

Exhibit	Tab	Schedule	Appendix	Contents
10 –LRAM and SSM				
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			A	Third Party Review of Guelph Hydro Electric Systems Inc.'s LRAM/SSM

OVERVIEW

Guelph Hydro's CDM efforts have been successful, and as a result, kWh consumption and kW demand have decreased causing Guelph Hydro to experience distribution revenue losses. The Board has authorized distributors to apply for Lost Revenue Adjustment Mechanism "LRAM" and Shared Savings Mechanism "SSM" adjustments. The authorization to apply for LRAM and SSM adjustments are derived from the Board's December 2004 Decision on the Pollution Probe motion (RP-2004-0203); the OEB's May 2005 Report on the 2006 Electricity Distribution Rate Handbook ("the Report", Board File No. RP-2004-0188); and the Guidelines for Electricity Distributor Conservation and Demand Management (EB-2008-0037), issued on March 28, 2008.

At page 107 of the May 2005 Report on the 2006 EDR Handbook, the Board addressed LRAM recoveries, stating:

"In its December 2004 Decision (RP-2004-0203), the Board concluded that an LRAM was appropriate and that it should apply to 3rd tranche expenditures. The Board indicated, at that time, that the LRAM formula would be established as part of the 2006 proceeding.

The Board continues to believe that an LRAM is appropriate and concludes that it will be retrospective, not prospective. At this time, greater accuracy will be achieved if the LRAM is calculated after-the-fact, based on actual results.

Accordingly, a distributor will be expected to calculate the energy savings by customer class and to value those energy savings by the Board-Approved distribution charge appropriate to that class. The resulting amount may be claimed in a subsequent rate year as compensation for lost revenue".

With respect to SSM, at page 110 of the Report, the OEB wrote:

"The Board, in its (RP-2004-0203) Decision, found that a distributor shareholder incentive was an appropriate way to encourage distributors to pursue CDM programs. The Board continues to be of this view. Distributors should be rewarded with 5 percent of the net savings established by the TRC test. The Board recognizes that it will be essential to establish certain inputs and to define avoided costs. Accordingly, the Board's Conservation Manual will address these matters. This will allow parties to screen CDM programs and calculate the relevant incentives."

At page 111 of the Report, the OEB wrote:

“The SSM will apply to TRC benefits achieved by 3rd tranche expenditures as well as any incremental expenditures that are approved in 2006. However, as in the case of the Board’s Decision with respect to 2005, the incentive will not apply to utility-side activities. Since the SSM will be retrospective, no claims for a shareholder incentive should be made in the 2006 Rate Applications.”

There has been considerable discussion in this proceeding as to whether CDM expenditures on the utility side should be differentiated from customer-side expenditures. The Board recognizes that conservation programs should have a balance between the two. It is important to recall however, the Board’s earlier finding that the SSM incentive does not apply to utility-side investments. The Board previously ruled with respect to the 2005 SSM that the inclusion of capitalised assets into rate base provides sufficient incentives. The Board continues to hold that view.”

The Guidelines for Electricity Distributor CDM state:

“5.1 Eligible LRAM programs

LRAM is available regardless of whether the programs are funded by the OPA or through distribution rates. The LRAM applies to programs implemented by the distributor, within its licensed service area, including programs delivered by the distributor itself and/or programs delivered for the distributor by a third party (under contract with the distributor, either in relation to rate-funded programs, or where the distributor has contracted with the OPA but has outsourced CDM program delivery to a third party). ”

And further:

“6.1 Eligible SSM programs

The SSM is available for customer focused initiatives that are funded through distribution rates and where the costs of the initiatives are expensed, such as efficiency improvements in the use of electricity. The SSM is not available for utility-side expenditures or programs that are not funded through distribution rates, such as those funded by the OPA. Where a program is initially funded through distribution rates, but is subsequently funded by the OPA, SSM will only be available for the period in which the program was funded through distribution rates.”

In accordance with the Report and the Guidelines for Electricity Distributor Conservation and Demand Management, Guelph Hydro’s LRAM request includes OPA funded as well as

1 distribution rate funded programs, while the SSM request includes programs funded through
2 distribution rates. Guelph Hydro has calculated energy savings by customer class and valued
3 those savings by the Board-approved distribution charge appropriate to each class, as required by
4 the Board.

5 Furthermore, Guelph Hydro submits to the Board that Guelph Hydro has complied with the
6 independent third party review requirements for LRAM and SSM recoveries as laid out on page
7 28 of the Guidelines for Electricity Distributor Conservation and Demand Management (EB-
8 2008-0037), which states:

9 *“Where a distributor is making a claim for LRAM in relation to programs funded by the*
10 *OPA, or where the distributors making a claim for LRAM and/or SSM in relation to*
11 *programs funded through distribution rates, distributors should engage an independent*
12 *third party. This independent third party review applies to LRAM or SSM claims made in*
13 *relation to programs funded in 2007 and beyond.”*

14 The presence of third party data verification should provide the OEB with reassurance that the
15 amounts claimed by Guelph Hydro for SSM and LRAM are reasonable and serve to maintain the
16 interests of the rate payers. Please refer to Exhibit 10, Tab 1, Schedule 6, Appendix A for Total
17 Energy Advice & Management Ltd. (“TEAM”)’s review of Guelph Hydro’s CDM programs,
18 program results and LRAM and SSM submission. Embedded in this review is a summary by
19 year and rate class of both Guelph Hydro’s distribution rate funded conservation programs, as
20 well as OPA contracted programs.

21 **Background:**

22 In its 2008 Cost of Service application (EB-2007-0742), Guelph Hydro requested and the OEB
23 approved an LRAM and SSM recovery of \$80,869 and \$23,348, respectively. The recovery
24 encompassed the revenue loss in 2005 and 2006. The amounts were approved to be recovered
25 through volumetric rate riders over a three-year period ending April 30, 2010.

26 In the Application submitted June 30, 2011, Guelph Hydro originally requested a recovery that
27 covered the revenue loss during the 2007 to 2009 period. However, on September 16, 2011,
28 Guelph Hydro received from the OPA a “2010 CDM Final Results Summary” which describes

1 the total measured and/or allocated CDM results attributed to Guelph Hydro Electric Systems
2 Inc. for 2010. Guelph Hydro has subsequently updated this Exhibit 10, and Guelph Hydro's
3 Independent Third Party Reviewer, TEAM, has updated its LRAM and SSM Review, included in
4 Appendix A of this submission.

5
6
7 In its Chapter 2 Filing Requirements for Electricity transmission and Distribution Applications,
8 the Board stated that

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

15 Guelph Hydro Electric Systems Inc. is now seeking lost revenue recovery that covers the
16 revenue loss during the period 2007 to 2010.

17 .

SUMMARY OF LRAM/SSM REQUEST:

Table 1

LRAM and SSM Total Amounts and Rate Riders by Class

2012 Test Year - LRAM and SSM Rate Rider											
Rate Class	Amounts (2007 to 2009)		Billing Units (2012)		Rate Riders			Three Year Rate Rider	Four Year Rate Rider	Number of Years to Use	Rate Rider to Use
	LRAM	SSM			LRAM	SSM	Total	Total	Total	(3 or 4)	Total
	\$	\$		Metrics	\$/unit (kWh or kW)	\$/unit (kWh or kW)	\$/unit (kWh or kW)	\$/unit (kWh or kW)	\$/unit (kWh or kW)	4	\$/unit (kWh or kW)
Residential	\$569,605	\$33,821	377,001,404	kWh	0.0015	0.0001	0.0016	0.0005	0.0004		0.0004
GS < 50 kW	\$145,469		148,053,484	kWh	0.0010	0.0000	0.0010	0.00033	0.0002		0.0002
GS 50 to 999 kW	\$20,290	\$12,142	1,038,526	kW	0.0195	0.0117	0.0312	0.0104	0.0078		0.0078
GS 1000 to 4999 kW	\$22,955	\$7,997	1,014,427	kW	0.0226	0.0079	0.0305	0.0102	0.0076		0.0076
Large Use	\$22,532	\$8,151	489,259	kW	0.0461	0.0167	0.0627	0.0209	0.0157		0.0157
USL	\$54,295		2,229,301	kWh	0.0244	0.0000	0.0244	0.0081	0.0061		0.0061

To minimize monthly bill impacts, a 4 year recovery period is proposed, as shown in Table 1 above. These rates and corresponding rate riders are based on the energy savings and lost revenues set out in this Exhibit, Tab 1, Schedule 3, Table 2.

