.

c) Please explain the nature of the amounts in the "Adjustments during 2015" column in the DVA Continuity Schedule.

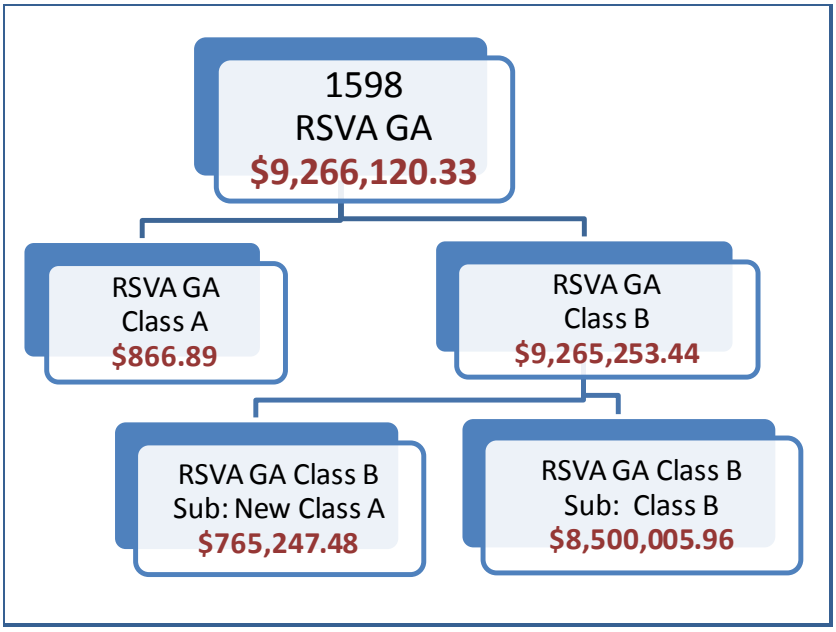
d) From the chart of Class A customers who participated in the ICI in Tab 2 of the DVA Additional Calculations spreadsheet, it does not appear that any Class A customers became Class B in 2015. Please confirm this.

    i. If this is not the case, please propose the appropriate allocation of the Account 1589 balance to these Class B customers that exited Class A in 2015.

LH Response:

The structure of the 1589 RSVA Global Adjustment (GA) account with sub balances at December 31, 2015 is illustrated below to assist with the responses.

The total balance of 1589 RSVA GA reconciles to the $9,266,120.33 filed in the RRR 2.1.7 Trial Balance as at December 31, 2015.



(a)

The DVA Continuity Schedule was adjusted with the $766,114 RSVA GA balance at December 31, 2015 which should not be disposed via rate riders to non-RPP customers. This adjustment consists of RSVA GA existing Class A balance of $866.89 and RSVA GA New Class balance of $765,247.48.

Year	Principal New Class A	Interest New Class A	TOTAL New Class A	Principal Class A	Interest Class A	TOTAL Class A	TOTAL Adjustment
Balance at December 31, 2015 (RRR E2.1.7 T/B)	$ 751,968.52	$ 13,278.96	$ 765,247.48	$ 1,204.66	$ (337.77)	$ 866.89	**$ 766,114.37**
Disposition (EB-2015-0087)	$(479,011.28)	$ (13,350.56)	$(492,361.84)				
Adjusted Balance for Disposition	**$ 272,957.24**	**$ (71.60)**	**$ 272,885.64**				
Year 2016 (Interest at 1.10%)		4,744.51	4,744.51				
Year 2017 (Interest at 1.10%)		987.13	987.13				
Total Claim	**$ 272,957.24**	**$ 5,660.04**	**$ 278,617.28**				

London Hydro has six customers who became Class A as of July 1, 2015. The balance of GA variance accumulated in the RSVA GA account during Years 2013 and 2014 for the new Class A customers was approved for recovery, with carrying charges to April 30, 2016, in the 2016 IRM rate application (EB-2015-0087). The approved amount of $492,361.84 is being recovered in 12 monthly installments from this group of customers.

The proposed $278,617.28 for recovery includes the RSVA GA New Class A account balance as at December 31, 2015 with carrying charges to April 30, 2017.

(b)

The total amount of disposition requested for RSVA GA balance comprises of: $278,617.28 debit balance that is a recovery from the new Class A customers; and ($812,013.89) credit balance which is a refund to Class B customers.

The following table illustrates the accumulated balances as at December 31, 2015 for each group of customers, New Class A and Class B, adjusted with the disposition of the 2014 year-end balances with carrying charges to April 30, 2015 as approved with the 2016 IRM rate application (EB-2015-0087). The total claim includes the adjusted balances with carrying charges to April 30, 2017.

Year	Principal New Class A	Interest New Class A	TOTAL New Class A	Principal Class B	Interest Class B	TOTAL Class B	TOTAL Amount
Balance at December 31, 2015 (RRR E2.1.7 T/B)	$ 751,968.52	$ 13,278.96	$ 765,247.48	$ 8,376,856.24	$ 123,149.72	$ 8,500,005.96	$ 9,265,253.44
Disposition (EB-2015-0087)	$(479,011.28)	$ (13,350.56)	$(492,361.84)	$ (9,143,276.37)	$ (190,791.70)	$ (9,334,068.07)	$ (9,826,429.91)
Adjusted Balance for Disposition	**$ 272,957.24**	**$ (71.60)**	**$ 272,885.64**	**$ (766,420.13)**	**$ (67,641.98)**	**$ (834,062.11)**	**$ (561,176.47)**
Year 2016 (Interest at 1.10%)		4,744.51	4,744.51		24,819.93	24,819.93	29,564.44
Year 2017 (Interest at 1.10%)		987.13	987.13		(2,771.71)	(2,771.71)	(1,784.58)
Total Claim 2017 COS RA	**$ 272,957.24**	**$ 5,660.04**	**$ 278,617.28**	**$ (766,420.13)**	**$ (45,593.76)**	**$ (812,013.89)**	**$ (533,396.61)**

(c)

The DVA Continuity Schedule calculates rate riders of the DVA Amounts entered in the model and reconciled to the RRR Trial Balance filed for the year ended on December 31, 2015.

