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January 5, 2009

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

Attention: Kirsten Walli
Board Secretary

Re: Additional Evidence for Hydro Ottawa 2009 Electricity Distribution Rates Application
EB-2008-0188

Hydro Ottawa filed an application on November 7, 2008, under section 78 of the *Ontario Energy Board Act*, 1998, S.O. 1998, c 15 (Schedule B), seeking approval for changes to the rates charged for electricity distribution and retail transmission, to be effective May 1, 2009. The Ontario Energy Board (the "Board") assigned the application file number EB-2008-0188.

On December 18th, 2008 the Vulnerable Energy Consumers Coalition ("VECC") filed Interrogatories on the LRAM/SSM evidence of Hydro Ottawa's Application. Question 8b inquired if the Elenchus Research Associates Inc. ("ERA") Report referred to in Exhibit B-1-2 would be available before the deadline for Interrogatories, which is January 6th, 2009.

Hydro Ottawa provided VECC with a copy of the ERA Report on December 24th, 2008 and has electronically submitted a copy to the Ontario Energy Board as additional evidence to Hydro Ottawa's 2008 Electricity Distribution Rates Application. A copy of the ERA Report, dated December 15, 2008 is attached.

If further information is required, please contact the undersigned at 613-738-5499 ext 7499 or janescott@hydroottawa.com.

Yours truly,

Original signed by

Jane Scott
Manager, Rates and Revenue
Hydro Ottawa

Hydro Ottawa
Independent Third Party Audit of Third Tranche CDM Programs 2005-2007

A Report Prepared by
Elenchus Research Associates Inc.

Final Report
December 15, 2008

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1 EXECUTIVE SUMMARY – HIGHLIGHTS FROM THE EVIDENCE

Elenchus Research Associates ("ERA") confirms that Hydro Ottawa has demonstrated accurate and verifiable support for the data put forward in their claim for a 2007 Lost Revenue Adjustment Mechanism ("LRAM") and Shared Savings Mechanism ("SSM")[1]. They have met all the requirements as set out in the guidelines from the Ontario Energy Board ("OEB") and as further demonstrated in recent OEB Decisions for other Local Distribution Companies ("LDCs"). ERA's opinion was formed after reviewing input and output assumptions, conducting a site visit and meetings with Hydro Ottawa, verifying assumptions with source documents and against data provided through OEB reports.

Hydro Ottawa filed an application with the Ontario Energy Board for authorization to recover LRAM through an adjusted rate rider based on the performance in 2007 of its 2005-2007 Conservation and Demand Management ("CDM") programs. All of these programs are made available through the OEB approved third tranche funding, and although an independent audit of the results of these programs is not mandatory, Hydro Ottawa considered it prudent to provide an independent third party opinion in support of its application.

ERA was retained by Hydro Ottawa to conduct an independent third party review and audit of its LRAM/SSM application for consistency with OEB guidelines. As part of this process, ERA examined all program input assumptions to test the accuracy of the LRAM and SSM claims and to identify and explain any inconsistencies. The review dealt with Hydro Ottawa's records (eg., internal tracking documents, invoices from third parties), consultant studies and custom evaluations of specialized programs. ERA examined Hydro Ottawa's Total Resource Cost ("TRC") input and output assumptions to test for consistency with the Board's "Inputs and Assumptions for Calculating Total Resource Cost" dated March 28, 2008. The audit summary has been presented in the form of LRAM and SSM spreadsheets that trace all input and output assumptions, their origin and their validity.

ERA's review did not identify any material errors in the supporting data or the methodology relied on to calculate either the proposed LRAM or the proposed SSM. The LRAM tables were vetted against the source data to ensure consistency. The SSM parameters used were audited against those used in the LRAM calculations for the same technology and were consistent.

[1] Note that in EB-2008-0188, Hydro Ottawa presented the information for a SSM for 2007 CDM Programs however, because the amount was small chose not to request approval for a rate rider.

Overall, the audit identified that input and output assumptions are consistent with published sources and that accurate documentation exists to support the proposed LRAM and SSM. The audit team identified a few minor discrepancies; specifically, free rider rates that were higher than those recommended by the Board. These discrepancies have been corrected in the updated analysis. A new TRC analysis was prepared, reflecting the correct values. There are minor differences in these results, versus those reported in Hydro Ottawa's 2007 CDM Annual report. This updated information is correct and consistent with published sources. The detailed findings of the audit are provided in spreadsheet format in Appendix A.

2 INTRODUCTION

In 2005 Hydro Ottawa received approval from the OEB to fund CDM programs from the third tranche of the incremental market adjusted revenue requirement. Originally these programs were to conclude by September 30, 2007, however Hydro Ottawa was granted approval to extend the completion date to September 30, 2008. In addition, in 2007 Hydro Ottawa delivered CDM programs that were funded by the Ontario Power Authority ("OPA"). This audit focused on the third tranche programs and does not include any OPA funded programs.

A third party review and audit of third tranche CDM programs is not a strict requirement. Under new rules established in the spring of 2008, the OEB requires an independent audit of the results of CDM programs that are funded in 2007 and beyond. However, Hydro Ottawa wanted to ensure that its reporting was clear and defensible and that the information provided in support of their application would satisfy current requirements. ERA conducted a full audit of all input and output assumptions for CDM programs for the period 2005-2007. Many of these programs were discontinued in early 2007 as part of the coordinated introduction of similar programs offered through the OPA.

3 GENERAL METHODOLOGY AND APPROACH

ERA conducted an independent third party review and audit of the inputs and assumptions used in Hydro Ottawa's LRAM/SSM application for 2007, consistent with the currently established guidelines. This report outlines the approach taken and the results of that investigation.

ERA's overall approach consisted of three tasks:

Task 1: Site Visit with Hydro Ottawa's CDM Team (October 29/30, 2008 in Ottawa): activities included: discussions with Hydro Ottawa's internal CDM and regulatory teams to identify audit requirements; review of the suite of CDM programs; review of Hydro Ottawa's CDM program information tracking and reporting mechanisms and systems; and an assessment of areas for improvement.

Task 2: Review of Input and Output Assumptions: activities included developing a spreadsheet that traces all input and output assumptions, their origin and their validity; this spreadsheet is presented in tabular format in Appendix A to this report.

Task 3: Final Report and Recommendations: activities included: providing feedback on Hydro Ottawa's CDM evaluation process; providing recommendations on future evaluation activities and on program design, performance and tracking enhancements.

The results of this process are provided in the relevant sections of the report.

4 LRAM AND SSM REQUIREMENTS

As outlined by the OEB, an application for LRAM should include[2]:

- kW or kWh impacts, both gross and net of free riders, for each program and for each customer class;
- the free rider rate applied to each program and, where applicable, any differences by technology;
- Verification of the participation levels;
- Duration of the program in years (or months); including a start date or first year weighting, for measuers that were installed part way through the year;
- A summary of all input assumptions noting those that are consistent with OEB levels and providing justification for any deviations;
- A calculation of the impact of the CDM program on distribution revenues by customer class.

Much of this information is captured in Hydro Ottawa's annual CDM reports, which are filed with the OEB. Similar to LRAM, an application for SSM must demonstrate proven and verifiable energy savings. The eligible incentive is calculated on the net benefit of the combined portfolio of programs.

[2] EB-2008-0037, March 28, 2008, pp. 34-35

5 INDEPENDENT THIRD PARTY REVIEW

ERA conducted a full audit of all input and output assumptions for Hydro Ottawa CDM programs for the period 2005-2007. Although Hydro Ottawa delivered a variety of programs in 2007, the scope of this audit is limited to programs that were funded through the third tranche and, in some instances, were delivered in cooperation with other members of the Coalition of Large Distributors ("CLD"). Most programs focused on prescriptive or pre-defined/pre-approved measures. The custom projects were formally evaluated by Marbek Resource Consultants Ltd. ("Marbek"). The documentation from that analysis was reviewed as part of this evaluation audit.