LOST REVENUE ADJUSTMENT MECHANISM:

The purpose of the LRAM adjustment is to remove any disincentive a utility may have towards CDM programs, by compensating a local distribution company (LDC) with a portion of lost revenues. The LRAM is determined by calculating the energy savings by customer class and valuing those energy savings by multiplying these quantities against the Board-approved variable distribution rate corresponding to the appropriate class, excluding any regulatory Asset Recovery rate riders.

The reduction in distribution revenue is calculated on the forgone volumes resulting from CDM activities by class and at the variable distribution rates applicable to the years 2007, 2008, 2009 and 2010.

A summary of the energy and demand savings by rate class by year resulting from the CDM activities is included in Table 2.

Table 2: Guelph Hydro's 2007 Net Savings as Verified by TEAM										
	2007		2008		2009		2010		2007-2010	
	kW	kWh	kW	kWh	kW	kWh	kW	kWh	kW	kWh
Residential	712	9,508,175	492	8,369,173	455	9,002,578	456	6,985,516	2,115	33,865,442
GS < 50 kW	11	15,020	16	54,370	594	2,453,006	594	6,766,038	1,216	9,288,435
GS 50-999 kW	1,390	526,506	2,060	800,090	1,939	2,415,184	1,939	3,255,698	7,329	6,997,479
GS > 1000 kW	1,966	40,665	3,721	4,340,226	2,929	7,004,809	2,929	5,265,460	11,544	16,651,160
Large User	1,959	245,865	3,187	329,733	2,761	1,463,197	2,761	2,105,603	10,667	4,144,397
Unmetered Scattered Load	0	942,614	0	471,307	0	471,307	0	471,307	0	2,356,536
TOTAL	6,038	11,278,845	9,475	14,364,900	8,678	22,810,081	8,679	24,849,622	32,870	73,303,449

In Table 3A, Guelph Hydro has translated the energy and demand savings of Table 2 into lost revenue by rate class for 2007, 2008, 2009 and 2010, using the applicable variable distribution rates appropriate to each rate class. Table 3B reflects the distribution volumetric rates, with no rate riders/adders included, used to calculate the LRAM of Table 3A. This calculation results in a

- 1 Total LRAM of \$835,146 for all customer classes from Residential to Large User, as well as
- 2 Unmetered Scattered Load.

Table 3A: Guelph Hydro's 2007-2010 LRAM Calculation

	2007		2008		2009		2010		2007-2010
	kW	kWh	kW	kWh	kW	kWh	kW	kWh	Total
Residential	0	169,246	0	137,254	0	148,543	0	114,562	\$569,605
GS < 50 kW	0	302	0	859	0	38,757	0	105,550	\$145,469
GS 50-999 kW	3,722	0	5,766	0	5,447	0	5,355	0	\$20,290
GS > 1000 kW	4,087	0	7,292	0	5,784	0	5,792	0	\$22,955
Large User	3,685	0	6,859	0	5,990	0	5,998	0	\$22,532
Unmetered Scattered Load	0	18,947	0	11,736	0	11,830	0	11,783	\$54,295
TOTAL	\$11,494	\$188,494	\$19,918	\$149,849	\$17,221	\$199,130	\$17,145	\$231,895	\$835,146

Table 3B: Distribution Volumetric Rates - no rate riders/adders included

Class	metric	2007	2008	2009	2010
Residential	\$/KWh	0.0178	0.0164	0.0165	0.0164
GS<50 kW	\$/KWh	0.0201	0.0158	0.0158	0.0156
GS 50 to 999 kW	\$/KW	2.6771	2.7994	2.8088	2.7615
GS 1000 to 4999 kW	\$/KW	2.0791	1.9595	1.9751	1.9777
Large User	\$/KW	1.8811	2.1526	2.1697	2.1725
USL	\$/kWh	0.0201	0.0249	0.0251	0.0250

1 The total LRAM recovery requested is \$835,146.

2 Guelph Hydro proposes to allocate the forgone distribution revenue from each rate class to that

3 class for recovery through a volumetric rate rider to be applied to the variable distribution rate

4 component for the applicable classes. As noted above, Guelph Hydro proposes to implement the

5 rate rider over a 4 year period, from January 1, 2012 to December 31, 2015, in order to mitigate

6 customer bill impacts.

SHARED SAVINGS MECHANISM:

SSM amounts are calculated based on the results of the TRC test, defined as a test that *“measures the net costs of a demand-side management program as a resource option based on the total costs of the program, including both the participant’s and the LDC’s costs.”*

In measuring the effectiveness of a program the TRC test examines the benefits of a program, which is typically the avoided resource costs such as electricity, with program costs which includes both the LDC’s costs and the participant’s costs, over the life of the program. This is considered the Net Present Value (“NPV”) of the sum of future benefits and must be greater than zero to be cost effective.

The TRC test also provides for free ridership such that a program with a high degree of free ridership is less cost effective for the LDC to pursue as the program costs may exceed the program benefits.

A summary of Guelph Hydro’s distribution rate based CDM programs with savings results by program by year as verified by TEAM is included in Table 4.

Table 4: Guelph Hydro's Rate Based (Third Tranche) Program Savings Verified by TEAM

Program Type	Program Name	Rate Class	2007 In Year kWh Savings Net of FR	2008 In Year kWh Savings Net of FR	2009 In Year kWh Savings Net of FR	2010 In Year kWh Savings Net of FR	Total 2007 - 2010 In Year kWh Savings Net of FR
3rd Tranche	City Water Treatment	GS >1000 kW (Commercial)	0	4,020,000	4,020,000	4,020,000	12,060,000
3rd Tranche	Earth Day	Residential	416,880	750,384	750,384	750,384	2,668,032
3rd Tranche	Enerconnect Coupon - 15 W CFLs	Residential	167,962	167,962	128,946	101	464,970
3rd Tranche	Guelph Environmental Leadership	Residential	3,863	2,756	0	0	6,619
3rd Tranche	Guelph Partnership for Innovation	Residential	30,980	30,980	24,455	0	86,414
3rd Tranche	LED Traffic Lights	Unmetered Scattered Load	942,614	471,307	471,307	471,307	2,356,536
3rd Tranche	Light Up a Life	Residential	50,436	50,436	47,366	16,675	164,913
3rd Tranche	Seasonal Baskets (Holiday Hampers)	Residential	373,129	294,933	93,160	22,928	784,150
3rd Tranche	Seasonal Light Exchange	Residential	9,360	9,360	9,360	9,360	37,440
3rd Tranche/Custom	Smart Wash	Residential	0	29,923	86,337	149,495	265,755
3rd Tranche	Switch to Cold	Residential	455,500	0	0	0	455,500
3rd Tranche	Univ of Guelph Lighting	Large User (Institutional)	233,665	233,665	233,665	233,665	934,660
3rd Tranche	Washer Dryer Replacement Program (Low Income)	Residential	6,409	6,409	6,409	6,409	25,636
3rd Tranche	WCDSB/UGDSB School Board	GS 50-999 kW (Institutional)	502,107	605,785	605,785	605,785	2,319,463
TOTAL			3,192,905	6,673,900	6,477,174	6,286,109	22,630,088

The amount of the SSM incentive is based on 5% of the NPV of the net benefits of Guelph Hydro CDM programs.

An independent third party, TEAM, has calculated the SSM amounts for Guelph Hydro in accordance with the methodology set out in the TRC Guide. TEAM has relied on previous Conservation and Demand Management Plan Annual Reports for years 2007, 2008 and 2009 verified for participation levels and the accuracy of measures and inputs used in the Total Resource Costs (TRCs) coupled with OPA data to calculate the SSM amounts for Guelph Hydro.

Similarly to the LRAM amounts, SSM recoveries have been reduced by the calculated load reduction according to the appropriate free ridership for each program. The list of these free riderships, as well as other inputs, is provided in the Independent Third Party Review of Guelph Hydro Electric Systems Inc.'s LRAM/SSM (Exhibit 10, Tab 1, Schedule 6, Appendix A).