The “Adjustments during YYYY” columns (each year), both principal and interest, in the DVA Continuity Schedule for Account 1589 RSVA Global Adjustment reflect the GA variances related

to Class A and New Class A customers that should not be disposed via rate riders. The adjustments effectively remove such GA variances from the rate rider calculations.

Year	2013	2014	2015	TOTAL
Principal New Class A	$ 132,818.88	$ 346,192.40	$ 272,957.24	$ 751,968.52
Interest New Class A	$ 1,983.09	$ 3,919.35	$ 7,376.52	$ 13,278.96
TOTAL New Class A	**$ 134,801.97**	**$ 350,111.75**	**$ 280,333.76**	**$ 765,247.48**
Principal Class A	$ 2,245.29	$ (32,175.91)	$ 31,135.28	$ 1,204.66
Interest Class A	$ 20.68	$ (66.09)	$ (292.36)	$ (337.77)
TOTAL Class A	**$ 2,265.97**	**$ (32,242.00)**	**$ 30,842.92**	**$ 866.89**
TOTAL Adjustments	**$ 137,067.94**	**$ 317,869.75**	**$ 311,176.68**	**$ 766,114.37**
Total Principal Adjustments	$ 135,064.17	$ 314,016.49	$ 304,092.52	$ 753,173.18
Total Interest Adjustments	$ 2,003.77	$ 3,853.26	$ 7,084.16	$ 12,941.19
TOTAL Adjustments	**$ 137,067.94**	**$ 317,869.75**	**$ 311,176.68**	**$ 766,114.37**

The GA variance balance accumulated for New Class A customers is proposed for recovery through direct settlement, therefore removed from the rate rider calculations in the DVA Continuity Schedule. The settlement amount for each customer is calculated in a separate worksheet.

Class A customers pay the actual GA, therefore any related balance is removed from the rate rider calculations in the DVA Continuity Schedule. The variance is due to minor rounding differences in amounts invoiced by the IESO, based on the Peak Demand Factor (PDF) assigned to London Hydro and what was billed to the customers using the customer specific PDF factor.

The updated DVA Continuity Schedule includes adjustments for Account 1580 RSVA WMS Variance – Sub-account CBR Class B to remove the portion of principal and interest values for new Class A customers. The amount is proposed for disposition through direct settlement in the same manner as the GA variance as requested in OEB Staff Interrogatories 9-57.

Adjustment to 1580 WMS Variance - CBR Class B for the portion of New Class A	2015	
Principal New Class A	$	6,276.47
Interest New Class A	$	38.05
TOTAL Adjustment to CBR Class B	**$**	**6,314.52**

(d)

London Hydro confirms that none of its Class A customers became Class B during Year 2015.

9-Staff-57

Transfers Between Class A and Class B Customers
Ref: DVA Additional Calculations

The rate riders for Account 1580, sub-account CBR Class B is calculated in Tab 2 of the DVA Additional Calculations spreadsheet.

a) Please propose an allocation of the balance in this sub-account pertaining to April to June 2015 for Class B customers that became Class A customers in 2015.
b) If London Hydro has any Class A customers that became Class B in 2015, please propose the appropriate allocation of the sub-account balance to these Class B customers that exited Class A.

LH Response:

(a)

The allocation of RSVA WMS CBR Class B charge to new Class A customers, who were Class B in the first half of 2015, is calculated based on the percentage of the new Class A customers' consumption compared to the total Class B consumption.

In 2015, there was no CBR component included in the WMS rate, and therefore the total IESO CBR Class B charge (CT 1351) is included in Account 1580 – Variance WMS, Sub-account CBR Class B. The new Class A customers became Class A on July 1, 2015, and therefore, contributed to this variance during April to June 2015.

The uplifted kWh for each new Class A customers is compared to the total Class B kWh and a percentage is calculated, then it is multiplied with the monthly IESO CBR Class B charge (CT 1351). This calculation is applied to April – June 2015 only, as the new Class A customers were Class B during that time and contributed to the variance during that period only.

Allocation methodology	Apr	May	Jun	TOTAL
Wholesale Class B kWh only	232,974,013	246,915,797	254,664,242	734,554,052
Uplifted billed kWh - new Class A	8,057,811	9,730,659	10,057,942	27,846,412
Percentage of new Class A	3.46%	3.94%	3.95%	
IESO CT 1351	$ 8,671.33	$ 75,532.26	$ 75,957.20	$ 160,160.79
Allocated CT 1351 to new Class A	**$ 299.91**	**$ 2,976.64**	**$ 2,999.92**	**$ 6,276.47**

The calculation is provided on "Tab1-CBR New Class A allocation" in the "Updated_London_Hydro_2017_DVA_Additional_RR_Calculation Excel worksheet for this disposition.

The amounts proposed for disposition in this schedule have been removed from the DVA Continuity Schedule by entering them as an "adjustment" in the "Adjustments during 2015" columns for both principal and interest.

The proposed direct settlement as calculated based on the above methodology:

New Class A customers	RSVA WMS CBR New Class A Principal Amount	RSVA WMS CBR New Class A Interest Amount	RSVA WMS CBR New Class A Total Amount
Customer 4	$ 1,425.83	$ 29.48	$ 1,455.31
Customer 5	$ 1,273.62	$ 26.36	$ 1,299.98
Customer 6	$ 1,851.35	$ 38.22	$ 1,889.57
Customer 7	$ 132.96	$ 2.78	$ 135.74
Customer 8	$ 429.12	$ 8.83	$ 437.95
Customer 9	$ 1,163.59	$ 24.08	$ 1,187.67
Total	**$ 6,276.47**	**$ 129.75**	**$ 6,406.22**

(b)

London Hydro had no Class A customers who became Class B during Year 2015.