As of 2008, for programs funded in 2007 and beyond, the OEB requires an independent third party review of the information presented in support of LRAM and/or SSM. For programs funded through distribution rates, the guidelines identify that the role of the third party is to[3]:

- Confirm that the input assumptions (eg., to TRC calculations) are either consistent with those posted on the Board's website or have been reviewed for reasonableness;
- Verify participation levels;
- Provide opinions of the cost effectiveness of the program results that are material to the LRAM and SSM amounts proposed;
- Recommend any forward looking evaluation work to be considered by the Applicant; and,
- Recommend any improvements (eg., to program design) that may benefit performance or uptake by customers.

Hydro Ottawa was responsible for:

- collecting all the material required by the review to defend the data presented in their CDM Annual Reports and the LRAM/SSM evidence;
- providing tables of input assumptions with sources; and
- providing ERA with full access to the company's data tracking systems.

ERA was responsible for ensuring the consistency and accuracy of the information provided by:

- reviewing Hydro Ottawa's input assumptions;
- examining the available source data and TRC results.

[3] EB-2008-0037, March 28, 2008, p. 29

To perform a comprehensive review and audit, ERA focused on the following:

- **Free rider rates**– differentiating by technology, between customer class, application or delivery mechanism, as appropriate and where relevant;
- **Equipment costs** – by technology or program bundle;
- **Equipment life** – differentiating between commercial and residential applications, where relevant;
- **Program costs** – by direct program specific costs and fully loaded costs, where available;
- **Electricity savings** –Energy Savings (kWh) and Demand Savings (kW);
- **Effectiveness Factors** – referencing the amount of time the projects were in place and delivering results;
- **Participation** – as demonstrated by number of units (eg., household or sites); and
- **TRC analysis** including discount rates.

For each of the areas identified above ERA examined the input and output assumptions for accuracy of results and to identify and explain any inconsistencies. Program input assumptions were tested for consistency with the values endorsed by the OEB. Finally, ERA's review was designed to confirm that sufficient documentation exists to support any variances from OEB approved values. ERA reviewed the information provided by Hydro Ottawa as per the guidelines set out by the OEB.

ERA examined the source documents for all the TRC tests. This included a review to ensure consistent input and output assumptions and to ensure all values were reflected accurately in the LRAM and SSM spreadsheets. Hydro Ottawa followed all the OEB guidelines using the appropriate avoided costs and methodology. As part of the comprehensive review, ERA reviewed input assumptions to:

- Ensure data was used as per OEB guidelines, with the exception of those technologies which were not represented on the OEB website, as noted above;
- Ensure that free rider rates were correctly applied to discount participants and equipment costs;
- Ensure that energy savings and equipment life assumptions were consistent with OEB guidelines; for those prescriptive measures not listed in the OEB analysis and for the bundle of custom projects, source materials were reviewed including evaluation reports from consultants;
- Validate equipment costs and ensure that equipment cost is reflected as a cost for the TRC analysis;
- Ensure that program costs are fully allocated for LRAM/SSM, and consistent with those presented in the CDM Annual Reports or the company's internal reporting system;
- Validate TRC results, and effectiveness factors;
- Verify participation levels across all programs including review of records of participation;

- Further audit against company records, and invoices, as appropriate.

ERA's review verified data consistency with OEB values, computation integrity and internal consistency between LRAM and SSM analysis. Where utility specific information was relied on, appropriate source documents (eg., third party invoices) were reviewed to ensure accuracy and appropriate application to the program or technology. It included review of SeeLine Group Ltd. ("Seeline") data and the results of independent evaluations conducted by Marbek for prescriptive and custom projects. The ERA team tested the accuracy of other inputs (eg., participation data and other information that is not available through published sources) to ensure sufficient evidence was available to demonstrate accurate tracking by reviewing customer submissions, manufacturer invoices and accounting / billing system reports. The evaluation audit also focused on determinants of attribution or effectiveness factors to confirm the portion of savings claimed in any given year.

6 FINDINGS OF THE THIRD PARTY REVIEW

ERA's evaluation audit found that Hydro Ottawa calculated all program specific and bundled program TRC results as per the OEB guidelines, for all eligible programs. The spreadsheet, provided at Appendix A, is a comprehensive cross-reference of all input and output assumptions completed through the course of the audit. It identifies both the value and source for all information relevant to the audit analysis.

This section discusses the findings of all aspects of ERA's review and assessment of Hydro Ottawa's CDM programs and support documentation.

Hydro Ottawa's tracking process was developed concurrent with the implementation of CDM programs starting in 2005. It has grown more robust and refined since 2005/2006: clearer links between input data and assumptions and quantified outputs have been made available.

Input assumptions

Hydro Ottawa's input assumptions are consistent with OEB documentations, where available. For those technologies where information did not exist, the Hydro Ottawa team commissioned new analysis (eg., SeeLine Analysis and the Marbek Study) that validated the energy savings attributed to these technologies.

As part of the audit, TRC results were compared to LRAM/SSM schedules, and to source documents. The findings for each of the key parameters are summarized below. The sections that follow address details for selected inputs.

An Overview of Input Assumptions

Input	Audit Approach and Findings
Free Riders	Consistent with OEB input assumptions, cross referenced with TRC inputs except as noted below.
Equipment Costs	For Residential and Small Commercial - measures given away (Compact Fluorescent Lightbulbs ("CFLs"), for example) included in program costs and captured through invoices from vendors. • For Large Commercial – measures paid by customer included in customer costs captured through invoices and applications forms.
Equipment Life	Consistent with OEB input assumptions, cross-referenced with TRC inputs.
Program Costs	Tracked through Hydro Ottawa's internal financial reporting system; Cross-referenced with invoices; Verified against official auditors output for 2007 financials.
Electricity Savings	Consistent with OEB input assumptions, cross-referenced with TRC inputs.
Effectiveness Factors	Calculated by CDM team, methodology reviewed and assumptions verified.
Participation	Validated through internal tracking system, linked back to invoices; Reviewed schedules for customer appointments, bills for audit services and customer application forms for incentives.

As noted in the overall findings, input assumptions were consistent with published sources. A few exceptions are noted below.

In general, **Free Rider** rates were consistent with the published assumptions. For low income programs, Hydro Ottawa relied on the Board's September 11, 2007 Decision and Order related to Toronto Hydro-Electric System Limited's LRAM/SSM application (the "Toronto Hydro Decision") that approved free rider rates of 1% for similarly delivered program measures.

Equipment Costs and **Equipment Life** were accurately reflected in the analysis. Equipment costs were included in program costs for many programs and combined across programs, which made tracking results less clear. When the inputs were disaggregated, the analysis was correct and complete.

Total **Program Costs** were correctly included in the TRC analysis, but the allocation of costs across the individual programs may give rise to skewed net present values ("NPV") for specific programs. In the case of the Energy Audit Support and Incentives Program, a credit for defective Christmas lights returned in January of 2007 and a few other internal accounting differences resulted in an overall negative balance for program costs.

Electricity Savings were consistent with the OEB input assumptions. Where measures were not listed in the summary tables, Hydro Ottawa commissioned additional work from SeeLine to calculate the proposed electricity savings. They also worked with Marbek to create a list of prescriptive measures used for their large commercial customers. Custom projects were individually evaluated by Marbek to ensure appropriate calculation of electricity savings.