A summary of Guelph Hydro's SSM calculation by program by year is included in Table 5.

Table 5: Guelph Hydro's SSM Calculation							
Program Name	Rate Class	Net TRC Benefits (\$)					SSM Amount (\$)
		2007	2008	2009	2010	TOTAL	
Earth Day	Residential	78,878.50	127,858.44	0.00	0.00	206,736.94	10,336.85
Light Up a Life	Residential	7,713.61	0.00	0.00	0.00	7,713.61	385.68
Seasonal Baskets	Residential	10,606.21	0.00	0.00	0.00	10,606.21	530.31
Smart Wash	Residential	0.00	109,251.01	225,255.09	116,859.29	451,365.39	22,568.27
City Water Treatment	GS 1000-4999 kW (Commercial)	0.00	159,940.28	0.00	0.00	159,940.28	7,997.01
WCDSB/UGDSB School Board	GS 50-999 kW (Institutional)	225,332.06	17,516.00	0.00	0.00	242,848.06	12,142.40
Univ of Guelph Lighting	Large User (Institutional)	163,027.84	0.00	0.00	0.00	163,027.84	8,151.39
TOTAL		\$485,558.22	\$414,565.73	\$225,255.09	\$116,859.29	\$1,242,238.33	\$62,111.92

The total SSM recovery requested is \$62,111.92.

1 As with the LRAM adjustment, Guelph Hydro proposes that the SSM amount arising from CDM
2 activities in each rate class be allocated to that class, and that the SSM be recovered through a
3 single volumetric distribution rate rider, in combination with LRAM, applicable to each rate
4 class as identified by the CDM program. Also consistent with the LRAM rate rider, Guelph
5 Hydro proposes to implement the variable distribution rate rider over 4 years, from January 1,
6 2012 to December 31, 2015, to mitigate customer bill impacts.

RELIEF REQUESTED:

The value of Guelph Hydro's total combined claim for LRAM and SSM recovery is \$897,258.

As can be seen in Table 1 at Tab 1, Schedule 2, page 1 above, Guelph Hydro proposes that the portion of that combined amount applicable to each class be recovered through a single volumetric rate rider for each class. This volumetric distribution rate rider will reflect revenue losses in each respective customer class. Guelph Hydro proposes the rate riders reflect those in Table 1, of the preceding Table 1 in this exhibit (Tab 1, Schedule 2), and that the effective date for these LRAM and SSM rate riders be January 1, 2012 for a period of 4 years ending December 31, 2015.

A four year rate rider is proposed in order to mitigate and minimize the bill impact to the rate payers. The bill impacts are set out in Schedule 6, below.

BILL IMPACTS:

Guelph Hydro proposes that the LRAM and SSM amounts be recovered over 4 years through rate riders effective January 1, 2012 until December 31, 2015. Table 6 below provides a summary of the impacts of the proposed LRAM and SSM adjustments for the average customer in each affected rate class.

Table 6

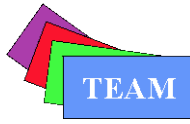
LRAM and SSM - Bill Impacts

Consumption per Month	Monthly Dollar Impact	Total Bill
Residential 800 kWh	\$0.32	0.26%
General Service < 50 kW 2,000 kWh	\$0.40	0.14%
General Service 50 to 999 kW 64,000 kWh and 160 kW	\$1.25	0.02%
General Service 1000 to 4999 kW 1,000,000 kWh and 2,200 kW	\$21.28	0.02%
Large Use 10,000,000 kWh and 15,000 kW	\$235.50	0.02%
Unmetered Scattered Load 65,000 kWh and 200 connections	\$396.50	3.80%

Guelph Hydro submits that the recovery of the LRAM and SSM over 4 years satisfactorily mitigates the rate impact to customers, and that further mitigation is not required.

APPENDIX A

Third Party Review of Guelph Hydro Electric Systems Inc.'s LRAM and SSM Submission



September 21, 2011

Mr. Matt Weninger, P.Eng.
Director of Metering & Conservation
Guelph Hydro Electric Systems Inc.
395 Southgate Drive
Guelph Ontario
N1G 4Y1

Re: Independent Third Party Review: 2007 – 2010 LRAM and SSM Amounts

Dear Matt,

Total Energy Advice & Management Ltd. ("TEAM") has completed the independent third party review required for Conservation and Demand Management (CDM) programs for the program years 2007, 2008, 2009 and 2010. TEAM's attached review concluded that Guelph Hydro Electric Systems Inc. (Guelph Hydro) used the appropriate input assumptions to calculate Total Resource Cost (TRC) values as well as the related Lost Revenue Amount Mechanism (LRAM) and Shared Savings Mechanism (SSM) amounts.

The attached report has been updated to incorporate 2010 savings data as well as the final 2011 Measures and Assumptions recently released by the OPA. Please note that during this process, it became apparent that a working draft of the report that had not yet incorporated the appropriate discount rates or measures and assumptions had previously been provided to Guelph Hydro. The attached report uses the correct discount rates, measures and assumptions as well as updating for 2010 savings data.

In the few instances where Guelph Hydro used internal assumptions, TEAM has evaluated the specific assumptions utilized by Guelph Hydro in the attached report and found them to be reasonable.

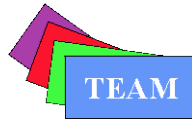
Please contact me if you have any questions.

Sincerely,

Linda Wainewright
Partner

Senior level commitment and expertise from start to finish.

1455 Eddie Shain Drive, Oakville, Ontario L6J 7C3
Phone : (905) 829-2710 Fax : (905) 829-2676 email: Linda.Wainewright@TheTeamLtd.com



Independent Third Party Review

Guelph Hydro Electric Systems Inc.

**Lost Revenue Adjustment Mechanism (LRAM) and
Shared Savings Mechanism (SSM)
Results Related to
2007, 2008, 2009 and 2010
Conservation and Demand Management Programs**

Senior level commitment and expertise from start to finish.

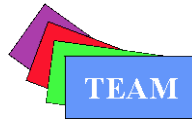
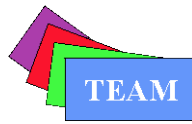


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1. Executive Summary

Guelph Hydro Electric Systems Inc. (Guelph Hydro) has actively encouraged Conservation and Demand Management (CDM) programs in their franchise resulting in reduced electricity, water and natural gas consumption.

Total Energy Advice & Management Ltd. (TEAM) has evaluated the 2007, 2008, 2009 and 2010 CDM program results as well as Guelph Hydro's Lost Revenue Adjustment Mechanism (LRAM) and Shared Savings Mechanism (SSM) amounts that result from those programs. Guelph Hydro has adhered to the requirements under the Guidelines for Electricity Distributor Conservation and Demand Management (EB-2008-0037) (the "CDM Guidelines") as well as recent decisions of the Board relevant to LRAM and SSM amounts.

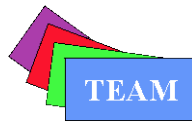
Specifically, for programs funded through rates, TEAM found that Guelph Hydro accurately reported their program participation levels for all programs. In addition, TEAM confirms that Guelph Hydro used the appropriate input assumptions to calculate the applied for LRAM and SSM amounts as discussed in Section 5.

For CDM programs offered through the OPA, TEAM confirms that Guelph Hydro used the OPA program results, including participation levels and input measures, as reported by the OPA for 2007, 2008 and 2009. The 2010 OPA program data was provided at a summary level. TEAM confirms Guelph Hydro used the information provided by the OPA for 2010.

The overall energy savings verified by TEAM by rate class for 2007, 2008, 2009 and 2010 have been shown in the tables below. These values are net of free riders and are for a full 12 months.