9-Staff-58

WMS Transactions
Ref: DVA Continuity Schedule

a) Account 1580 WMS transactions in 2015 was a credit of $7M. Please explain why the variance recorded in this account is so high.
b) Please explain how interest has been forecasted for the periods of Jan. 1-Dec. 31, 2016 and Jan. 1-April 30, 2017 and why it results in interest that is in different directions (e.g. positive in the first period, negative in the second period) for some accounts.

LH Response:

a) Variances between the amounts charged by the Independent Electricity System Operator (IESO), based on the monthly settlement invoice including accruals and the amounts billed to London Hydro's customers using the Board-approved WMS Rate, including accruals, are booked to Account 1580 WMS.

The IESO announced the approval of the Market Rule Amendment MR-00421-0R00 and the resulting disbursements to participants withdrawing energy from the IESO administered market. During 2015, the IESO included over $4M Transmission Rights Clearing Account Credits (CT 102) on its invoices. These credits have reduced the total amount of WMS charged by the IESO, while the billing rate to customers did not change, and have contributed to a higher than normal variance in the account.

b) The projected interest values in Column BQ of the DVA Continuity Schedule include the forecasted interest from Jan 1, 2016 to Dec 31, 2016 on the Dec 31-2015 principal balances, adjusted for disposition during 2016, and the actual carrying charges from Jan 1, 2016 to Apr 30, 2016 on principal approved and instructed for disposition by the OEB during

2016. The projected interest values in Column BR of the DVA Continuity Schedule include the forecasted interest from Jan 1, 2017 to Apr 30, 2017 on the Dec 31-2015 principal balances, adjusted for disposition during 2016. The interest is calculated by using the Board prescribed interest rate for the respective quarterly period, and the forecast calculation for 2017 uses the current 1.10% rate.

Column BQ is titled: Projected Interest from Jan 1, 2016 to December 31, 2016 on Dec 31-15 balance adjusted for disposition during 2016. The purpose of the calculation in Column BQ is to forecast the carrying charges of the adjusted principal values proposed for disposition only.

Column BN is titled: Interest Disposition during 2016 – instructed by OEB. This column reflects the interest disposition values from the Decision and Rate Order related to London Hydro's 2016 IRM Rate Application (EB-2015-0087), which includes carrying charges up to April 30, 2016.

The disposition during 2016 includes the carrying charges up to April 30, 2016, while the year-to-date principal and interest balances include the related carrying charges only up to December 31, 2015 in the DVA Continuity Schedule. Therefore, the balances proposed for disposition in 2017 would be incorrect, if the two amounts were not offset, by the equivalent value with opposite sign of the actual carrying charges from Jan 1, 2016 to Apr 30, 2016 of the principal disposition during 2016. To avoid this error, this interest has to be updated in the DVA Continuity Schedule in order to reflect the accurate balances proposed for disposition.

Since the DVA Continuity Schedule has only two columns to record interest during Year 2016: Column BN (to record interest disposition during 2016) and Column BQ (to forecast 2016 interest on Dec 31-15 balance adjusted for disposition), there is no column to enter the actual carrying charge included in the disposition during 2016.

The issue is highlighted in the following table using Account 1589 RSVA GA – Class B. The table details the annual individual components included in the proposed disposition amount. This account had a debit balance of $8.4M principal which attracted interest with a debit

balance during the first four months of 2016. The $8.4M is the total of $9.1M debit principal accumulated during years 2013 and 2014, and $0.7M credit accumulated during 2015. After the disposition date the balance became a smaller credit value and attracted interest with a credit balance.

Illustration of individual components of Account 1589 RSVA GA Class B balance proposed for disposition in 2017:

Account 1589 RSVA GA Class B - Components of proposed balance for disposition	Principal	INTEREST	TOTAL	INTEREST DVA Continuity Schedule Columns available for Interest
RSVA Transactions during Year 2013	$ 1,842,822	$ 24,613	$ 1,867,435	$ 24,613
RSVA Transactions during Year 2014	$ 7,300,454	$ 24,010	$ 7,324,465	$ 24,010
Carrying Charge on principal from Jan 1, 2015 to Dec 31, 2015		$ 108,918	$ 108,918	$ 108,918
Carrying Charge on principal from Jan 1, 2016 to Apr 30, 2016		$ 33,251	$ 33,251	
Disposition during 2016 - instructed by the OEB (with carrying charge up to Apr 30, 2016)	$ (9,143,276)	$ (190,792)	$ (9,334,068)	$ (190,792)
Subtotal - GA Class B variances not related to Year 2015	**$ -**	**$ -**	**$ -**	**$ (33,251)**
RSVA Transactions during Year 2015	$ (766,420)	$ (34,391)	$ (800,812)	$ (34,391)
Carrying Charge on principal from Jan 1, 2016 to Dec 31, 2016		$ (8,431)	$ (8,431)	$ (8,431)
Carrying Charge on principal from Jan 1, 2017 to Apr 30, 2017		$ (2,772)	$ (2,772)	$ (2,772)
Subtotal - GA Class B variances not related to Year 2015	**$ (766,420)**	**$ (45,594)**	**$ (812,014)**	**$ (45,594)**
TOTAL CLAIM - 1589 RSVA GA Class B variance	**$ (766,420)**	**$ (45,594)**	**$ (812,014)**	**$ (78,844)**

If the actual carrying charges from Jan 1, 2016 to Apr 30, 2016 of the principal disposition during 2016 would not be entered the account balance proposed for disposition would be $33,251 higher credit for Account 1589 RSVA GA – Class B.