The Hydro Ottawa team used an approach for calculating **Effectiveness Factors** that is consistent with their CLD delivery partners. This methodology is also internally consistent with Hydro Ottawa's past submissions for 2005/2006 LRAM/SSM. In general, the analyses use 1.0 for previous years' projects, because they were in place for the full 12 months of 2007 and have not reached the end of their equipment life. For 2007 projects, the analysis used a fraction that reflects an estimate of the number of months for which savings were in effect. Dates are based on when equipment was distributed to residential or small commercial customers, and in the case of larger commercial customers based on invoices submitted with the application. The most accurate projection for the installed date available to Hydro Ottawa at this time was the purchase date with a lag for installation timelines. This can be modified going forward by collecting the actual installed date in future applications. Based on the review conducted for audit purposes, these effectiveness factors accurately reflect the mix of measures and dates installed.

Hydro Ottawa ensured the accuracy and completeness of customer **Participation** numbers claimed in their program tracking documentation. For those programs delivered by the LDC directly to its customers, a comprehensive tracking methodology was followed to ensure:

- Accurate documentation of the number of Customers participating in a program;
- Proof of customer purchase invoices for prescribed technologies before the incentive payment was issued;
- Cheques issued for incentives were reflected in financial systems;
- Custom project applications were reviewed and validated through an independent evaluation team with expertise in CDM technologies (focusing on analysis of energy savings and validation of base case);
- Spot checks were conducted at customer sites to validate the installation and ongoing use of the identified technology.

For programs delivered by third parties on behalf of Hydro Ottawa, Hydro Ottawa collected information on participating customers and ensured that those participating were aware of the goals and objectives of the program. The tracking for these programs included but was not limited to:

- Customer lists, for technology giveaways and purchase invoices from manufacturers/distributors;
- List of customers who participated, by event and day;
- Purchase orders (eg., for CFLs distributed at individual events or through third party contractors; for measures in 50 and 100 unit increments);
- Appointment lists with direct links back to specific customers, addresses and measures installed;
- Receipts or invoices with links back to company financial system (eg., Purchase invoices for items purchased by LDC, and those of customers).

Potential savings from information programs were not reflected in the CDM results for programs in any year, although developing a culture of conservation was the intention of the program and awareness helped deliver savings in other related areas.

The sections below address key components of the audit process and any issues that were identified.

Assessment of Analysis

There were no errors found in the analysis of either LRAM or SSM tables. The LRAM tables were vetted against the source data to ensure consistency. The SSM parameters used were audited against those in the LRAM tables for the same technology and were found to be consistent.

This review also identified areas for improvement in the approach used for documentation and tracking of results and program costs. Some time and effort during the audit was devoted to unbundling the results and costs of certain programs. In all, when the data was appropriately disaggregated, the calculated results were found to be consistent and to be accurately represented in the claimed LRAM and SSM.

2005/2006 PROGRAMS

The calculation of 2005/2006 LRAM and SSM was submitted in evidence for EB-2007-0713 and agreed to by all parties in Hydro Ottawa's Proposed Settlement Agreement that was accepted by the Board. As part of this audit, the ERA team reviewed participation counts and invoices, to ensure consistency between the TRC results filed in Hydro Ottawa's 2008 LRAM/SSM application and its filed CDM Annual Reports. For the most part, the information was consistent. A few instances were identified such as a mistyped free rider rate, or error in documenting customer participation. For these few instances where there were discrepancies, they were between the Annual Report and the published data. It was determined that the published data was the correct source.

Overall, Hydro Ottawa's approach to conducting the TRC test and calculating TRC results is consistent with OEB guidelines. All technologies had a TRC test, which was available for review and validation as part of the audit process.

7 RECOMMENDATIONS FOR PROGRAM IMPROVEMENTS

Hydro Ottawa created and delivered a strong set of CDM programs for the period 2005-2007. A number of these programs were refined and modified cooperatively with the other partners in the CLD to create a suite of program offerings that have since been adopted by the OPA and rolled out across the province of Ontario Since these specific programs have been taken over by OPA, their design and development is no longer managed by the LDC and therefore any program modifications would be addressed through OPA discussions

Recommendations for Future Evaluation Work

Hydro Ottawa completed a comprehensive evaluation using internal resources and external experts. Through the course of the audit there were a few areas for improvement that could be implemented in future evaluations. These include:

- Annotated spreadsheets identifying the source for inputs, and assumptions;
- Consistency in format for reporting, established during the planning phase with planning assumptions used as a comparison point for actual values at time of evaluation;
- Parallel tracking of CDM costs, for cross reference with company financial system;
- Development of a formal management information system that would allow visibility into program results throughout the tracking process and against planning assumptions for internal and external reporting;
- Enhanced tracking that links participants (eg., name and address or other contact information), with purchases (eg., as demonstrated through invoices) providing real time reviews of program results to allow for modifications in program delivery or targeting prior to the formal evaluation;
- A secure database to accumulate both planning and evaluation results with management reporting requirements – both internal and external (OPA/OEB reports);
- Robust storage methodology for files allowing easy and efficient access to documentation for programs and tracking files;
- Formalize tracking, through a purchased or redesigned tracking system.

As noted before, these recommendations do not materially change the results or findings. The value of these recommendations is that they will make both future evaluations and the accompanying third party review more time efficient through greater transparency.

Recommendations for Future Program Tracking

An unbundled process for program tracking will provide improved data collection and reporting. ERA's review identified that specific improvements could be made in the following areas:

- Increasing diligence related to allocation of costs to specific programs, to ensure accurate analysis of cost-effectiveness;

- Allocation of technology costs at a program level, especially where technologies were distributed free of charge to customers as an element of a bundle of programs;
- Tracking of energy savings for specific technologies, whether bundled with other complimentary technologies or provided on a stand alone basis;
- Tracking of program specific costs when program costs were reported in aggregate;
- Improving documentation of unbudgeted or exogenous costs (eg., returns on defective Seasonal LED strings);
- Tracking of actual installation dates for equipment installed by large commercial customers.

Recommendations for NPV Analysis - TRC results

ERA has identified the need for Hydro Ottawa to address the following issues and concerns when conducting TRC analysis in the future, both for program planning decisions and program evaluation purposes.

- Ensure that all CDM programs have specific and unique equipment costs, especially for those programs where technologies are purchased by the LDC directly. Incremental equipment costs should be reflected in the societal analysis at a program specific level and not consolidated among programs offered on a bundled basis. .
- Ensure that each technology is itemized within bundled programs.

8 FINAL ASSESSMENT – AN AUDITOR'S NOTE

After reviewing both input and output assumptions, conducting a site visit and meetings with Hydro Ottawa, verifying assumptions with source documents and against data provided through the OEB reports, it is our opinion that Hydro Ottawa has demonstrated accurate and verifiable support for their claim for LRAM and SSM. They have met all the requirements as set out in the most recent guidelines from the OEB and as further elaborated in recent rate case decisions.

