



1 Greendale Drive, Caledonia, ON, N3W 2J3 Tel: (905) 765-5211 Fax: (905) 765-5316

March 30, 2007

Delivered by Courier

Ontario Energy Board
P.O. Box 2319
2300 Yonge Street
Suite 2700
Toronto, ON M4P 1E4

Attention: Ms. Kirsten Walli
Board Secretary

**Re: Haldimand County Hydro Inc.
RP-2004-0203 \ EB-2004-0523
Conservation and Demand Annual Report – 2006**

Further to the Ontario Energy Board's (the "Board") orders approving electricity distributor conservation and demand ("CDM") plans, the Board requires that each distributor file an annual report including a cost benefit analysis.

Pursuant to the Board's "Guideline for Annual Reporting of CDM Initiatives" issued December 21, 2005 and the updated "Requirements for Annual Reporting of CDM Initiatives" issued March 1, 2007, please find enclosed three (3) hard copies and two (2) electronic copies of Haldimand County Hydro Inc.'s 2006 annual reporting which includes the following:

- 2006 Conservation and Demand Management Annual Report, dated March 30, 2007;
- Appendix A – Evaluation of the CDM Plan;
- Appendix B – Discussion of the Programs "Co-Branded Mass Market", "Smart Meter <50 kW", "Smart Meter >50 kW", "Energy Audit Feasibility Study", and "Distribution Conversion".
- Appendix C – Program and Portfolio Totals; as listed in Appendix B.

Yours truly,
HALDIMAND COUNTY HYDRO INC.

Original signed by S. Graham

Sherry Graham
Accounting Supervisor

2006 OEB Annual Conservation and Demand Management Report



Submitted By Haldimand County Hydro Inc.
R. Jane Albert, Consumer Services Manager

RP-2004-0203/EB-2004-0523

March 30, 2007

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1.0 Introduction

Haldimand County Hydro Inc. distributes electricity to 20,237 customers in Haldimand County. Our customer base is made up of a unique combination of rural and suburban customers stretching over 1252 square kilometers.

Our desire to promote a sustainable conservation culture with our customers facilitated our participation in a regional approach to program development to derive economies of scale but to also create consistent regional information to the customers across 11 LDC's, known as NEPA (Niagara Erie Public Power Alliance).

The NEPA group has long been known in the Industry as a leader in facilitating regional understanding of regulatory changes, public safety messaging, co-ordination of training and now conservation and demand management.

Our Conservation and Demand Management (CDM) plan was prepared as a NEPA initiative. Together we represent 525,000 customers and a total of \$5.5 million dollars of CDM funding. Our primary goal is to leverage common solutions and deliverables to maximize results when ever feasible.

During 2005 and 2006, our primary concentration was to plan and create our foundation. High on the list was emphasizing customer communication branding in the form of Conserver Joe to begin changing and building awareness for the long term. In 2007 our customers will enjoy further localized programming as well as our support for programming designed and delivered by the OPA.

The following table shows the approved plan expenditures by project as well as actual expenditures to December 31, 2006.¹

Project	Target Customers	Shared Initiative with NEPA	Approved Budget	Actual Spent as of Dec. 31, 2005	Actual Spent as of Dec 31, 2006	Total Budget Spent
Co-branded Mass Market Program	Residential and <50 kW customers	Development of Conserver Family	60,000	\$44,983.29 ¹	\$16,126.33 ²	\$61,109.62
Social Housing	Residential	Under Review	\$20,000.00	\$0	0	
Smart Metering Low Volume	Residential	NEPA and OUSM	\$15,000	\$5,989.51	7613.72	\$13,603.23
Energy Audit >50kW	>50kW	Under Review	\$5,000.00	\$1,061.00	4319.55	\$5,380.55
Smart Metering >50kW	>50kW	Local to HCH	\$37,500	\$4,985.70	9928.55	\$14,914.25
Distribution Assets – Voltage Conversion	All	Local to HCH	\$294,585.00	\$103,833.68	190751.32	\$294,585.00
Administration			\$5,000	\$2,458.24	2937.64	\$5,395.88
Project and Budget Totals			\$ 437,085.00	\$ 118,328.13	\$231,677.11	\$ 394,988.53

2.0 Evaluation of the CDM Plan

¹ All programs completed or started in 2005 are detailed in Appendix B with accumulated results in Appendix A. Actual reported spending varies from our 4th quarter filing spending by \$20,130.00 to account for final expenditures for Lighten Your Electricity Bill coupon event.