The continuity of the transactions as submitted within the DVA Continuity Schedule:

Account 1589 RSVA GA Class B - Continuity of proposed balance for disposition	Principal	INTEREST	TOTAL	INTEREST DVA Continuity Schedule Columns available for Interest
Continuity				
RSVA Transactions during Year 2013	$ 1,842,822	$ 24,613	$ 1,867,435	$ 24,613
RSVA Transactions during Year 2014	$ 7,300,454	$ 24,010	$ 7,324,465	$ 24,010
RSVA Transactions during Year 2015	$ (766,420)	$ 74,526	$ (691,894)	$ 74,526
Subtotal - Year-to-date balance at Dec 31, 2015 - RRR Trial Balance	**$ 8,376,856**	**$ 123,150**	**$ 8,500,006**	**$ 123,150**
Carrying Charge on principal from Jan 1, 2016 to Apr 30, 2016	$ -	$ 33,251	$ 33,251	
Disposition during 2016 - instructed by the OEB (with carrying charge up to Apr 30, 2016)	$ (9,143,276)	$ (190,792)	$ (9,334,068)	$ (190,792)
Carrying Charge on principal from Jan 1, 2016 to Dec 31, 2016	$ -	$ (8,431)	$ (8,431)	$ (8,431)
Carrying Charge on principal from Jan 1, 2017 to Apr 30, 2017	$ -	$ (2,772)	$ (2,772)	$ (2,772)
TOTAL CLAIM - 1589 RSVA GA Class B variance	**$ (766,420)**	**$ (45,594)**	**$ (812,014)**	**$ (78,844)**

London Hydro updated the actual carrying charges from Jan 1, 2016 to Apr 30, 2016 of the principal disposition during 2016 by combining it with the forecasted interest from Jan 1, 2016 to Dec 31, 2016 on the Dec 31-2015 principal balances adjusted for disposition during 2016 in Column BQ of the DVA Continuity Schedule.

Deferral and Variance Accounts	2016 Projected Interest on Principal Proposed for Disposition in 2017 Jan 1 to Dec 31 1.10%	Interest on Principal carried to Apr 30, 2016, Disposition in 2016	DVA Cont. Sch. Column BQ TOTAL 2016 Interest Jan 1 to Dec 31 1.10%
Group 1 Accounts			
Smart Metering Entity Charge Variance Account	$ (270)	$ 292	$ 22
RSVA - Wholesale Market Service Charge	$ (78,094)	$ (26,586)	$ (104,680)
Variance WMS – Sub-account CBR Class A	$ 507	$ -	$ 507
Variance WMS – Sub-account CBR Class B	$ 8,913	$ -	$ 8,913
RSVA - Retail Transmission Network Charge	$ (2,497)	$ 8,388	$ 5,890
RSVA - Retail Transmission Connection Charge	$ (6,164)	$ 5,427	$ (736)
RSVA - Power	$ (4,098)	$ (1,699)	$ (5,796)
RSVA - Global Adjustment Class B	$ (8,431)	$ 33,251	$ 24,820
Disposition and Recovery/Refund of Regulatory Balances (2012)	$ -	$ -	$ -
Disposition and Recovery/Refund of Regulatory Balances (2013)	$ -	$ (2,099)	$ (2,099)
Disposition and Recovery/Refund of Regulatory Balances (2014)	$ 13	$ -	$ 13
Subtotal Group 1 Accounts	**$ (90,121)**	**$ 16,974**	**$ (73,147)**

9-Staff-59

Annual Amounts in Accounts 1518 and 1548
Ref: E9/T4/S1, p. 10
Ref: DVA Continuity Schedule

The total principal for Account 1518 and Account 1548 in Exhibit 9 agree to that in the DVA Continuity Schedule. However, the amount recorded in each year is different between Exhibit 9 and the DVA Continuity Schedule as seen in the table below.

a) Please explain the difference.
b) If the amounts in the DVA Continuity Schedule are correct, please explain the fluctuations year over year.

		2012	2013	2014	2015	Total
Account 1518	E9-T1-S4-Page 10	$22,668	$ 304	$22,625	$ 40,626	$ 86,223
	DVA Continuity Schedule	-$8,898	-$9,104	$4,247	$ 99,977	$ 86,222
		$ 31,566	$ 9,408	$ 18,378	-$ 59,351	$ 1
Account 1548	E9-T1-S4-Page 10	-$1,781	-$ 285	$1,207	$ 769	-$90
	DVA Continuity Schedule	$31,007	$32,235	$34,601	-$97,933	-$ 90
		-$32,788	-$32,520	-$33,394	$98,702	$ -

LH Response:

(a)

The DVA Continuity Schedule reflects the values filed for each year under RRR E2.1.7 Trial Balance. The RRR filings were based on the existing analysis for years up to 2014. The retail service activities and settlement process have changed since the original implementation. During Year 2015 London Hydro performed a detailed review of its retail activities and processes, employed in providing the services to its retailer associated customers, and updated its monthly analysis for USoA Accounts 1518 and 1548. As a result of this analysis an adjustment was also booked to bring the year-to-date variance up to date, effective January 1,

2012. The restated balances for each affected year are included in E9-T1-S4 Page 10 of the application.

(b)

The restated balances included in E9-T1-S4 Page 10 reflect the actual variances resulting from providing retailer associated services.