9 APPENDICES

APPENDIX A: LRAM and SSM Tables

Rate Class	Prog	Technology	# units		Measure Life		Total Energy Savings (kWh)		Total Energy Savings (kW)		Total Energy Savings with # units		Free Ridership		Net kWh or kW saved		Distribution Rate, by Rate Class		Effective-ness Factor		Lost Revenue $	
			Value	Source	Value	Source	Value	Source	Value	Source	Value	Source	Value	Source	Value	Source	Value	Source	Value	Source	Value	Source
2005 Programs																						
Residential	**Co-Branded Mass Markets**		33,925	Company Data	4-30	SeeLine Report	89	Multiple Technologies		Multiple Technologies	3,035,481.00	Multiple Technologies	5-10%	SeeLine Report	2,775,870.00	SeeLine Report			0.25	Company Data		
Residential	**Electric Avenue**																					
Residential	**Energy Audit and Support and Initiatives**																					
Residential		Water Heater Tune Up	163	Company Data	6	SeeLine Analysis	93	Multiple Technologies			15,082.20	Multiple Technologies	0-5%	Multiple Technologies	14,364.00	SeeLine Analysis			0.50	Company Data		
Residential		Smart Business Ottawa Audit Program	3	Company Data															0.50	Company Data		
Residential		Cool Shop Program	610	Company Data	2	SeeLine Analysis	203	Multiple Technologies			123,816.00	Multiple Technologies	10%	Multiple Technologies	112,560.20	SeeLine Analysis			0.29	Company Data		
Residential	**Fridge Bounty**		581	Company Data	6	SeeLine Analysis	1200	SeeLine Analysis	0.272	SeeLine Analysis	697,200.00	SeeLine Analysis	10%	SeeLine Analysis	627,480.00	SeeLine Analysis						
Residential	**Res. Load Control**																					
Residential	**Social Housing**																					
Residential		PowerPlay Program	334	Company Data	1-20	SeeLine Analysis	174	SeeLine Analysis			57,949.00	SeeLine Analysis	1%	EB-2007-0096	57,375	SeeLine Analysis			0.50	Company Data		
Residential		Water Heater Tune Up	100	Company Data	6	SeeLine Analysis	103	SeeLine Analysis			10,258.00	SeeLine Analysis	1%	EB-2007-0096	10,157	SeeLine Analysis			0.50	Company Data		
Residential		Social Housing Services Corp. - Audits	161	Company Data																		
	Design Advisory > 50kW																					
Commercial		**LED Traffic Lights**																				
Commercial		**C&I Load Control Initiative**																				
Commercial		**On the Bill Financing**																				
Commercial		**Leveraging Energy Conservation and Load I**	5,444	Company Data	5	SeeLine Analysis	80	SeeLine Analysis	0.017	SeeLine Analysis	91.62	SeeLine Analysis	10%	SeeLine Analysis	83.62	SeeLine Analysis			0.25	Company Data		
Commercial		**Load Displacement**																				
Commercial		**Stand-By Generators**																				
Commercial		**Distribution Loss Reduction**																				
Residential		**Overall Support Program**	30,280	Company Data	4-30	SeeLine Analysis	105	Multiple Technologies			3,175,016	SeeLine Analysis	5-10%	Multiple Technologies	2,886,668.00	SeeLine Analysis			0.33	Company Data		

Rate Class	Prog	Technology	# units		Measure Life		Total Energy Savings (kWh)		Total Energy Savings (kW)		Total Energy Savings with # units		Free Ridership		Net kWh or kW saved		Distribution Rate, by Rate Class		Effective-ness Factor		Lost Revenue $	
			Value	Source	Value	Source	Value	Source	Value	Source	Value	Source	Value	Source	Value	Source	Value	Source	Value	Source	Value	Source
2006 Programs																						
Residential	**Co-Branded Mass Markets**		**438,905**																			
Residential		HomeShow 2006 - CFLs	987	Company Data	4	OEB Measures List	109	SeeLine Analysis			107,622.00	Calculated	10%	SeeLine Analysis	96,860.00	SeeLine Analysis			0.75	Company Data		
Residential		CDM Website - Pageviews	184,306	Company Data																		
Residential		Events Van - CFLs	1,868	Company Data	4	OEB Measures List	109	SeeLine Analysis			203,687.00	Calculated	10%	SeeLine Analysis	183,318.00	SeeLine Analysis			0.67	Company Data		
Residential		Powerwise promotion	0																0.67	Company Data		
Residential		School Initiative - CFLs	210	Company Data	4	OEB Measures List	109	SeeLine Analysis			22,898.00	Calculated	10%	SeeLine Analysis	20,609.00	SeeLine Analysis			0.25	Company Data		
Residential		Powerwise Brand	0										0%									
Residential		*Spring Retail - EKC*	*136,309*	Company Data									10%						0.67	Company Data		
		CFLs	129,881	Company Data	4	OEB Measures List	104	OEB Measures List			13,514,118.05	Calculated	10%		12,162,706.25	Calculated						
		Ceiling Fans	1,135	Company Data	20	OEB Measures List	141	SeeLine Analysis			159,592.35	Calculated	10%		143,633.12	Calculated						
		Timers	4,168	Company Data	20	OEB Measures List	183	SeeLine Analysis			760,660.00	Calculated	10%		684,594.00	Calculated						
		Programmable Thermostats	1,125	Company Data	18	OEB Measures List	218	SeeLine Analysis			245,261.25	Calculated	10%		220,735.13	Calculated						
Residential		*Fall EKC*	*115,225*	Company Data															0.25	Company Data		
		Baseboard Programmable Thermostats	230	Company Data	18	OEB Measures List	367	SeeLine Analysis			84,314.55	Calculated	10%		75,883.10	Calculated						
		Dimmers	2,257	Company Data	10	OEB Measures List	139	OEB Measures List			314,174.40	Calculated	10%		282,756.96	Calculated						
		Energy Star CFL's	70,456	Company Data	4	OEB Measures List	104	OEB Measures List			7,356,310.96	Calculated	10%		6,620,679.86	Calculated						
		Motion Sensor Light Switch	866	Company Data	20	OEB Measures List	209	OEB Measures List			180,820.80	Calculated	10%		162,738.72	Calculated						
		Programmable Thermostats	430	Company Data	18	OEB Measures List	1466	OEB Measures List			630,526.20	Calculated	10%		567,473.58	Calculated						
		Programmable Thermostats - Cooling	1,120	Company Data	18	OEB Measures List	159	OEB Measures List			178,169.60	Calculated	10%		160,352.64	Calculated						
		Seasonal LED Lights	39,866	Company Data	30	OEB Measures List	13	SeeLine Analysis			519,852.64	Calculated	10%		467,867.38	Calculated						
Residential	**Electric Avenue**		1	Company Data																		
Residential		Electric Thermal Storage Units	10	Company Data	18	OEB Measures List	217	SeeLine Analysis			2,173.00	Calculated	0%	SeeLine Analysis	2,173.00	Calculated			1.00	Company Data		
Residential		*Electric DHW Measures and CFLs*	*70*	Company Data															1.00	Company Data		
Residential		Powerpack	20	Company Data	4	OEB Measures List	109	SeeLine Analysis			2,182.00	Calculated	0%	SeeLine Analysis	2,182.00	Calculated			1.00	Company Data		
Residential		Tank Wrap	10	Company Data	6	OEB Measures List	270	OEB Measures List			2,700.00	Calculated	0%	SeeLine Analysis	2,700.00	Calculated			1.00	Company Data		
Residential		Shower Head	10	Company Data	12	OEB Measures List	546	SeeLine Analysis			5,456.00	Calculated	0%	SeeLine Analysis	5,456.00	Calculated			1.00	Company Data		
Residential		Faucet - kitchen	10	Company Data	12	OEB Measures List	34	OEB Measures List			335.00	Calculated	0%	SeeLine Analysis	335.00	Calculated			1.00	Company Data		
Residential		Faucet - bathroom	10	Company Data	12	OEB Measures List	34	OEB Measures List			335.00	Calculated	0%	SeeLine Analysis	335.00	Calculated			1.00	Company Data		
Residential		Pipe Wrap	10	Company Data	6	OEB Measures List	76	OEB Measures List			760.00	Calculated	0%	SeeLine Analysis	760.00	Calculated			1.00	Company Data		
Residential																						
Residential		Education and Energuide Audits	15	Company Data									0%									
Residential	**Energy Audit Support and Incentives**																					
Residential		Powerwise Tune-Ups	175	Company Data			118				20,613	Calculated	5-10%	OEB Measures List	19,091.86	Calculated			0.50	Company Data		
Residential		Smart Business Ottawa Audits	14	Company Data			0				0	Calculated	0%	OEB Measures List	0.00	Calculated						
Residential		Cool Shops 2006	3,060	Company Data			96				294,178	Calculated	10%	OEB Measures List	264,760.60	Calculated			0.25	Company Data		
Residential		Project Porch Light	220,050	Company Data			109				23,994,252	Calculated	10%	OEB Measures List	21,594,826.80	Calculated			0.25	Company Data		
Residential		Direct Energy ECM & AC	91	Company Data			1149				104,583	Calculated	10%	OEB Measures List	94,124.39	Calculated			0.67	Company Data		
Residential		Keep Cool RAC Retirement	2,332	Company Data			530				1,236,381	Calculated	10%	3rd Party Report	1,112,742.00	Calculated			1.00	Company Data		
Residential		SLED Exchange 2006	3,400	Company Data			19				64,124	Calculated	5%	OEB Measures List	60,917.80	Calculated			1.00	Company Data		
Residential	**Fridge Bounty**																					
Residential		Fridge Retirement	3,000	Company Data	6	OEB Measures List	1200	OEB Measures List			3,600,000.00	Calculated	10%	OEB Measures List	3,240,000.00	Calculated			0.50	Company Data		
Residential		Freezer Retirement	1,492	Company Data	6	OEB Measures List	900	OEB Measures List			1,342,800.00	Calculated	10%	OEB Measures List	1,208,520.00	Calculated			0.29	Company Data		
Residential		PowerWise Power Pack	7,692	Company Data	4	OEB Measures List	107	OEB Measures List			825,208.68	Calculated	10%	OEB Measures List	742,687.81	Calculated			0.50	Company Data		
Residential	**Res. Load Control**		1,315	Company Data																		
Residential	**Social Housing**																					
Residential		Low Income Tune-Ups	1,185	Company Data	1-20	OEB Measures List	116	OEB Measures List			137,432	Calculated	1%	EB-2007-0096	136,057	Calculated			0.50	Company Data		
Residential		PowerPlay Tune-Ups and Audits	3,341	Company Data	1-20	OEB Measures List	124	OEB Measures List			414,010	Calculated	1%	EB-2007-0096	409,870	Calculated			0.50	Company Data		
	C&I Load Control											Calculated										
Commercial	**Leveraging Energy Conservation and Load Management**		m Project									Calculated										
Commercial		85% General Service >50 kW	m Project									Calculated	10-30%	Multiple Technologies	539	Calculated						
Commercial		15 % General Service >1,500 kW	m Project									Calculated	10-30%	Multiple Technologies	95	Calculated						
Commercial		**Overall Support Program**	2,539	Company Data								Calculated										
Commercial		Overall Support Program										Calculated										
Commercial		Kill a Watt Meters	2,388	Company Data								Calculated										
Commercial		Ottawa Eco-Fair	150	Company Data								Calculated	10%						0.67	Company Data		
Commercial		Porchlight 2005	0									Calculated										
Commercial		Second Geration ToR	0									Calculated										
Commercial		School Program	0									Calculated										
Commercial		Employee Conservation Awareness	1	Company Data								Calculated	0%						1.00	Company Data		
Commercial		Mascots	0									Calculated										
Commercial		CDM Website Capital Expenses	0									Calculated										