Guelph Hydro's 2007 Net Savings as Verified by TEAM

	kW Savings	kWh Savings
Residential	712	9,508,175
GS < 50 kW	11	15,020
GS 50-999 kW	1,390	526,506
GS > 1000 kW	1,966	40,665
Large User	1,959	245,865
Unmetered Scattered Load	0	942,614
TOTAL	6,038	11,278,845



Guelph Hydro's 2008 Net Savings as Verified by TEAM

	kW Savings	kWh Savings
Residential	492	8,369,173
GS < 50 kW	16	54,370
GS 50-999 kW	2,060	800,090
GS > 1000 kW	3,721	4,340,226
Large User	3,187	329,733
Unmetered Scattered Load	0	471,307
TOTAL	9,475	14,364,900

Guelph Hydro's 2009 Net Savings as Verified by TEAM

	kW Savings	kWh Savings
Residential	455	9,002,578
GS < 50 kW	594	2,453,006
GS 50-999 kW	1,939	2,415,184
GS > 1000 kW	2,929	7,004,809
Large User	2,761	1,463,197
Unmetered Scattered Load	0	471,307
TOTAL	8,678	22,810,081

Guelph Hydro's 2010 Net Savings as Verified by TEAM

	kW Savings	kWh Savings
Residential	456	6,985,516
GS < 50 kW	594	6,766,038
GS 50-999 kW	1,939	3,255,698
GS > 1000 kW	2,929	5,265,460
Large User	2,761	2,105,603
Unmetered Scattered Load	0	471,307
TOTAL	8,679	24,849,622



2. Background

TEAM has reviewed the detailed information for each CDM program offered by Guelph Hydro to its customers during the 2007, 2008, 2009 and 2010 program years. Our review evaluated the participation levels and input measures used in the Total Resource Cost (TRC) calculations as well as the related LRAM and SSM amounts.

Guelph Hydro claimed the LRAM and SSM amounts for the calendar years 2005 and 2006 that resulted from the 2005 and 2006 CDM programs during 2008. Guelph Hydro is now claiming the LRAM amounts resulting from the 2005 and 2006 CDM programs for the calendar years 2007, 2008, 2009 and 2010 as well as LRAM and SSM amounts for the program years 2007 to 2010, inclusive.

The 2007-2010 LRAM claim includes several adjustments from the 2005 and 2006 years as detailed below. These adjustments were applied to the 2007 savings results.

<u>Description of Adjustment</u>	<u>Amount of Adjustment (kWh)</u>
LED Traffic Lights (2005 program) 2006 energy savings not claimed	471,307
OPA Reported Retroactive Adjustments (2005 and 2006 adjustments)	
Every Kilowatt Counts	1,990,328
Cool and Hot Savings	122,479
Fridge Retirement	49,615
Total Adjustments	<u>2,633,730</u>

3. Overall Findings

Guelph Hydro has included annual savings in their LRAM claim that reflect appropriate input assumptions consistent with section 7.3 of the CDM Guidelines and TEAM has verified the participation levels for the 2007, 2008, 2009 and 2010 programs.

4. Participation Levels

TEAM was able to verify the participation level for all programs based on a detailed review of supporting material that included invoices, receipts and incentive payments for all programs funded through rates. For OPA programs, TEAM was able to verify the participation levels against data reported by the OPA as required by the OEB.

5. Input Assumptions



TEAM confirms that the 2007, 2008, 2009 and 2010 energy savings that resulted from 2005 through 2010 CDM programs used the appropriate input measures available consistent with Section 7.3 of the CDM Guidelines as well as recent OEB decisions related to LRAM and SSM with any exceptions noted in section 5.a below. The input assumptions for OPA funded programs for 2007, 2008, 2009 and 2010 were provided by the OPA.

TEAM has provided a summary of the LRAM input assumptions used by Guelph Hydro for each program in Appendix A.

a. Internal Input Assumptions

In several programs funded through rates, custom assumptions were used since the OEB or OPA, depending on the year, did not include measures relevant to the technology in question. The custom input assumptions used for the 2007 through 2010 programs funded through rates are as noted below.

2007 Programs

WCDSB/UGDSB School Board program – This was a custom program involving load control equipment being installed at two schools in the Wellington Catholic District School Board. TEAM has confirmed that Guelph Hydro used a free rider rate of 30%. The OPA measures did not list input assumptions for the equipment installed. TEAM has verified that the input assumptions used were based on actual consumption levels before and after the load control equipment was installed.

2008 Programs

City Water Treatment – Guelph Hydro provided an incentive to upgrade the cogeneration facility at the City of Guelph's Waste Water Treatment facility. This was a custom program. However, the free rider rate used was 0% due to the fact that Guelph Hydro had specific knowledge that this program would not have moved forward without the incentive provided. Savings were calculated based on actual load displaced.

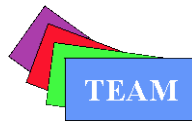
WCDSB/UGDSB School Board program – This was a custom program to install load control equipment in two schools in the Upper Grand District School Board. TEAM has confirmed that Guelph Hydro used a free rider rate of 30%. The OPA measures did not list input assumptions for the equipment installed. TEAM has verified that the input assumptions used were conservative savings estimates at the time based on a review of projected energy savings levels for multiple building automation system technologies.

2009 and 2010 Programs

All program input assumptions used OEB or OPA measures, as appropriate.

6. Recommended Improvements / Forward Looking Evaluation Work

The third tranche Market Adjustment Revenue Requirement (MARR) programs have completed, so no additional evaluation work has been noted for those programs. The OPA's evaluator has evaluated the OPA programs, so no additional evaluation work has been recommended for those



programs. The Smart Wash program continued into 2010 and has been managed and promoted to ensure growth of the program and continued savings for customers.



Appendix A: LRAM Input Assumptions by Year by Program

Program Type	Program Name	Ghesi or WEDCO (all Ghesi after 2006)	CDM Report Year	Customer Class	# of Participants	# of Participants After FR	Freerider (%)	Gross kW Savings	Annual Gross kWh Savings	kW Savings net of FR	Annual kWh Savings Net of FR	Source of Input Assumptions
3rd Tranche	Earth Day	Ghesi	2007	Residential	10,000	9,000	10%	10	463,200	9	416,880	OPA Measures List
3rd Tranche	Seasonal Baskets	Ghesi	2007	Residential	550	495	10%	1	25,476	0	22,928	OPA Measures List
3rd Tranche	Light Up a Life	Ghesi	2007	Residential	400	360	10%	0	18,528	0	16,675	OPA Measures List
3rd Tranche	WCDSB - School Board	Ghesi	2007	Institutional	2	1	30%	0	717,296	0	502,107	Ghesi Internal Assumptions
3rd Tranche	Univ of Guelph Lighting	Ghesi	2007	Institutional	3,574	3,217	10%	4	259,628	3	233,665	OPA Measures List
2007 3rd Tranche Totals								15	1,484,127	13	1,192,255	
OPA	Great Refrigerator Roundup	Ghesi	2007	Consumer	594	240	60%	49	408,185	20	164,960	OPA Reported
OPA	Cool & Hot Savings Rebate	Ghesi	2007	Consumer	1,082	551	49%	267	373,762	127	190,297	OPA Reported
OPA	Every Kilowatt Counts	Ghesi	2007	Consumer	39,169	28,711	27%	64	1,556,248	44	1,140,723	OPA Reported
OPA	peaksaver	Ghesi	2007	Consumer, Busi	6	5	10%	4	0	3	0	OPA Reported
OPA	Summer Savings	Ghesi	2007	Consumer	4,126	495	88%	4,073	7,275,246	489	873,029	OPA Reported
OPA	Social Housing Pilot	Ghesi	2007	Consumer Low-	84	84	0%	12	103,677	12	103,677	OPA Reported
OPA	Energy Efficiency Assistance for Houses	Ghesi	2007	Consumer Low-	5	5	0%	3	4,749	3	4,749	OPA Reported
OPA	Renewable Energy Standard Offer	Ghesi	2007	Consumer, Busi	2	2	0%	13	14,605	13	14,605	OPA Reported
OPA	ERIP	Ghesi	2007	Business	n/a	n/a	10%	33	90,367	29	81,331	OPA Reported
OPA	Loblaw & York Region DR	Ghesi	2007	Business, Indus	0	0	0%	406	0	406	0	OPA Reported
OPA	Demand Response 1	Ghesi	2007	Business, Indus	0	0	0%	4,878	0	4,878	0	OPA Reported
2007 OPA Totals								9,801	9,826,839	6,025	2,573,372	
3rd Tranche	Earth Day	Ghesi	2008	Residential	8,000	7,200	10%	8	370,560	7	333,504	OPA Measures List
3rd Tranche	Smart Wash	Ghesi	2008	Residential	497	447	10%	4	33,248	3	29,923	OPA Measures List
3rd Tranche	City Water Treatment	Ghesi	2008	Commercial	1	1	0%	500	4,020,000	500	4,020,000	Ghesi Internal Assumptions
3rd Tranche	UGDSB - School Board	Ghesi	2008	Institutional	2	1	30%	0	148,112	0	103,678	Ghesi Internal Assumptions
2008 3rd Tranche Totals								512	4,571,920	511	4,487,105	

Senior level commitment and expertise from start to finish.