² Expenditures of \$726.30 are to applied in the final OEB Annual report in 2007.

Haldimand County Hydro Inc.
2006 OEB Annual CDM Report

The Haldimand County Hydro has implemented CDM projects that has effectively reduced 52kW in demand with annual savings of 490,714 kWh and total project savings over the lifespan of the technology of 3,431,582 kWh.

Appendix A depicts our overall CDM portfolio summarizing both programs with qualitative and quantitative results. Our overall TRC value is -\$270,890.00 with total spending of \$231,201. We have opted to not project TRC calculations for projects not completed by December 31, 2006.

Haldimand County Hydro is a strong advocate of actively participating with the OPA on their residential programs. In 2006 we participated in EKC promotions. We incurred no incremental costs during our participation. In this report we are not reporting on statistics of products purchased. It is our intention to continue promotion with staff and customers through our standard bill insert messages and local website which are presented to our customers.

Some programs are not designed to have specific quantifiable energy savings but are nevertheless effective and important in our view. Examples of this second category of program include:

- Educational components like the “Conserver Family” information
- Active participation in the implementation study of smart meters for low volume customers in Ontario

3.0 Discussion of the Programs

Below is a brief summary of our specific CDM activities started in 2005 and/or 2006 and completed in 2006. Appendix B includes details on programs with TRC values listed below as new this year, Appendix C that categorizes the programs and their attributes by customer.

Completed Projects

3.1 Voltage Conversion of Hagersville 4 kV to 27.6 kV

TRC - \$(270,890.00)

Timeline – August 2005 to November 2006

The overall TRC analysis of the final project has indicated a negative net present value and would be considered a pilot CDM project. Haldimand County Hydro is committed to continued distribution improvements that will improve our reliability and efficient electricity distribution through our system.

Permanent improvements to our overall loss factor will benefit all our customers. Haldimand County Hydro still has several areas that will continue to be reviewed as part

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of our capital project strategy. In the community of Hagersville, an opportunity to change sections of line from 4 kV to 27.6 kV was determined to provide overall long term benefit to our customer base. This conversion also provides us with the opportunity to take older (high loss) transformers out of service and replace them with more efficient transformers built to today's standards. In addition to the distribution transformers it allows us to take out of service a 4 kV substation operating with old high loss transformers.

3.2 LED Christmas Light Exchange

TRC - \$52,183

Timeline – July 1, 2006 – December 31, 2006



In conjunction with our NEPA members, CLD group and Hydro One, Haldimand County Hydro supported and promoted the use of seasonal LED lights in Haldimand County. The three groups worked together to bulk purchase LED seasonal light strings. Our overall savings of 133,039 kWh equated to enough energy to power over 175 homes during the month of December.

Our program was planned to work with multiple levels of customer groups to promote a seasonal lighting alternative and to establish role models in our community by working with local community Christmas light committees.

All of our events were manned by volunteers from Haldimand County Hydro Staff and Board Members and their families. Our overall goal was to create the largest pile of old lights for grand finale. By all accounts we were very well received in the community.

Organized Events

1. LED Exchange Program with Haldimand County Residents

- Haldimand County Hydro attended two light up night venues offering a new multi-colour Christmas LED light string in exchange for two old incandescent light strings. A total of 1600 LED light sets were available for distribution

The following are some of the photo's taken at the two events

Caledonia Exchange

Haldimand County Hydro Inc.
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Dunnville Exchange



2. Conservation Bureau’s “Every Kilowatt Counts” Coupon Campaign

- Residents across Ontario are invited to purchase energy efficient products from local merchants at discounted prices. LED Christmas lights discount coupons were made available from October 1st until November 30, 2006.