Schedule of actual revenues and expenses by USoA account number that are incorporated into the variances recorded in Account 1518 and 1548:

Transactions	USoA	2012	2013	2014	2015
Retailer Charges	4082	$ (139,561)	$ (119,353)	$ (104,398)	$ (92,212)
Incremental Expenses to provide retail services	5315	162,228	119,657	127,023	132,837
RCVA Retail	**1518**	**$ 22,668**	**$ 304**	**$ 22,625**	**$ 40,626**
STR Charges	4084	$ (5,628)	$ (4,180)	$ (2,745)	$ (2,951)
Incremental Expenses to provide retail services	5315	3,847	3,895	3,951	3,720
RCVA STR	**1548**	**$ (1,781)**	**$ (285)**	**$ 1,207**	**$ 769**

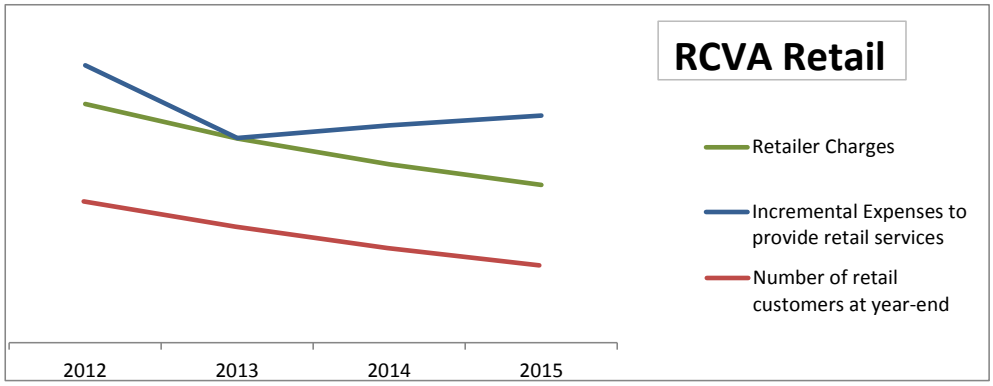
Year	2012	2013	2014	2015
Number of retail customers at year-end	12,843	11,168	9,748	8,589

There is an increasing trend of customers switching from retailer services to standard supply service. Consequently, there is less revenue from retailer charges while system changes are still required to continue to comply with billing requirements and serve those customers who have chosen to buy their electricity from a retailer.

Cost fluctuations resulted from the following events and upgrades:

- Year 2012: Increased contracted costs for Customer Information System to optimize SAP implemented EBT design for retailer settlement functionality.
- Year 2013: New contract EBT hub service provider resulted in cost reduction.

Year 2015: Changes to the Bill Presentation Regulation (O.Reg. 275/04) for low-volume customers, who have a contract for electricity with a retailer, regarding the presentation of costs associated with losses on invoices.



9-Staff-60

Disposition of Account 1592
Ref: E9/T4/S1, p. 12

London Hydro is requesting disposition of Account 1592, sub-account HST/OVAT ITCs for ($163k). London Hydro disposed of this account in its 2013 cost of service application. Per the Filing Requirements dated June 28, 2012, this sub-account was to include balances up to the effective date of the rate order. Please confirm that London Hydro only disposed of balances up to Dec. 31, 2011 and did not include a forecasted balance up to April 30, 2013in its 2013 cost of service application.

LH Response:

London Hydro confirms that it did not include a forecasted balance up to April 30, 2013 in its 2013 cost of service rate application (EB-2012-0146). It included only the audited balance accumulated up to December 31, 2011 with carrying charges to April 30, 2013.

London Hydro is requesting the disposition of the remainder of this liability accumulated during Year 2012, with applicable interest, in its 2017 cost of service application.

9-Staff-61

Cap and Trade Deferral Account
Ref: E1/T2/S1, p. 21

London Hydro is requesting a Cap and Trade deferral account as requested by Brantford Power Inc. in EB-2016-0058. Brantford Power Inc. agreed to not establish the deferral account as part of the settlement agreement in its proceeding.

a) Please explain how the account would meet the eligibility criteria of the establishment of a new account, those being causation, materiality and prudence as per the Filing Requirements.
b) Please confirm that no costs related to cap and trade have been included in this application. If not, please indicate where these costs have been included and how much has been included.
c) Please explain how London Hydro is planning to distinguish costs solely attributable to the cap and trade program (as compared to other cost pressures that may arise from year to year).

LH Response:

(a)

At the time of application the impacts of the Cap and Trade were not a known factor and mechanisms of disclosure had not been determined or disclosed. The impacts of the cost of Cap and Trade have made headlines leading up to and post its implementation date of January 1, 2017. For simple reference London Hydro includes the following as one example of what is being conveyed in the media.

"What is the impact to us as consumers? Regrettably, much of the initial impact of this program will be felt by end users. From electricity to natural gas, gasoline to propane, along with other fuels, users will experience increased prices tied directly to the initial roll out of the cap and trade program. The cost of carbon allowances incurred by propane and fuels importers and producers will negatively affect prices beginning January 1, 2017. Sales of affected products will include additional charges as noted below:

It is estimated that these costs will initially equate to approximate increases of 2.78 cents per litre for propane, 4.27 cents per litre for motor fuels (gasoline), and 5.44 cents per litre for diesel fuels and 4.95 cents per litre for heating oil." [1]

However public disclosure of the explicit costs related to Cap and Trade have been deliberately excluded by such agencies as the OEB. The following is extracted from the same article above.

"Surprisingly, the Ontario Energy Board ruled that it is not a requirement to separately disclose the cost of cap and trade on bills despite stake-holder groups' interest in disclosure."

Hence London Hydro has not been afforded the disclosure mechanisms required and therefore will not be in a position to segregate the incremental costs of Cap and Trade as originally anticipated and therefore formally rescinds our request for this deferral account.

(b)

London Hydro would confirm that no costs related to cap and trade have been included in this application.