Program Type	Program Name	GHESI or WEDCO (all GHESI after 2006)	CDM Report Year	Customer Class	# of Participants	# of Participants After FR	Freerider (%)	Gross kW Savings	Annual Gross kWh Savings	kW Savings net of FR	Annual kWh Savings Net of FR	Source of Input Assumptions
OPA	Great Refrigerator Roundup	GHESI	2008	Consumer	1,019	553	46%	84	774,144	45	419,847	OPA Reported
OPA	Cool Savings Rebate	GHESI	2008	Consumer	952	547	43%	232	367,668	134	211,203	OPA Reported
OPA	Summer Sweepstakes	GHESI	2008	Consumer	6,513	5,053	22%	73	289,605	57	224,693	OPA Reported
OPA	Every Kilowatt Counts	GHESI	2008	Consumer	49,086	19,792	60%	140	2,659,023	58	1,072,119	OPA Reported
OPA	Peaksaver	GHESI	2008	Consumer, Busi	237	213	10%	205	4,100	185	3,690	OPA Reported
OPA	ERIP	GHESI	2008	Business	n/a	n/a	n/a	173	1,009,633	100	559,122	OPA Reported
OPA	High Performance New Construction	GHESI	2008	Business	0	0	30%	7	6,198	5	4,338	OPA Reported
OPA	Renewable Energy Standard Offer	GHESI	2008	Consumer, Busi	4	4	0%	11	12,299	11	12,299	OPA Reported
OPA	Loblaw & York Region DR	GHESI	2008	Business, Indus	0	0	0%	442	0	442	0	OPA Reported
OPA	Demand Response 1	GHESI	2008	Business, Indus	0	0	0%	6,644	0	6,644	0	OPA Reported
OPA	Demand Response 3	GHESI	2008	Business, Indus	0	0	0%	1,285	0	1,285	0	OPA Reported
2008 OPA Totals								9,296	5,122,671	8,965	2,507,311	
Custom	Smart Wash	GHESI	2009	Residential	937	843	10%	7	62,682	6	56,414	OPA Measures List
2009 Custom Totals								7	62,682	6	56,414	
OPA	Great Refrigerator Roundup	GHESI	2009	Consumer	835	434	48%	107	688,026	55	365,890	OPA Reported
OPA	Cool Savings Rebate	GHESI	2009	Consumer	1,676	717	57%	387	601,306	169	256,915	OPA Reported
OPA	Every Kilowatt Counts	GHESI	2009	Consumer	34,639	10,772	69%	124	1,217,536	45	446,736	OPA Reported
OPA	Peaksaver	GHESI	2009	Consumer, Busi	372	334	10%	199	354	179	318	OPA Reported
OPA	ERIP	GHESI	2009	Business	n/a	n/a	n/a	659	5,789,031	479	4,374,629	OPA Reported
OPA	High Performance New Construction	GHESI	2009	Business	1	1	30%	80	183,060	56	128,142	OPA Reported
OPA	Power Savings Blitz	GHESI	2009	Business	n/a	n/a	n/a	571	2,227,194	542	2,115,834	OPA Reported
OPA	Loblaw & York Region DR	GHESI	2009	Business, Indus	0	0	0%	423	0	423	0	OPA Reported
OPA	Demand Response 1	GHESI	2009	Business, Indus	0	0	0%	2,538	111,498	2,538	111,498	OPA Reported
OPA	Demand Response 2	GHESI	2009	Business, Indus	0	0	0%	1,723	1,061,404	1,723	1,061,404	OPA Reported
OPA	Demand Response 3	GHESI	2009	Business, Indus	2	2	0%	2,462	20,272	2,462	20,272	OPA Reported
2009 OPA Totals								9,273	11,899,681	8,672	8,881,639	



Program Type	Program Name	GHESI or WEDCO (all GHESI after 2006)	CDM Report Year	Customer Class	# of Participants	# of Participants After FR	Freerider (%)	Gross kW Savings	Annual Gross kWh Savings	kW Savings net of FR	Annual kWh Savings Net of FR	Source of Input Assumptions	
Custom	Smart Wash	GHESI	2010	Residential	1,049	944	10%	8	70,176	7	63,158	OPA Measures List	
2010 Custom Totals								8	70,176	7	63,158		
OPA	Great Refrigerator Roundup	GHESI	✓	2010	Consumer	799	424	53%	0	868,880	0	461,070	OPA Reported
OPA	Cool Savings Rebate	GHESI	✓	2010	Consumer	1,434	608	42%	480	770,053	209	326,714	OPA Reported
OPA	Every Kilowatt Counts	GHESI	✓	2010	Consumer	5,504	2,545	46%	36	370,696	15	171,436	OPA Reported
OPA	Peaksaver	GHESI	✓	2010	Consumer, Busi	733	666	91%	452	1,782	411	1,620	OPA Reported
OPA	ERIP	GHESI	✓	2010	Business	17	9	51%	423	2,463,064	221	1,249,706	OPA Reported
OPA	High Performance New Construction	GHESI	✓	2010	Business	5	4	70%	298	680,364	209	476,255	OPA Reported
OPA	Multifamily Energy Efficiency Rebates	GHESI	✓	2010	Business	1	1	74%	5	66,071	4	48,669	OPA Reported
OPA	Peaksaver	GHESI	✓	2010	Business	10	9	91%	7	71	6	65	OPA Reported
OPA	Power Savings Blitz	GHESI	✓	2010	Business	428	427	100%	377	1,147,190	374	1,144,533	OPA Reported
OPA	Loblaw & York Region DR	GHESI	✓	2010	Business, Indus	0	0	0%	473	0	473	0	OPA Reported
OPA	Demand Response 1	GHESI	✓	2010	Business, Indus	0	0	0%	0	0	0	0	OPA Reported
OPA	Demand Response 2	GHESI	✓	2010	Business, Indus	0	0	0%	1,926	2,250,748	1,926	2,250,748	OPA Reported
OPA	Demand Response 3	GHESI	✓	2010	Business, Indus	4	4	100%	4,073	79,804	4,073	79,804	OPA Reported
2010 OPA Totals								8,550	8,698,722	7,920	6,210,618		



Appendix B: Savings for OPA Programs (MW and MWh) as reported by OPA

Gross Summer Peak Demand Savings (MW)