Rate Class	Prog	Technology	# units		Measure Life		Total Energy Savings (kWh)		Total Energy Savings (kW)		Total Energy Savings with # units		Free Ridership		Net kWh or kW saved		Distribution Rate, by Rate Class		Effective-ness Factor		Lost Revenue $	
			Value	Source	Value	Source	Value	Source	Value	Source	Value	Source	Value	Source	Value	Source	Value	Source	Value	Source	Value	Source
2007 Programs																						
Residential	**Residential Load Control**																					
Residential		Residential Load Control - Demand Response	166	Company Data					83.000	OEB Measures List			10%	OEB Measures List				Company Data	0.9	Company Data		Calculated
Residential		Programmable thermostat cooling	166	Company Data	18	OEB Measures List	159	OEB Measures List	0.163	OEB Measures List	26,410.60	Calculated	10%	OEB Measures List	23,769.54	Calculated		Company Data	0.9	Company Data		Calculated
Residential		Programmable thermostat heating	16	Company Data	18	OEB Measures List	1466	OEB Measures List	0.000	OEB Measures List	23,461.49	Calculated	10%	OEB Measures List	21,115.34	Calculated		Company Data	0.9	Company Data		Calculated
Residential																						
Residential	**Energy Audit Support and Incentives**																					
Residential		Tuneups	39	Company Data																		
Residential		13 Watt CFLs in Power Packs	78	Company Data	4	SeeLine Analysis	109	SeeLine Analysis	0.000	OEB Measures List	8,505.12	Calculated	10%	OEB Measures List	7,654.61	Calculated		Company Data	0.7	Company Data		Calculated
Residential		water tank wrap	19	Company Data	6	OEB Measures List	270	OEB Measures List	0.019	OEB Measures List	5,129.81	Calculated	5%	OEB Measures List	4,873.32	Calculated		Company Data	0.7	Company Data		Calculated
Residential		13 Watt CFLs in Power Packs individually distri	266	Company Data	4	SeeLine Analysis	109	SeeLine Analysis	0.000	OEB Measures List	29,004.64	Calculated	10%	OEB Measures List	26,104.18	Calculated		Company Data	0.7	Company Data		Calculated
Residential		13 Watt CFLs individually distributed	6,109	Company Data	4	SeeLine Analysis	109	SeeLine Analysis	0.000	OEB Measures List	666,125.36	Calculated	10%	OEB Measures List	599,512.82	Calculated		Company Data	0.7	Company Data		Calculated
Residential		SLEDS 35 String	458	Company Data	30	OEB Measures List	13	SeeLine Analysis	0.000	SeeLine Analysis	5,972.32	Calculated	5%	OEB Measures List	5,673.70	Calculated		Company Data	1	Company Data		Calculated
Residential		SLEDS 70 String	100	Company Data	30	OEB Measures List	13	SeeLine Analysis	0.000	SeeLine Analysis	1,304.00	Calculated	5%	OEB Measures List	1,238.80	Calculated		Company Data	1	Company Data		Calculated
Residential	**Refrigerator Buy Back Program**																					
Residential		Fridges	535	Company Data	6	OEB Measures List	1200	OEB Measures List	0.272	OEB Measures List	642,000.00	Calculated	10%	OEB Measures List	577,800.00	Calculated		Company Data	0.8	Company Data		Calculated
Residential		Freezers	320	Company Data	6	OEB Measures List	900	OEB Measures List	0.204	OEB Measures List	288,000.00	Calculated	10%	OEB Measures List	259,200.00	Calculated		Company Data	0.8	Company Data		Calculated
Residential		13 Watt CFLs in Power Packs	1,710	Company Data	4	SeeLine Analysis	109	SeeLine Analysis	0.000	SeeLine Analysis	186,458.40	Calculated - 186,390	10%	OEB Measures List	167,812.56	Calculated		Company Data	0.8	Company Data		Calculated
Residential	**Electric Avenue - A Community Program**																					
Residential	**Social Housing Program**																					
Residential		Tuneups	151	Company Data																		
Residential		13 Watt CFLs in Power Packs	302	Company Data	4	SeeLine Analysis	109	SeeLine Analysis	0.000	OEB Measures List	32930.08	Calculated	1%	EB-2007-0096	32,600.78	Calculated		Company Data	0.7	Company Data		Calculated
Residential		13 watt CFLs	941	Company Data	4	SeeLine Analysis	109	SeeLine Analysis	0.000	OEB Measures List	102606.64	Calculated	1%	EB-2007-0096	101,580.57	Calculated		Company Data	0.7	Company Data		Calculated
Residential		water tank wrap	42	Company Data	6	OEB Measures List	270	OEB Measures List	0.019	OEB Measures List	11339.58	Calculated	1%	EB-2007-0096	11,226.18	Calculated		Company Data	0.7	Company Data		Calculated
Residential		kitchen aerators	42	Company Data	12	OEB Measures List	34	OEB Measures List	0.002	OEB Measures List	1412.46	Calculated	1%	EB-2007-0096	1,398.34	Calculated		Company Data	0.7	Company Data		Calculated
Residential		shower heads	42	Company Data	12	OEB Measures List	545	OEB Measures List	0.039	OEB Measures List	22908.9	Calculated	1%	EB-2007-0096	22,679.81	Calculated		Company Data	0.7	Company Data		Calculated
Residential		bathroom aerators	34	Company Data	12	OEB Measures List	34	OEB Measures List	0.002	OEB Measures List	1143.42	Calculated	1%	EB-2007-0096	1,131.99	Calculated		Company Data	0.7	Company Data		Calculated
Residential		pipe insulation	16	Company Data	6	OEB Measures List	76	OEB Measures List	0.005	OEB Measures List	1215.84	Calculated	1%	EB-2007-0096	1,203.68	Calculated		Company Data	0.7	Company Data		Calculated
Residential		Low Income Electricity Tuneups																				
Residential		13 Watt CFLs in Power Packs	516	Company Data	4	SeeLine Analysis	109	SeeLine Analysis	0.000	OEB Measures List	56,264.64	Calculated	1%	EB-2007-0096	55,701.99	Calculated		Company Data	0.7	Company Data		Calculated
Residential		water tank wrap	93	Company Data	6	OEB Measures List	270	OEB Measures List	0.019	OEB Measures List	25,109.07	Calculated	1%	EB-2007-0096	24,857.98	Calculated		Company Data	0.7	Company Data		Calculated
Residential		kitchen aerators	109	Company Data	12	OEB Measures List	34	OEB Measures List	0.002	OEB Measures List	3,665.67	Calculated	1%	EB-2007-0096	3,629.01	Calculated		Company Data	0.7	Company Data		Calculated
Residential		shower heads	109	Company Data	12	OEB Measures List	545	OEB Measures List	0.039	OEB Measures List	59,454.05	Calculated	1%	EB-2007-0096	58,859.51	Calculated		Company Data	0.7	Company Data		Calculated
Residential		bathroom aerators	109	Company Data	12	OEB Measures List	34	OEB Measures List	0.002	OEB Measures List	3,665.67	Calculated	1%	EB-2007-0096	3,629.01	Calculated		Company Data	0.7	Company Data		Calculated
Residential		pipe insulation	105	Company Data	6	OEB Measures List	76	OEB Measures List	0.005	OEB Measures List	7,978.95	Calculated	1%	EB-2007-0096	7,899.16	Calculated		Company Data	0.7	Company Data		Calculated
COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL (>50KW)																						
	Leveraging Conservation and Load Management programs																					
Commercial	scriptive r	Single-lamp Std. T12 Fixtures to T8 fixture	1,479	Project Appl.	5	OEB Measures List	52	Marbek Report	0.011	Marbek Report	16.48	Calculated	10%	OEB Measures List	14.83	Calculated		Company Data	1	Company Data		Calculated
Commercial		Two-lamp Std. T12 Fixtures to T8 fixture	6,626	Project Appl.	5	OEB Measures List	80	Marbek Report	0.017	Marbek Report	113.60	Calculated	10%	OEB Measures List	102.24	Calculated		Company Data	0.9	Company Data		Calculated
Commercial		Three-lamp Std. T12 Fixtures to T8 fixture	119	Project Appl.	5	OEB Measures List	112	Marbek Report	0.024	Marbek Report	2.86	Calculated	10%	OEB Measures List	2.57	Calculated		Company Data	1	Company Data		Calculated
Commercial		Four-lamp Std. T12 Fixtures to T8 fixture	1,242	Project Appl.	5	OEB Measures List	160	Marbek Report	0.034	Marbek Report	42.59	Calculated	10%	OEB Measures List	38.33	Calculated		Company Data	1	Company Data		Calculated
Commercial		Single-lamp Std. T12 Fixtures to HP T8 fixture	41	Project Appl.	5	OEB Measures List	68	Marbek Report	0.015	Marbek Report	0.60	Calculated	10%	OEB Measures List	0.54	Calculated		Company Data	0.6	Company Data		Calculated
Commercial		Two-lamp Std. T12 Fixtures to HP T8 fixture	731	Project Appl.	5	OEB Measures List	120	Marbek Report	0.026	Marbek Report	18.80	Calculated	10%	OEB Measures List	16.92	Calculated		Company Data	0.9	Company Data		Calculated
Commercial		Three-lamp Std. T12 Fixtures to HP T8 fixture	84	Project Appl.	5	OEB Measures List	160	Marbek Report	0.034	Marbek Report	2.88	Calculated	10%	OEB Measures List	2.59	Calculated		Company Data	1	Company Data		Calculated
Commercial		Four-lamp Std. T12 Fixtures to HP T8 fixture	0	Not used															1	Company Data		Calculated
Commercial		LED Exit signs	65	Project Appl.	25	OEB Measures List	237	OEB Measures List	0.027	OEB Measures List	1.76	Calculcated	10%	OEB Measures List	1.58	Calculated		Company Data	1	Company Data		Calculated
Commercial		14w	5,928	Project Appl.	4	SeeLine Analysis	0	SeeLine Analysis	0.037	SeeLine Analysis	216.68	Calculated	10%	OEB Measures List	195.01	Calculated		Company Data	0.5	Company Data		Calculated
Commercial		13w	65	Project Appl.	4	SeeLine Analysis	0	SeeLine Analysis	0.037	SeeLine Analysis	2.38	Calculated	10%	OEB Measures List	2.14	Calculated		Company Data	0.5	Company Data		Calculated
Commercial		LED Exit signs	50	Project Appl.	25	OEB Measures List	308	OEB Measures List	0.027	OEB Measures List	1.35	Calculcated	10%	OEB Measures List	1.22	Calculated		Company Data	1	Company Data		Calculated
Commercial	Custom pr	Project #1	1	Project Appl.	5	Marbek Evaluation	566754	Marbek Evaluation	83.390	Marbek Evaluation	83.39	Calculated	30%	OEB Guidelines	58.37	Calculated		Company Data	1	Company Data		Calculated
Commercial		Project #2	1	Project Appl.	5	Marbek Evaluation	530879	Marbek Evaluation	68.800	Marbek Evaluation	68.80	Calculated	30%	OEB Guidelines	48.16	Calculated		Company Data	1	Company Data		Calculated
Commercial		Project #3	1	Project Appl.	5	Marbek Evaluation	191906	Marbek Evaluation	32.710	Marbek Evaluation	32.71	Calculated	30%	OEB Guidelines	22.90	Calculated		Company Data	1	Company Data		Calculated
Commercial		Project #4	1	Project Appl.	15	Marbek Evaluation	111724	Marbek Evaluation	17.000	Marbek Evaluation	17.00	Calculated	30%	OEB Guidelines	11.90	Calculated		Company Data	1	Company Data		Calculated