(c)

Please reference a) above.

[1] http://dowlerkarn.com/capandtrade/

9-Staff-62

Climate Change Action Plan Deferral Account
Ref: E9/T10/S1, p. 4-5

London Hydro is requesting a Climate Change Action Plan Deferral Account to record unplanned infrastructure transformer upgrades, electrical system upgrades and other such costs incurred when directly related to the Climate Change Action Plan and not directly reimbursed in full by customer contributions or other subsidies.

a) Per the Filing Requirements, in the event an applicant seeks an accounting order to establish a new deferral/variance account, the eligibility criteria of causation, materiality and prudence must be met. Please discuss how the requested account meets the eligibility criteria.
b) London Hydro indicates that if the request for the account is denied, London Hydro would herein request to have its Electricity Distribution Licence amended to affect the application of customer contributions on residential service changes as a result of activities directly related to the Climate Change Action Plan.
   i. Is London Hydro requesting to amend its license in this application if the account is denied?
   ii. Please explain what is meant by “affect the application of customer contributions on residential service changes” in the amendment London Hydro referenced.

LH Response:

(a)

For the purpose of this discussion London Hydro relies on the following definitions of causation, materiality and prudence

> ***Causation:*** *Amounts should be directly related to events where the amount must be clearly outside of the base upon which rates were derived.*
>
> ***Materiality:*** *The amounts must exceed the Board-defined materiality threshold and have a significant influence on the operation of the distributor.*
>
> ***Prudence:*** *The amount must have been prudently incurred. This means that the distributor’s decision to incur the amount must represent the most cost-effective option (not necessarily least initial cost) for ratepayers.*

With respect to causation London Hydro would note that there are many activities directed in the Climate Change Action Plan as introduced by the Ministry of Environment and Climate Change. For simple reference London Hydro would note the directive to increase the number of electric vehicles (EV) to be used in the province of Ontario. To promote this initiative the government is expanding EV and residential charging station rebates and introducing free-overnight charging to encourage the use of EV's. Historically London Hydro has sized residential developments to allow for normal household consumption. Let's say for simplicity that an average home consumes 2 kW in peak demand. Normally for every 10 homes there is a 20 kVA transformer circuit installed. Should growth in EV's occur there is the potential for a requirement to supply an additional 4 kW of peak demand to power up the vehicle? Potentially one or two vehicles on a transformer circuit may not cause any harm to the system. More than two could tax the system and cause outages and damage to equipment. London Hydro would be required in such events to change out transformation to allow for such events.

With respect to materiality the scope of costs to be incurred is currently indeterminate and dependent on the popularity of the rebate program and diversification of participants. London Hydro would suggest that materiality will be known more fully once time has evolved and the program has been in place for several years

With respect to prudence, that will be a test for the OEB once time has evolved and the program has been in place for several years. Currently the most effective solution will most likely be the replacement of transformers. In the future there is a strong possibility for alternative equipment to be invented to levelize charging. London Hydro will always pursue the least cost alternatives when available.

(b)

(i)

Yes London Hydro is requesting to amend its licence to allow the recovery of implicit customer contributions to recover localized incremental costs.

(ii)

London Hydro is suggesting that it will design a customer contribution program such that the implicit costs required to affect the necessary system changes are localized and shared fairly among the customers creating the costs.

9-Staff-63

Burden Reduction Bill Deferral Account
Ref: E9/T10/S1, p. 5-6
Ref: E4/T1/S5, p. 39

London Hydro is requesting for a Burden Reduction Bill Deferral Account to record the excess of one and a half times the average bad debt write-off amounts experienced in the preceding three years should Bill 218 be enacted and should the OEB exercise the elongation of disconnection periods in excess of currently prescribed periods.

a) Per the Filing Requirements, in the event an applicant seeks an accounting order to establish a new deferral/variance account, the eligibility criteria of causation, materiality and prudence must be met. Please discuss how the requested account meets the eligibility criteria.

LH Response:

For the purpose of this discussion London Hydro relies on the following definitions of causation, materiality and prudence

Causation: Amounts should be directly related to events where the amount must be clearly outside of the base upon which rates were derived.

Materiality The amounts must exceed the Board-defined materiality threshold and have a significant influence on the operation of the distributor.

Prudence The amount must have been prudently incurred. This means that the distributor's decision to incur the amount must represent the most cost-effective option (not necessarily least initial cost) for ratepayers.

With respect to causation London Hydro would note that the act as stated may allow the OEB to exercise the curtailment of disconnection procedures for extended periods of time. Back in 2002/2003 the government directed similar activity wherein London Hydro experienced higher than average bad debt write-offs. London Hydro would suggest that such action again will have similar consequences.

With respect to materiality the scope of costs to be incurred is currently indeterminate and dependent on the length of curtailment and diversification of participants. London Hydro would suggest that materiality will be known more fully once time has evolved and the program has been put in place.

With respect to prudence, that will be a test for the OEB once time has evolved and the curtailment has been in put in place.

b) London Hydro has included $700k in OM&A for bad debt expenses in the 2017 revenue requirement. Please explain whether this amount included in rates will be included as an offset in the requested deferral account.

LH Response:

London Hydro has requested that the offset amount be the average of the previous 3 years actual amount times 1.5.

9-Staff-64

Draft Accounting Order for Requested DVAs
Ref: E9/T10/S1

Per the Filing requirements, please provide a draft accounting order for the four requested DVAs: Retiree Life Insurance, Pension & Other Post-Employment Benefits, Cap and Trade Deferral Account, Climate Change Action Plan Deferral Account, and Burden Reduction Deferral Account.