Initiative Name	Program Name	Program Year	Results Status	2007	2008	2009	2010
Secondary Refrigerator Retirement Pilot	Consumer	2006	Final	0.0125	0.0125	0.0125	0.0125
Cool & Hot Savings Rebate	Consumer	2006	Final	0.1380	0.1380	0.1380	0.1380
Every Kilowatt Counts	Consumer	2006	Final	0.0416	0.0416	0.0416	0.0416
Demand Response 1	Business, Industrial	2006	Final	0.0000	0.0000	0.0000	0.0000
Loblaws & York Region Demand Response	Business, Industrial	2006	Final	0.0000	0.0000	0.0000	0.0000
Great Refrigerator Roundup	Consumer	2007	Final	0.0495	0.0495	0.0495	0.0495
Cool & Hot Savings Rebate	Consumer	2007	Final	0.2665	0.2665	0.2665	0.2665
Every Kilowatt Counts	Consumer	2007	Final	0.0640	0.0564	0.0564	0.0564
peaksaver®	Consumer, Business	2007	Final	0.0038	0.0038	0.0038	0.0038
Summer Savings	Consumer	2007	Final	4.0729	1.2147	0.5848	0.5848
Affordable Housing Pilot	Consumer Low-Incom	2007	Final	0.0000	0.0000	0.0000	0.0000
Social Housing Pilot	Consumer Low-Incom	2007	Final	0.0122	0.0122	0.0122	0.0122
Energy Efficiency Assistance for Houses Pilot	Consumer Low-Incom	2007	Final	0.0032	0.0032	0.0032	0.0032
Electricity Retrofit Incentive	Business	2007	Final	0.0325	0.0325	0.0325	0.0325
Demand Response 1	Business, Industrial	2007	Final	4.8780	0.0000	0.0000	0.0000
Loblaws & York Region Demand Response	Business, Industrial	2007	Final	0.4058	0.0000	0.0000	0.0000
Renewable Energy Standard Offer	Consumer, Business, I	2007	Final	0.0128	0.0128	0.0128	0.0128
Great Refrigerator Roundup	Consumer	2008	Final	0.0000	0.0836	0.0836	0.0836
Cool Savings Rebate	Consumer	2008	Final	0.0000	0.2323	0.2323	0.2323
Every Kilowatt Counts Power Savings Event	Consumer	2008	Final	0.0000	0.1400	0.1326	0.1326
peaksaver®	Consumer, Business	2008	Final	0.0000	0.2050	0.2050	0.2050
Summer Sweepstakes	Consumer	2008	Final	0.0000	0.0733	0.0420	0.0420
Electricity Retrofit Incentive	Consumer, Business	2008	Final	0.0000	0.1732	0.1732	0.1732
High Performance New Construction	Business	2008	Final	0.0000	0.0073	0.0073	0.0073
Power Savings Blitz	Business	2008	Final	0.0000	0.0000	0.0000	0.0000
Demand Response 1	Business, Industrial	2008	Final	0.0000	6.6442	0.0000	0.0000
Demand Response 3	Business, Industrial	2008	Final	0.0000	1.2848	0.0000	0.0000
Loblaws & York Region Demand Response	Business, Industrial	2008	Final	0.0000	0.4415	0.0000	0.0000
Renewable Energy Standard Offer	Consumer, Business	2008	Final	0.0000	0.0108	0.0108	0.0108
Great Refrigerator Roundup	Consumer	2009	Final	0.0000	0.0000	0.1073	0.1073
Cool Savings Rebate	Consumer	2009	Final	0.0000	0.0000	0.3871	0.3871
Every Kilowatt Counts Power Savings Event	Consumer	2009	Final	0.0000	0.0000	0.1235	0.1185
peaksaver®	Consumer, Business	2009	Final	0.0000	0.0000	0.1990	0.1990
Electricity Retrofit Incentive	Consumer, Business	2009	Final	0.0000	0.0000	0.6592	0.6592
High Performance New Construction	Business	2009	Final	0.0000	0.0000	0.0803	0.0803
Power Savings Blitz	Business	2009	Final	0.0000	0.0000	0.5709	0.5709
Demand Response 1	Business, Industrial	2009	Final	0.0000	0.0000	2.5377	0.0000
Demand Response 2	Business, Industrial	2009	Final	0.0000	0.0000	1.7232	0.0000
Demand Response 3	Business, Industrial	2009	Final	0.0000	0.0000	2.4616	0.0000
Loblaws & York Region Demand Response	Business, Industrial	2009	Final	0.0000	0.0000	0.4230	0.0000
2006 Subtotal				0.1922	0.1922	0.1922	0.1922
2007 Subtotal				9.8012	1.6516	1.0218	1.0218
2008 Subtotal				0.0000	9.2961	0.8869	0.8869
2009 Subtotal				0.0000	0.0000	9.2728	2.1223
Overall Total				9.9934	11.1399	11.3736	4.2232



Gross Energy Savings (MWh)

Initiative Name	Program Name	Program Year	Results Status	2007	2008	2009	2010
Secondary Refrigerator Retirement Pilot	Consumer	2006	Final	55	55	55	55
Cool & Hot Savings Rebate	Consumer	2006	Final	155	155	155	155
Every Kilowatt Counts	Consumer	2006	Final	3,531	3,531	3,531	455
Demand Response 1	Business, Industrial	2006	Final	0	0	0	0
Loblaw & York Region Demand Response	Business, Industrial	2006	Final	0	0	0	0
Great Refrigerator Roundup	Consumer	2007	Final	408	408	408	408
Cool & Hot Savings Rebate	Consumer	2007	Final	374	374	374	374
Every Kilowatt Counts	Consumer	2007	Final	1,556	1,531	1,531	1,531
peaksaver®	Consumer, Business	2007	Final	0	0	0	0
Summer Savings	Consumer	2007	Final	7,275	1,226	464	464
Affordable Housing Pilot	Consumer Low-Income	2007	Final	0	0	0	0
Social Housing Pilot	Consumer Low-Income	2007	Final	104	104	104	104
Energy Efficiency Assistance for Houses Pilot	Consumer Low-Income	2007	Final	5	5	5	5
Electricity Retrofit Incentive	Business	2007	Final	90	90	90	90
Demand Response 1	Business, Industrial	2007	Final	0	0	0	0
Loblaw & York Region Demand Response	Business, Industrial	2007	Final	0	0	0	0
Renewable Energy Standard Offer	Consumer, Business, In	2007	Final	15	15	15	15
Great Refrigerator Roundup	Consumer	2008	Final	0	774	774	774
Cool Savings Rebate	Consumer	2008	Final	0	368	368	368
Every Kilowatt Counts Power Savings Event	Consumer	2008	Final	0	2,659	2,646	2,646
peaksaver®	Consumer, Business	2008	Final	0	4	4	4
Summer Sweepstakes	Consumer	2008	Final	0	290	105	105
Electricity Retrofit Incentive	Consumer, Business	2008	Final	0	1,010	1,010	1,010
High Performance New Construction	Business	2008	Final	0	6	6	6
Power Savings Blitz	Business	2008	Final	0	0	0	0
Demand Response 1	Business, Industrial	2008	Final	0	0	0	0
Demand Response 3	Business, Industrial	2008	Final	0	0	0	0
Loblaw & York Region Demand Response	Business, Industrial	2008	Final	0	0	0	0
Renewable Energy Standard Offer	Consumer, Business	2008	Final	0	12	12	12
Great Refrigerator Roundup	Consumer	2009	Final	0	0	688	688
Cool Savings Rebate	Consumer	2009	Final	0	0	601	601
Every Kilowatt Counts Power Savings Event	Consumer	2009	Final	0	0	1,218	1,101
peaksaver®	Consumer, Business	2009	Final	0	0	0	0
Electricity Retrofit Incentive	Consumer, Business	2009	Final	0	0	5,789	5,789
High Performance New Construction	Business	2009	Final	0	0	183	183
Power Savings Blitz	Business	2009	Final	0	0	2,227	2,227
Demand Response 1	Business, Industrial	2009	Final	0	0	111	0
Demand Response 2	Business, Industrial	2009	Final	0	0	1,061	0
Demand Response 3	Business, Industrial	2009	Final	0	0	20	0
Loblaw & York Region Demand Response	Business, Industrial	2009	Final	0	0	0	0
2006 Subtotal				3,741	3,741	3,741	666
2007 Subtotal				9,827	3,752	2,990	2,990
2008 Subtotal				0	5,123	4,924	4,924
2009 Subtotal				0	0	11,900	10,590
Overall Total				13,568	12,617	23,556	19,170



Net Summer Peak Demand Savings (MW)