Program	Rate Class	Free Rider-ship	NPV Electricity	Total Customer Incremental Costs	Total Program Delivery Costs	Source	TRC Costs (NPV)	Source	Total Costs (NPV)	Source	TRC Benefits (NPV)	Source	TRC Net Benefits (NPV)	Source	TRC Benefit Cost Ratio	Source	SSM	Source
RESIDENTIAL AND SMALL COMMERCIAL			$ -	$ -	$ -		$ -		$ -		$ -		$ -		N/A			
			$ -	$ -	$ -		$ -		$ -		$ -		$ -		N/A			
Co-Branded Mass Markets			$ -	$ -	$ -		$ -		$ -		$ -		$ -		N/A			
Program Costs			$ -	$ -	$ 113,687	Validated from Company Records			$ 113,687	Calculated	$ -		$ (113,687)	Calculated	0.00	Calculated	**(5,684.34)**	Calculated
			$ -	$ -	$ -		$ -						$ -		N/A		**0.00**	Calculated
Residential Load Control	Residential	10	$ 54,230	$ -	$ -		$ -		$ -		$ 54,230	SeeLine Group Analysis	$ 54,230	Calculated	N/A		**2,711.48**	Calculated
Programmable Thermostat - Cooling	Residential	10	$ 22,768	$ -	$ -		$ -		$ -		$ 22,768	SeeLine Group Analysis	$ 22,768	Calculated	N/A		**1,138.42**	Calculated
Programmable Thermostat - Heating	Residential	10	$ 19,916	$ -	$ -		$ -		$ -		$ 19,916	SeeLine Group Analysis	$ 19,916	Calculated	N/A		**995.79**	Calculated
Program Costs	Residential		$ -	$ -	$ 154,175	Validated from Company Records			$ 154,175	Calculated	$ -		$ (154,175)	Calculated	0.00	Calculated	**(7,708.74)**	Calculated
			$ -	$ -	$ -		$ -						$ -		N/A			
Energy Audit Support and Incentives			$ -	$ -	$ -		$ -		$ -		$ -		$ -		N/A			
Tuneups	Residential	10	$ -	$ -	$ -		$ -		$ -		$ -		$ -		N/A			
13 Watt CFLs in Power Packs	Residential	10	$ 1,975	$ -	$ -		$ -		$ -		$ 1,975	SeeLine Group Analysis	$ 1,975	Calculated	N/A		**98.73**	Calculated
Water Tank Wrap	Residential	5	$ 1,857	$ -	$ -		$ -		$ -		$ 1,857	SeeLine Group Analysis	$ 1,857	Calculated	N/A		**92.85**	Calculated
13 Watt CFLs in Power Packs individually distributed	Residential	10	$ 6,734	$ -	$ -		$ -		$ -		$ 6,734	SeeLine Group Analysis	$ 6,734	Calculated	N/A		**336.68**	Calculated
13 Watt CFLs individually distributed	Residential	10	$ 154,647	$ -	$ -		$ -		$ -		$ 154,647	SeeLine Group Analysis	$ 154,647	Calculated	N/A		**7,732.35**	Calculated
Small Commercial Audit	Residential	0	$ -	$ -	$ -		$ -		$ -		$ -		$ -		N/A			
35 Light SLEDs	Residential	5	$ 8,438	$ -	$ -		$ -		$ -		$ 8,438	SeeLine Group Analysis	$ 8,438	Calculated	N/A		**421.88**	Calculated
70 Light SLEDs	Residential	5	$ 1,842	$ -	$ -		$ -		$ -		$ 1,842	SeeLine Group Analysis	$ 1,842	Calculated	N/A		**92.11**	Calculated
Program Costs	Residential		$ -	$ -	$ (59,288)	Validated from Company Records			$ (59,288)	Calculated	$ -		$ 59,288	Calculated	0.00	Calculated	**2,964.40**	Calculated
			$ -	$ -	$ -		$ -						$ -		N/A			
Refrigerartor Buy Back Program			$ -	$ -	$ -		$ -		$ -		$ -		$ -		N/A			
Fridges	Residential	10	$ 254,521	$ -	$ -		$ -		$ -		$ 254,521	SeeLine Group Analysis	$ 254,521	Calculated	N/A		**12,726.05**	Calculated
Freezers	Residential	10	$ 114,200	$ -	$ -		$ -		$ -		$ 114,200	SeeLine Group Analysis	$ 114,200	Calculated	N/A		**5,709.98**	Calculated
13 Watt CFLs in Power Packs	Residential	10	$ 43,288	$ -	$ -		$ -		$ -		$ 43,288	SeeLine Group Analysis	$ 43,288	Calculated	N/A		**2,164.40**	Calculated
Program Costs	Residential		$ -	$ -	$ 188,838	Validated from Company Records			$ 188,838	Calculated	$ -		$ (188,838)	Calculated	0.00	Calculated	**(9,441.92)**	Calculated
			$ -	$ -	$ -		$ -						$ -		N/A			
Electric Avenue - A Community Program (Program Costs Only)		0	$ -	$ -	$ 16,799	Validated from Company Records			$ 16,799	Calculated	$ -		$ (16,799)	Calculated	0.00	Calculated	**(839.96)**	Calculated
			$ -	$ -	$ -		$ -						$ -		N/A			
Social Housing Program			$ -	$ -	$ -		$ -		$ -		$ -		$ -		N/A			
PowerPlay Audits			$ -	$ -	$ -		$ -		$ -		$ -		$ -		N/A			
Tuneups	Residential		$ -	$ -	$ -		$ -		$ -		$ -		$ -		N/A			
13 Watt CFLs in Power Packs	Residential	1	$ 8,410	$ -	$ -		$ -		$ -		$ 8,410	SeeLine Group Analysis	$ 8,410	Calculated	N/A		**420.48**	Calculated
13 watt CFLs	Residential	1	$ 26,204	$ -	$ -		$ -		$ -		$ 26,203	SeeLine Group Analysis	$ 26,204	Calculated	N/A		**1,310.20**	Calculated
water tank wrap	Residential	1	$ 4,278	$ -	$ -		$ -		$ -		$ 4,278	SeeLine Group Analysis	$ 4,278	Calculated	N/A		**213.89**	Calculated
kitchen aerators	Residential	1	$ 995	$ -	$ -		$ -		$ -		$ 2,173	SeeLine Group Analysis	$ 2,173	Calculated	N/A		**108.63**	Calculated
shower heads	Residential	1	$ 16,145	$ -	$ -		$ -		$ -		$ 25,792	SeeLine Group Analysis	$ 25,792	Calculated	N/A		**1,289.62**	Calculated
bathroom aerators	Residential	1	$ 806	$ -	$ -		$ -		$ -		$ 1,759	SeeLine Group Analysis	$ 1,759	Calculated	N/A		**87.94**	Calculated
pipe insulation	Residential	1	$ 486	$ -	$ -		$ -		$ -		$ 486	SeeLine Group Analysis	$ 486	Calculated	N/A		**24.28**	Calculated
Low Income Electricity Tuneups			$ -	$ -	$ -		$ -		$ -		$ -		$ -		N/A		**0.00**	Calculated
13 Watt CFLs in Power Packs	Residential	1	$ 14,369	$ -	$ -		$ -		$ -		$ 14,369	SeeLine Group Analysis	$ 14,369	Calculated	N/A		**718.45**	Calculated
water tank wrap	Residential	1	$ 9,473	$ -	$ -		$ -		$ -		$ 9,473	SeeLine Group Analysis	$ 9,473	Calculated	N/A		**473.65**	Calculated