LH Response:

Note: London Hydro has rescinded request for the Cap and Trade Deferral Account

Draft Accounting Order- Retiree Life Insurance

London Hydro shall establish the following deferral account, effective May 1, 2017:

- 1508-Other Regulatory Assets, Sub-Account – Retiree Life Insurance Deferral Account.

London Hydro currently pays life insurance premiums on behalf of a large group of retirees associated with a plan that is no longer offered. As there are no new retirees being added to this plan, the annual premiums continue to increase significantly. The difference between the expected cost of premiums and the amounts to be recovered from 2017-2021, based on this COS Application, is $486,417. This difference is substantial and, accordingly, the Company is requesting the creation of a deferral account to record the difference.

The new deferral account will be used to record all premiums and potential buyouts paid regarding life insurance benefits, offset by the annual amount recovered through rates. The difference will remain in the newly created deferral account, to be collected or repaid by London Hydro at a later time through rates.

London Hydro will seek disposition of this account to recover the amounts so recorded in its next cost of service rate application.

London Hydro will propose a disposition period at the time of disposition, with consideration to the level of variance captured in the account and the potential bill impacts to customers.

Carrying charges will apply to this account.

Sample Accounting Entries

Illustration Assumptions:

Retiree Life Insurance annual cost on 2017 COS basis is $407,530

Retiree Life Insurance (2021) cash basis is $601,998 (Reference Exhibit 4 Tab 1, Schedule 5 Page 352)

Sample entry (2021):

Account Number	Description	DR	CR
1508	Other Regulatory Assets, Retiree Life Insurance Variance Account	$194,468	
5000	OM&A- Retiree Life Insurance		$194,468

Draft Accounting Order- P&OPEB IFRS Transitional Adjustments

London Hydro shall establish the following deferral account, effective May 1, 2017:

- 1508-Other Regulatory Assets, Sub-Account – P&OPEB IFRS Transitional Adjustments Deferral Account.

London Hydro is requesting the creation of a deferral account to record adjustments made upon transition from CGAAP to IFRS in connection with unamortized actuarial gains and losses, and past service awards not recognized under CGAAP as well as actuarial gains and losses resulting during 2014 and 2015.

London Hydro is seeking disposition of this account to recover the amounts so recorded in this cost of service rate application.

London Hydro proposes a disposition period of one year, with consideration to the level of variance captured in the account and the potential bill impacts to customers.

Carrying charges will be calculated and applied to this account upon approval of disposition.

Sample Accounting Entries

Illustration Assumptions:

P&OPEB IFRS Transitional Adjustments is $1,548,600

Sample entry (May 1, 2017):

Account Number	Description	DR	CR
1508	Other Regulatory Assets, P&OPEB IFRS Transitional Adjustments Deferral Account	$1,548,600	
3000	Retained Earnings		$1,548,600

Draft Accounting Order- Climate Change Action Plan Deferral Account

London Hydro shall establish the following deferral account, effective May 1, 2017:

- 1508-Other Regulatory Assets, Sub-Account – Climate Change Action Plan Deferral Account - Capital.
- 1508-Other Regulatory Assets, Sub-Account – Climate Change Action Plan Deferral Account – Operating Expense.
- 1508-Other Regulatory Assets, Sub-Account – Climate Change Action Plan Deferral Account – Stranded Assets.

London Hydro is herein requesting the establishment of a deferral account to be applied to unplanned infrastructure transformer upgrades, electrical system upgrades, and other such costs incurred when directly related to the Climate Change Action Plan and not directly reimbursed in full by customer contributions or other subsidies. There is no certainty, at this point, about the scope and timing of program costs. London Hydro is accordingly unable to forecast its costs -- capital, operating and stranded assets -- with sufficient certainty to include them as an ACM for rate-making purposes.

The balance of each account, including carrying charges, would be examined and disposed of by the Board in a future proceeding. The Board could ensure, therefore, that London Hydro would recover only the costs that were prudently incurred and are reasonable.

London Hydro would reference Guideline G-2011-0001 Smart Meter Funding and Cost Recovery – Final Disposition December 15, 2011. Similar accounting concepts used for Smart Meter Cost Recovery will be proposed for accounting and disposition of this account.

Draft Accounting Order- Burden Reduction Bill Deferral Account

London Hydro shall establish the following deferral account, effective May 1, 2017:

- 1508-Other Regulatory Assets, Sub-Account – Burden Reduction Bill Deferral Account.

London Hydro herein requests the establishment of a deferral account to recover amounts in excess of one and one half times the average bad debt write-off amounts experience in the three preceding years should Bill 218 be enacted as worded and should the OEB exercise the elongation of disconnection periods in excess of currently prescribed periods.

London Hydro will seek disposition of this account to recover the amounts so recorded in its next cost of service rate application.

London Hydro will propose a disposition period at the time of disposition, with consideration to the level of variance captured in the account and the potential bill impacts to customers.

Carrying charges will apply to this account.

Sample entry:

Impacted year Bad Debt Expense: $1,325,000
Previous 3 year average Bad Debt Expense: $750,000
One and one half times previous 3 year average Bad Debt Expense: $1,125,000

Account Number	Description	DR	CR
1508	Other Regulatory Assets, Burden Reduction Bill Deferral Account	$200,000	
5000	OM&A- Bad Debt Expense		$200,000

File Number: EB-2016-0091

Date Filed: January 17, 2017

Tab 3 of 5

Exh 9 LPMA Interrogatories

9-LPMA-60

Ref: Exhibit 9, Tab 1, Schedule 10

Please confirm that in the EB-2016-0058 Decision and Order the Board approved a settlement proposal wherein the following was agreed to by Brantford Power Inc. ("BPI") and the intervenors:

The Parties agree that BPI will not establish a Cap and Trade Variance Account as requested in the Application. The Parties acknowledge that the Test Year Revenue Requirement does not specifically include any provision for increased costs associated with the implementation of Ontario's Cap and Trade Program. The Parties agree that, should the OEB make a generic variance account available to capture the costs of Cap and Trade for which BPI would normally qualify, nothing in this agreement will prevent BPI from using such a variance account and disposing of the balances in that variance account.