Initiative Name	Program Name	Program Year	Results Status	2007	2008	2009	2010
Secondary Refrigerator Retirement Pilot	Consumer	2006	Final	0.0112	0.0112	0.0112	0.0112
Cool & Hot Savings Rebate	Consumer	2006	Final	0.1135	0.1135	0.1135	0.1135
Every Kilowatt Counts	Consumer	2006	Final	0.0375	0.0375	0.0375	0.0375
Demand Response 1	Business, Industrial	2006	Final	0.0000	0.0000	0.0000	0.0000
Loblaw & York Region Demand Response	Business, Industrial	2006	Final	0.0000	0.0000	0.0000	0.0000
Great Refrigerator Roundup	Consumer	2007	Final	0.0202	0.0202	0.0202	0.0202
Cool & Hot Savings Rebate	Consumer	2007	Final	0.1270	0.1270	0.1270	0.1270
Every Kilowatt Counts	Consumer	2007	Final	0.0442	0.0400	0.0400	0.0400
peaksaver®	Consumer, Business	2007	Final	0.0034	0.0034	0.0034	0.0034
Summer Savings	Consumer	2007	Final	0.4888	0.1458	0.0702	0.0702
Affordable Housing Pilot	Consumer Low-Income	2007	Final	0.0000	0.0000	0.0000	0.0000
Social Housing Pilot	Consumer Low-Income	2007	Final	0.0122	0.0122	0.0122	0.0122
Energy Efficiency Assistance for Houses Pilot	Consumer Low-Income	2007	Final	0.0032	0.0032	0.0032	0.0032
Electricity Retrofit Incentive	Business	2007	Final	0.0293	0.0293	0.0293	0.0293
Demand Response 1	Business, Industrial	2007	Final	4.8780	0.0000	0.0000	0.0000
Loblaw & York Region Demand Response	Business, Industrial	2007	Final	0.4058	0.0000	0.0000	0.0000
Renewable Energy Standard Offer	Consumer, Business, Industrial	2007	Final	0.0128	0.0128	0.0128	0.0128
Great Refrigerator Roundup	Consumer	2008	Final	0.0000	0.0449	0.0449	0.0449
Cool Savings Rebate	Consumer	2008	Final	0.0000	0.1338	0.1338	0.1338
Every Kilowatt Counts Power Savings Event	Consumer	2008	Final	0.0000	0.0585	0.0559	0.0559
peaksaver®	Consumer, Business	2008	Final	0.0000	0.1845	0.1845	0.1845
Summer Sweepstakes	Consumer	2008	Final	0.0000	0.0568	0.0326	0.0326
Electricity Retrofit Incentive	Consumer, Business	2008	Final	0.0000	0.0996	0.0996	0.0996
High Performance New Construction	Business	2008	Final	0.0000	0.0051	0.0051	0.0051
Power Savings Blitz	Business	2008	Final	0.0000	0.0000	0.0000	0.0000
Demand Response 1	Business, Industrial	2008	Final	0.0000	6.6442	0.0000	0.0000
Demand Response 3	Business, Industrial	2008	Final	0.0000	1.2848	0.0000	0.0000
Loblaw & York Region Demand Response	Business, Industrial	2008	Final	0.0000	0.4415	0.0000	0.0000
Renewable Energy Standard Offer	Consumer, Business	2008	Final	0.0000	0.0108	0.0108	0.0108
Great Refrigerator Roundup	Consumer	2009	Final	0.0000	0.0000	0.0551	0.0551
Cool Savings Rebate	Consumer	2009	Final	0.0000	0.0000	0.1692	0.1692
Every Kilowatt Counts Power Savings Event	Consumer	2009	Final	0.0000	0.0000	0.0453	0.0445
peaksaver®	Consumer, Business	2009	Final	0.0000	0.0000	0.1791	0.1791
Electricity Retrofit Incentive	Consumer, Business	2009	Final	0.0000	0.0000	0.4790	0.4790
High Performance New Construction	Business	2009	Final	0.0000	0.0000	0.0562	0.0562
Power Savings Blitz	Business	2009	Final	0.0000	0.0000	0.5423	0.5423
Demand Response 1	Business, Industrial	2009	Final	0.0000	0.0000	2.5377	0.0000
Demand Response 2	Business, Industrial	2009	Final	0.0000	0.0000	1.7232	0.0000
Demand Response 3	Business, Industrial	2009	Final	0.0000	0.0000	2.4616	0.0000
Loblaw & York Region Demand Response	Business, Industrial	2009	Final	0.0000	0.0000	0.4230	0.0000
2006 Subtotal				0.1622	0.1622	0.1622	0.1622
2007 Subtotal				6.0248	0.3938	0.3182	0.3182
2008 Subtotal				0.0000	8.9646	0.5672	0.5672
2009 Subtotal				0.0000	0.0000	8.6717	1.5255
Overall Total				6.1870	9.5207	9.7193	2.5731



Net Energy Savings (MWh)

Initiative Name	Program Name	Program Year	Results Status	2007	2008	2009	2010
Secondary Refrigerator Retirement Pilot	Consumer	2006	Final	50	50	50	50
Cool & Hot Savings Rebate	Consumer	2006	Final	122	122	122	122
Every Kilowatt Counts	Consumer	2006	Final	3,178	3,178	3,178	410
Demand Response 1	Business, Industrial	2006	Final	0.0000	0.0000	0.0000	0
Loblaws & York Region Demand Response	Business, Industrial	2006	Final	0	0	0	0
Great Refrigerator Roundup	Consumer	2007	Final	165	165	165	165
Cool & Hot Savings Rebate	Consumer	2007	Final	190	190	190	190
Every Kilowatt Counts	Consumer	2007	Final	1,141	1,127	1,127	1,127
peaksaver®	Consumer, Business	2007	Final	0	0	0	0
Summer Savings	Consumer	2007	Final	873	147	56	56
Affordable Housing Pilot	Consumer Low-Incom	2007	Final	0	0	0	0
Social Housing Pilot	Consumer Low-Incom	2007	Final	104	104	104	104
Energy Efficiency Assistance for Houses Pilot	Consumer Low-Incom	2007	Final	5	5	5	5
Electricity Retrofit Incentive	Business	2007	Final	81	81	81	81
Demand Response 1	Business, Industrial	2007	Final	0	0	0	0
Loblaws & York Region Demand Response	Business, Industrial	2007	Final	0	0	0	0
Renewable Energy Standard Offer	Consumer, Business, I	2007	Final	15	15	15	15
Great Refrigerator Roundup	Consumer	2008	Final	0	420	420	420
Cool Savings Rebate	Consumer	2008	Final	0	211	211	211
Every Kilowatt Counts Power Savings Event	Consumer	2008	Final	0	1,072	1,067	1,067
peaksaver®	Consumer, Business	2008	Final	0	4	4	4
Summer Sweepstakes	Consumer	2008	Final	0	225	81	81
Electricity Retrofit Incentive	Consumer, Business	2008	Final	0	559	559	559
High Performance New Construction	Business	2008	Final	0	4	4	4
Power Savings Blitz	Business	2008	Final	0	0	0	0
Demand Response 1	Business, Industrial	2008	Final	0	0	0	0
Demand Response 3	Business, Industrial	2008	Final	0	0	0	0
Loblaws & York Region Demand Response	Business, Industrial	2008	Final	0	0	0	0
Renewable Energy Standard Offer	Consumer, Business	2008	Final	0	12	12	12
Great Refrigerator Roundup	Consumer	2009	Final	0	0	366	366
Cool Savings Rebate	Consumer	2009	Final	0	0	257	257
Every Kilowatt Counts Power Savings Event	Consumer	2009	Final	0	0	447	428
peaksaver®	Consumer, Business	2009	Final	0	0	0	0
Electricity Retrofit Incentive	Consumer, Business	2009	Final	0	0	4,375	4,375
High Performance New Construction	Business	2009	Final	0	0	128	128
Power Savings Blitz	Business	2009	Final	0	0	2,116	2,116
Demand Response 1	Business, Industrial	2009	Final	0	0	111	0
Demand Response 2	Business, Industrial	2009	Final	0	0	1,061	0
Demand Response 3	Business, Industrial	2009	Final	0	0	20	0
Loblaws & York Region Demand Response	Business, Industrial	2009	Final	0	0	0	0
2006 Subtotal				3,350	3,350	3,350	582
2007 Subtotal				2,573	1,834	1,742	1,742
2008 Subtotal				0	2,507	2,359	2,359
2009 Subtotal				0	0	8,882	7,670
Overall Total				5,924	7,691	16,333	12,353



Gross Summer Peak Demand Savings (MW)

Initiative Name	Program Name	Program Year	Results Status	2007	2008	2009	2010
Cool Savings Rebate	Consumer	2010	Final	0.0000	0.0000	0.0000	0.4803
Great Refrigerator Roundup	Consumer	2010	Final	0.0000	0.0000	0.0000	0.0359
Every Kilowatt Counts Power Savings Event	Consumer	2010	Final	0.0000	0.0000	0.0000	0.1371
peaksaver®	Consumer	2010	Final	0.0000	0.0000	0.0000	0.4515
Electricity Retrofit Incentive	Consumer, Business	2010	Final	0.0000	0.0000	0.0000	0.4230
High Performance New Construction	Business	2010	Final	0.0000	0.0000	0.0000	0.2984
Multifamily Energy Efficiency Rebates	Business	2010	Final	0.0000	0.0000	0.0000	0.0054
Peaksaver	Business	2010	Final	0.0000	0.0000	0.0000	0.0070
Power Savings Blitz	Business	2010	Final	0.0000	0.0000	0.0000	0.3774
Demand Response 1	Business, Industrial	2010	Final	0.0000	0.0000	0.0000	0.0000
Demand Response 2	Business, Industrial	2010	Final	0.0000	0.0000	0.0000	1.9255
Demand Response 3	Business, Industrial	2010	Final	0.0000	0.0000	0.0000	4.0727
Loblaw & York Region Demand Response	Business, Industrial	2010	Final	0.0000	0.0000	0.0000	0.4726
2010 Subtotal				0.0000	0.0000	0.0000	8.6868