3. Monetary Exchange Program with Christmas Light Committees in Dunnville, Caledonia, Cayuga, Selkirk, Fisherville and Jarvis.

- Local Light-up Committees were invited to bring in their old Christmas lights in exchange for funding to help purchase new LED lights that provide greater durability on public displays and light standards along with significantly reducing electrical consumption. Our community light up committees have committed to a short term goal is transforming their community lighting displays to energy efficient standards. True leaders and advocates of energy efficiency. Overall energy saving since 2004-2005 season 21,958 kWh.

Christmas Lights Consumption (kWh)			
Community	2004-2005	2005-2006	2006-2007
Hagersville	3748	1764	647
Caledonia	9495	4483	32
Cayuga	6020	1655	2144
Dunnville	4047	4536	3585
Selkirk	1749	691	2
Jarvis	5681	1888	838
Caledonia (metered)			1534
Total	30740	15017	8782

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Community Christmas Light Committee pictured in front of a sample of the lights they turned in for recycling.

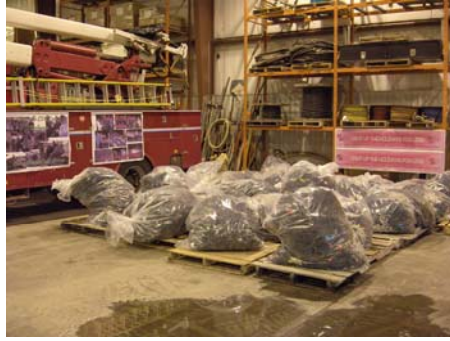
4. LED Light Donation for Low Income Families

- HCH worked with four local food banks this year by contributing a string of LED light to Christmas food hampers for 418 families throughout Haldimand County. Although no incandescent lights are exchanged, the high efficiency of the LED lights can help them with energy costs and add to the enjoyment of the holidays.

LED Seasonal Light Finale

On December 8th, 2006, Haldimand County Hydro invited local media to cover the unveiling of all the incandescent lights that have been removed from Haldimand County due to the various programs administered during the past two months. On hand to celebrate the energy savings of the event were, Mayor Marie Trainer, Mr. Peter Love, Ontario's Chief Energy Conservation Officer, Haldimand County Hydro staff, representatives from NEPA Utilities, and some of the representatives of the local light committee's.





Pictured above are the incandescent lights collected and photo opportunity with the NEPA members, and Peter Love.

3.3 Cold Water Wash

TRC – \$13,500.00

Timeline – October 1, 2005 – March 31, 2006

In conjunction with other NEPA members and LDCs across the province, Haldimand County Hydro supported and promoted the use of cold water to wash clothes. In partnership with Proctor and Gamble, we distributed 18,072 coupons with recorded customer coupon redemption of 3.3% or 601 customers.

Haldimand County Hydro does not presently bill for rental electric hot water heaters. Prior to the business being sold, we billed approximately 1300 water heaters ranging from 40 to 60 gallons.

Our primary delivery efforts included local organized staff promotions and customer contests to enhance awareness of the attributes and benefits of switching to cold water.

All customer received their “Switch to Cold” coupon via a direct mail in September, 2005. Results of the program were available March 2006.

Ongoing Projects – Initiated in 2005

3.4 Large User Energy Seminar and Audit Program

TRC- Qualitative and TRC value

Timeline – July 1, 2006 – March 31, 2006

The objective of the seminar and the audit program was to provide a better understanding of energy use for our largest users. We know from the Ontario Power Authorities Integrated Power Plan that our commercial and industrial customer provide the largest opportunity of peak demand reductions in the province. Haldimand County Hydro has a large and strong agricultural base and their presence was strong at the seminar.

Customers in attendance were offered the opportunity to receive up to \$3000.00 towards an energy audit by a pre-approved contractor implemented energy changes. Funding was available for a maximum of 7 customers. As of December 31, 2006, a total 4 out of 7 audits have been complete. Further results will be reported in our final report.