kitchen aerators	Residential	1	$ 2,583	$ -	$ -		$ -		$ -		$ 5,638	SeeLine Group Analysis	$ 5,638	Calculated	N/A		**281.91**	Calculated
shower heads	Residential	1	$ 41,899	$ -	$ -		$ -		$ -		$ 66,937	SeeLine Group Analysis	$ 66,937	Calculated	N/A		**3,346.86**	Calculated
bathroom aerators	Residential	1	$ 2,583	$ -	$ -		$ -		$ -		$ 5,638	SeeLine Group Analysis	$ 5,638	Calculated	N/A		**281.91**	Calculated
pipe insulation	Residential	1	$ 3,187	$ -	$ -		$ -		$ -		$ 3,187	SeeLine Group Analysis	$ 3,187	Calculated	N/A		**159.36**	Calculated
Progarm Costs	Residential		$ -	$ -	$ 7,111	Validated from Company Records			$ 7,111	Calculated	$ -		$ (7,111)	Calculated	0.00	Calculated	**(355.57)**	Calculated
			$ -	$ -	$ -		$ -						$ -		N/A			
COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL (>50KW)			$ -	$ -	$ -		$ -		$ -		$ -		$ -		N/A			
Leveraging Conservation and Load Management Programs			$ -	$ -	$ -		$ -		$ -		$ -		$ -		N/A			
PBIP Prescriptive Measures			$ -	$ -	$ -		$ -		$ -		$ -		$ -		N/A			
Single-lamp Std. T12 Fixtures to T8 fixture	C, I & I >50kW < 1500kw	10	$ 29,405	$ 38,602	$ -		$ 38,602	Marbek Report	$ 38,602	Marbek Report	$ 29,405	SeeLine Group Analysis	$ (9,197)	Calculated	0.76	Calculated	**(459.83)**	Calculated
Two-lamp Std. T12 Fixtures to T8 fixture	C, I & I >50kW < 1500kw	10	$ 202,673	$ 196,792	$ -		$ 196,792	Marbek Report	$ 196,792	Marbek Report	$ 202,673	SeeLine Group Analysis	$ 5,881	Calculated	1.03	Calculated	**294.03**	Calculated
Three-lamp Std. T12 Fixtures to T8 fixture	C, I & I >50kW < 1500kw	10	$ 5,096	$ 4,177	$ -		$ 4,177	Marbek Report	$ 4,177	Marbek Report	$ 5,096	SeeLine Group Analysis	$ 919	Calculated	1.22	Calculated	**45.95**	Calculated
Four-lamp Std. T12 Fixtures to T8 fixture	C, I & I >50kW < 1500kw	10	$ 75,979	$ 50,301	$ -		$ 50,301	Marbek Report	$ 50,301	Marbek Report	$ 75,979	SeeLine Group Analysis	$ 25,678	Calculated	1.51	Calculated	**1,283.92**	Calculated
Single-lamp Std. T12 Fixtures to HP T8 fixture	C, I & I >50kW < 1500kw	10	$ 1,260	$ 1,245	$ -		$ 1,245	Marbek Report	$ 1,245	Marbek Report	$ 1,260	SeeLine Group Analysis	$ 15	Calculated	1.01	Calculated	**0.76**	Calculated
Two-lamp Std. T12 Fixtures to HP T8 fixture	C, I & I >50kW < 1500kw	10	$ 39,659	$ 25,165	$ -		$ 25,165	Marbek Report	$ 25,165	Marbek Report	$ 39,659	SeeLine Group Analysis	$ 14,495	Calculated	1.58	Calculated	**724.73**	Calculated
Three-lamp Std. T12 Fixtures to HP T8 fixture	C, I & I >50kW < 1500kw	10	$ 6,076	$ 3,383	$ -		$ 3,383	Marbek Report	$ 3,383	Marbek Report	$ 6,076	SeeLine Group Analysis	$ 2,693	Calculated	1.80	Calculated	**134.66**	Calculated
Four-lamp Std. T12 Fixtures to HP T8 fixture	C, I & I >50kW < 1500kw		$ -	$ -	$ -		$ -		$ -		$ -		$ -		N/A		**0.00**	Calculated
LED Exit signs	C, I & I >50kW < 1500kw	10	$ 17,814	$ 4,388	$ -		$ 4,388	Marbek Report	$ 4,388	Marbek Report	$ 17,814	SeeLine Group Analysis	$ 13,427	Calculated	4.06	Calculated	**671.34**	Calculated
14W CFL	C, I & I >50kW < 1500kw	10	$ 167,784	$ 21,341	$ -		$ 21,341	Marbek Report	$ 21,341	Marbek Report	$ 167,784	SeeLine Group Analysis	$ 146,443	Calculated	7.86	Calculated	**7,322.15**	Calculated
13WCFL	C, I & I >50kW < 1500kw	10	$ 1,840	$ 234	$ -		$ 234	Marbek Report	$ 234	Marbek Report	$ 1,840	SeeLine Group Analysis	$ 1,606	Calculated	7.86	Calculated	**80.29**	Calculated
LED Exit signs	C, I & I >1500kw	10	$ 13,703	$ 3,375	$ -		$ 3,375	Marbek Report	$ 3,375	Marbek Report	$ 13,703	SeeLine Group Analysis	$ 10,328	Calculated	4.06	Calculated	**516.41**	Calculated
			$ -	$ -	$ -		$ -		$ -		$ -		$ -		N/A			
PBIP Custom Projects			$ -	$ -	$ -		$ -		$ -		$ -		$ -		N/A			
Project #1	C, I & I >50kW < 1500kw	30	$ 159,895	$ 141,493	$ -		$ 141,493	Marbek Evaluation	$ 141,493	Marbek Evaluat	$ 159,888	SeeLine Group Analysis	$ 18,396	Calculated	1.13	Calculated	**919.79**	Calculated
Project #2	C, I & I >50kW < 1500kw	30	$ 147,701	$ 195,960	$ -		$ 195,960	Marbek Evaluation	$ 195,960	Marbek Evaluat	$ 147,695	SeeLine Group Analysis	$ (48,265)	Calculated	0.75	Calculated	**(2,413.27)**	Calculated
Project #3	C, I & I >50kW < 1500kw	30	$ 55,137	$ 40,215	$ -		$ 40,215	Marbek Evaluation	$ 40,215	Marbek Evaluat	$ 55,135	SeeLine Group Analysis	$ 14,920	Calculated	1.37	Calculated	**746.00**	Calculated
Project #4	C, I & I >50kW < 1500kw	30	$ 82,075	$ 89,950	$ -		$ 89,950	Marbek Evaluation	$ 89,950	Marbek Evaluat	$ 82,064	SeeLine Group Analysis	$ (7,886)	Calculated	0.91	Calculated	**(394.29)**	Calculated
Program Costs			$ -	$ -	$ 468,891	Validated from Company Records			$ 468,891	Calculated	$ -		$ (468,891)	Calculated	0.00	Calculated	**(23,444.57)**	Calculated
			$ -	$ -	$ -		$ -						$ -		N/A			
C,I and I Load Control (Program Costs Only)			$ -	$ -	$ 1,915	Validated from Company Records			$ 1,915	Calculated	$ -		$ (1,915)	Calculated	0.00	Calculated	**(95.74)**	Calculated
			$ -	$ -	$ -		$ -						$ -		N/A			
			$ -	$ -	$ -		$ -						$ -		N/A			
TOTAL RESULTS			**$ 1,821,929**	**$ 816,620**	**$ 892,129**		**$ 816,620**		**$ 1,708,749**		**$ 1,864,830**		**$ 156,082**				**$ 7,804**	