Does London Hydro agree that the cap and trade variance account should not be established as part of this application, but if the OEB were to make a generic variance account available to capture the cost of cap and trade for which London Hydro would normally qualify, nothing would prevent London Hydro from using such a variance account and disposing of the balances in the variance account. If not, please explain why not.

LH Response:

London Hydro agrees that the cap and trade variance account should not be established as part of this application, but if the OEB were to make a generic variance account available to capture the cost of cap and trade for which London Hydro would normally qualify, nothing would prevent London Hydro from using such a variance account and disposing of the balances in the variance account. Please reference 9-Staff-61.

9-LPMA-61

Ref: Exhibit 9, Tab 1, Schedule 10

What is the expected revenue requirement associated with expenditures that would be included in the climate change action plan deferral account?

LH Response:

Please reference 9-Staff-62. With respect to revenue requirement the scope of costs to be incurred is currently indeterminate and dependent on the popularity of the rebate program and diversification of participants. London Hydro would suggest that this will be known more fully once time has evolved and the program has been in place for several years.

9-LPMA-62

Ref: Exhibit 9, Tab 1, Schedule 10

a) Please provide the bad debt write-off expense included in the test year revenue requirement.
b) Please provide the bad debt write-off amounts for each of 2013, 2014, 2015 and the forecast based on as many months of actual data as are available for 2016.

LH Response:

(a)

The bad debt write-off expense included in the proposed 2017 Test Year is $700,000.

(b)

Actual amounts written-off for each of the fiscal years ended 2013 to 2016 is as follows:

Write-off Amounts	
Year	**Amount**
2013 Actual	$ 335,938
2014 Actual	$ 464,772
2015 Actual	$ 554,301
2016 Actual	$ 730,787

File Number: EB-2016-0091

Date Filed: January 17, 2017

Tab 4 of 5

Exh 9 SEC Interrogatories

9-SEC-23

[9/1/10, p. 3] With respect to the proposed new Cap and Trade Deferral Account:

(a) Please demonstrate that the proposed new account will meet the requirement of materiality.
(b) Please provide a draft accounting order for the new account, specifying in detail the costs to be included in the account.

LH Response:

Please reference 9-Staff-61. London Hydro is rescinding request for this account.

File Number: EB-2016-0091

Date Filed: January 17, 2017

Tab 5 of 5

Exh 9 VECC Interrogatories

9-VECC-64

Reference: E9/T1/S5

a) Please provide a list of all new deferral or variance accounts LHI is applying for in this application.
a) For each account please provide a precedent of another utility who has had a similar account approved by the Ontario Energy Board.

LH Response:

(a)

- RETIREE LIFE INSURANCE
- PENSION & OTHER POST-EMPLOYMENT BENEFITS (P&OPEB)
- CAP AND TRADE DEFERRAL ACCOUNT
- CLIMATE CHANGE ACTION PLAN DEFERRAL ACCOUNT
- BURDEN REDUCTION BILL DEFERRAL ACCOUNT

(b)

RETIREE LIFE INSURANCE

London Hydro is not aware of any other utility that has a similar account approved by the OEB

PENSION & OTHER POST-EMPLOYMENT BENEFITS (P&OPEB)

London Hydro is not aware of any other utility that has a similar account approved by the OEB

CAP AND TRADE DEFERRAL ACCOUNT

Request rescinded.

CLIMATE CHANGE ACTION PLAN DEFERRAL ACCOUNT

London Hydro is not aware of any other utility that has a similar account approved by the OEB. However London Hydro could equate this program to the Smart Meter implementation program.

BURDEN REDUCTION BILL DEFERRAL ACCOUNT

London Hydro is not aware of any other utility that has a similar account approved by the OEB.

9-VECC-65

Reference: E9/T1/S5

a) Please explain how the Green Button Project meets the criteria for deferral account 1534 and 1535 given its that it is an ongoing operation of the utility. Specifically, what distinguishes the "pilot" portion of this project from any other part?
b) Please explain why the VAR compensators were booked into the smart grid deferral account rather than being considered ongoing utility work.

LH Response:

(a)

The cost of the pilot phase includes the expenses associated only with the initial exploration, demonstration and development of the Green Button initiative in response of the Ministry of Energy asking London Hydro to participate in the Green Energy pilot program. The costs booked to the deferral accounts represent the initial pilot phase investments and OM&A expenses of the project. The initial pilot phase involved the design, development and demonstration of a pilot solution only of the Green Button application, and the promotion of the initiative within London Hydro's customer base to help them to understand and proactively manage their electricity use. The cost of the project had not been budgeted for in the previous cost of service rate application. This distinguishes the pilot phase from the costs acquired later when the application became an ongoing operation of the utility.

Through standardization of the application data format, certification and further development of the program it became an ongoing operation of the utility. The costs associated with this phase are not included in the deferral accounts.

(b)

The VAR Compensator project was a pilot project and had not been budgeted for in the previous cost of service rate application.

London Hydro provided its electric grid facilities to host the VAR compensator pilot project with engineering support. According to the guidelines, referenced on pages 1-2 of E9/T1/S5 of London Hydro's cost of service rate application (EB-2016-0091), the associated costs were booked to 1534 Smart Grid Capital Deferral Account as investments related to smart grid demonstration (pilot) project. The decision to classify this pilot project as such was also strengthened by the fact that this project was partially funded by the Smart Grid Fund, which supports such innovative projects to improve the electricity grid and is administered by the Ministry of Energy.