Gross Energy Savings (MWh)

Initiative Name	Program Name	Program Year	Results Status	2007	2008	2009	2010
Cool Savings Rebate	Consumer	2010	Final	0	0	0	770
Great Refrigerator Roundup	Consumer	2010	Final	0	0	0	371
Every Kilowatt Counts Power Savings Event	Consumer	2010	Final	0	0	0	869
peaksaver®	Consumer	2010	Final	0	0	0	2
Electricity Retrofit Incentive	Consumer, Business	2010	Final	0	0	0	2,463
High Performance New Construction	Business	2010	Final	0	0	0	680
Multifamily Energy Efficiency Rebates	Business	2010	Final	0	0	0	66
Peaksaver	Business	2010	Final	0	0	0	0
Power Savings Blitz	Business	2010	Final	0	0	0	1,147
Demand Response 1	Business, Industrial	2010	Final	0	0	0	0
Demand Response 2	Business, Industrial	2010	Final	0	0	0	2,251
Demand Response 3	Business, Industrial	2010	Final	0	0	0	80
Loblaw & York Region Demand Response	Business, Industrial	2010	Final	0	0	0	0
2010 Subtotal				0	0	0	8,699

Net Summer Peak Demand Savings (MW)

Initiative Name	Program Name	Program Year	Results Status	2007	2008	2009	2010
Cool Savings Rebate	Consumer	2010	Final	0.0000	0.0000	0.0000	0.2087
Great Refrigerator Roundup	Consumer	2010	Final	0.0000	0.0000	0.0000	0.0153
Every Kilowatt Counts Power Savings Event	Consumer	2010	Final	0.0000	0.0000	0.0000	0.0700
peaksaver®	Consumer	2010	Final	0.0000	0.0000	0.0000	0.4105
Electricity Retrofit Incentive	Consumer, Business	2010	Final	0.0000	0.0000	0.0000	0.2214
High Performance New Construction	Business	2010	Final	0.0000	0.0000	0.0000	0.2089
Multifamily Energy Efficiency Rebates	Business	2010	Final	0.0000	0.0000	0.0000	0.0041
Peaksaver	Business	2010	Final	0.0000	0.0000	0.0000	0.0064
Power Savings Blitz	Business	2010	Final	0.0000	0.0000	0.0000	0.3738
Demand Response 1	Business, Industrial	2010	Final	0.0000	0.0000	0.0000	0.0000
Demand Response 2	Business, Industrial	2010	Final	0.0000	0.0000	0.0000	1.9255
Demand Response 3	Business, Industrial	2010	Final	0.0000	0.0000	0.0000	4.0727
Loblaw & York Region Demand Response	Business, Industrial	2010	Final	0.0000	0.0000	0.0000	0.4726
2010 Subtotal				0.0000	0.0000	0.0000	7.9900



Net Energy Savings (MWh)

Initiative Name	Program Name	Program Year	Results Status	2007	2008	2009	2010
Cool Savings Rebate	Consumer	2010	Final	0	0	0	327
Great Refrigerator Roundup	Consumer	2010	Final	0	0	0	171
Every Kilowatt Counts Power Savings Event	Consumer	2010	Final	0	0	0	461
peaksaver®	Consumer	2010	Final	0	0	0	2
Electricity Retrofit Incentive	Consumer, Business	2010	Final	0	0	0	1,250
High Performance New Construction	Business	2010	Final	0	0	0	476
Multifamily Energy Efficiency Rebates	Business	2010	Final	0	0	0	49
Peaksaver	Business	2010	Final	0	0	0	0
Power Savings Blitz	Business	2010	Final	0	0	0	1,145
Demand Response 1	Business, Industrial	2010	Final	0	0	0	0
Demand Response 2	Business, Industrial	2010	Final	0	0	0	2,251
Demand Response 3	Business, Industrial	2010	Final	0	0	0	80
Loblaw & York Region Demand Response	Business, Industrial	2010	Final	0	0	0	0
2010 Subtotal				0	0	0	6,211



Appendix C: Input Assumptions

2007 WCDSB - School Board

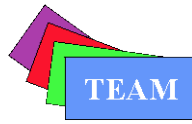
Efficient Technology & Equipment Description
Automation system upgrades at two Wellington Catholic District School Board schools in 2007. One of the significant benefits of this project was the ability for a 100-tonne chiller to be controlled that had previously run year round. Other efficiency upgrades included the repair and upgrade of the HVAC systems at two schools; replacing the control systems; optimizing the heat pump loop plant and the boiler plant; and installing new control units on all fan coil units, unit ventilators, heat pumps and Variable Air Volume units. Also, faulty valves and actuators were replaced. As noted above, the chiller plant was optimized and new controls were installed. Finally, all outdoor lighting was added to proper controllers and is now being controlled by astronomical schedules.
Base Technology & Equipment Description
Outdated control systems, some of which were installed when school was built roughly 40 years ago.

Resource Savings Assumptions

Electricity	kW or kWh
Savings of 502,107 kWh net of free riders - calculated based on consumption levels before and after installation	
Natural Gas	M³ or Btu or CFM
Not Applicable	
Water	L
Not Applicable	

Other Input Assumptions

Equipment Life	Years
10	
Incremental Cost	\$/kW or \$/kWh
\$0.0215 per kWh	
Free Ridership	%



30%



2008 City Water Treatment

Efficient Technology & Equipment Description
Upgrade of a co-generation facility at the City of Guelph's Waste Water Treatment facility. The upgrade included the installation of a scrubber to remove siloxane from the digester gas, as well as improvements to the cooling system to address overheating of the co-generation units. The total cost of the upgrades is approximately \$900,000.
Base Technology & Equipment Description
The existing base system included two reciprocating cogeneration engines and generators that used the methane gas collected as part of the wastewater treatment process to produce electricity to power the Waste Water Treatment Plant. The existing system needed to be upgraded in order to produce 500 kW of electricity.

Resource Savings Assumptions

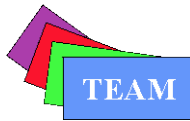
Electricity	kW or kWh
500 kW peak reduction and 4,020,00 kWh per year	
Natural Gas	M ³ or Btu or CFM
12,060 MMbtu per year	
Water	L
Not Applicable	

Other Input Assumptions

Equipment Life	Years
20	
Incremental Cost	\$/kW or \$/kWh
\$990 per kW (included both electricity and heat recovery)	
Free Ridership	%
0%	

2008 UGDSB - School Board

Efficient Technology & Equipment Description
Installation of building automation systems at two Upper Grand District School Board schools. Building Automation Systems including sensors, automatic controls and an intelligent monitoring system that constantly checks the temperature of the school were installed. These systems allow both schools to be monitored and the heating and cooling controlled from the head office of the



school board. The automation provides a level of control that decreases heating and cooling costs since spaces can be managed individually and the remote capability of the controls (monitored and adjusted over the internet) reduces on-site visits by school board operations and maintenance staff, thereby reducing operations costs for the school board.

Base Technology & Equipment Description

No technology was in place for building automation.

Resource Savings Assumptions

Electricity	kW or kWh
Savings of 148,112 kWh assumes 20% savings. This was a conservative savings estimate at the time based on a review of projected energy savings levels for multiple BAS technologies.	
Natural Gas	M³ or Btu or CFM
Savings of 31,172 m ³ assumes 20% savings (rationale as noted above).	
Water	L
Not Applicable	

Other Input Assumptions

Equipment Life	Years
10	
Incremental Cost	\$/kW or \$/kWh
\$0.0762 per kWh	
Free Ridership	%
30%	