APPENDIX B: RESOURCES

Below is a summary of the skills and experiences of the ERA Consultants that worked on this project. The ERA team has extensive experience in program evaluation. They have conducted similar evaluations for a number of LDCs in 2008, in support of their 2009 rate filings.

Helen Platis, Vice President Operational Solutions was project lead. She has conducted similar evaluations for both Bluewater Power, and Enwin in support of their 2009 rate filings. Helen has over 20 years general management experience in both natural gas and electricity, working with some of the top energy companies in North America including Duke Energy (Union Gas), Ontario Hydro and Centrica PLC (Direct Energy). She has held senior positions in Strategic Planning, Business Development, Sales, Marketing and Operations.

Helen was responsible for the planning and evaluation of some of the first CDM projects conducted in the province of Ontario -- in electricity (during her time with Ontario Hydro) and for natural gas (while with Union Gas). She designed and implemented an evaluation approach that is still used today. She has developed evaluation guidelines and training material and acted as an expert witness before the OEB in a number of rate cases. Her work has been published in international symposiums and conference proceedings since 1990.

Natalie Dance provided audit review and analytical support. Natalie has experience in a variety of consulting roles, while working with Elenchus and as principle of her own consulting firm. She has worked on similar projects to support past rate filings (cite examples).

Kathi Litt provided the final review of the evidence and the audit report. Her years of regulatory experience while with the Ontario Energy Board and most recently as Manager of Rates and Regulatory Affairs with Enersource ensured that information was presented clearly and consistently with OEB expectations.