3.5 Conserver Joe Website

TRC – Qualitative

Timeline – May 2005 to September 2007

In partnership with the NEPA group, we continue to maintain a diversified customer education package built around Conserver Joe and his family. The development of the design was built around the concept of a family approach to saving energy. Each family member brings their own special touch to encouraging and sharing conservation.

Introducing the Conserver Family



Joe



Jane



Meghan



Jordan

We know that changing our consumers' habits to sustain ongoing support and belief in conservation would take the resources of the working folks, as well as the push and enthusiasm of our youth.

To assist in local use of the Conserver Family, Product Use guidelines have been developed to keep our Conserver Family used in a consistent manner.

Conserver Joe and his family continues to make appearances in various media as follows:

- **Conservation Handbook** – advises residential customers how to seasonally tune up their home to optimize energy use.
- **Newsletter** – a tabloid designed to share the success stories across LDCs utilizing Conserver Joe.
- **Bill Inserts** – Initially 10 bill inserts have been developed each sharing a single conservation message. All four family members share tips on saving energy.
- **Website** – www.conserverjoe.com – the website was developed to create a consistent message and branding. All NEPPA participants are able to use the website links.
- **Print Ads** – a selection of print ads have been developed for easy and quick circulation.

3.6 Smart Metering – Low Volume Customers

TRC - Qualitative

Timeline –May, 2005 – September 2007

Haldimand County Hydro has elected not to directly facilitate a low volume smart metering pilot. However, we have embraced our responsibility to understand and participate in the development of smart metering implementation. We hold an active role on the OUSM working group in all facets and contribute to a more localized working group with the 11 NEPA members to explore regional solutions.

All funding attributed to Smart Metering for low volume customers is to support our involvement in both these organizations. In the last quarter of 2006, Haldimand County Hydro embarked on preparing our Smart Meter Implementation Plan which is projects full implementation by end of 2008 in the preliminary plans.

3.7 Smart Metering – Large Volume Customers

TRC - Qualitative

Timeline – May 2005 – September 2007

In response to the smart meter initiative all our large customers (>50 kW) who use gave greater than 200kW will have an interval meter installed. In total 13 customers have received an interval meter. Changes to our Conditions of Service will ensure that all new construction with loading greater than 200 kW will automatically have an interval meter installed.

Final equipment and communication equipment was installed in 2006. 2007 we will finalize our program by working with all interval customers to educate and entice energy conservation by reviewing hourly consumption data and patterns using web tools, OPA incentive programs. It is our intent to actively participate in the OPA LDC programs and communicate directly with this high volume customer base.

3.8 Administrative

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TRC – Qualitative

Timeline – January 1, 2006 – December 31, 2006

General administrative costs cover our participation in the general CDM meetings regarding program development, reporting and review. Administrative funds are not directly attributed to any one program, but rather are considered to be a general expense to cover our cost to participate.

4.0 Lessons Learned

Creating a balanced plan requires a concerted effort to include a mix of localized programming to engage a community commitment and broader initiatives to connect Haldimand County Hydro to a provincial goal and solution.

Our plan was developed with the express desire to improve our overall customer base efficiency and target specific customer segments. Our limited budget of \$437,000 required some creative approaches.

The improvement of our overall loss factor by the conversion of 4 kV line in Hagersville to 27.6 kV benefits our entire customer base. It is clear that based on TRC alone, the line conversion does not present itself as a potential program. However, the added customer and system benefits of improved voltage continued to be a significant argument when continuing overall distribution system maintenance and improvements.

Never underestimate the power of a strong community program. Our signature program this year was our seasonal LED light exchange. We took extra effort to engage our whole community. First we engaged the enthusiasm of our Christmas community light leaders to change their lighting displays from incandescent to LED. We met with customers during light up nights to exchange lights, challenged our own staff to reduce their seasonal lighting energy use and we provided LED lights to low income families. We are planning to continue the program during the 2007 season.

Converting thirteen of our largest customers to interval meters is an important start to initiating other demand response programs. Showing customers when they use the power, with the relative price signal, creates the proper support for ongoing efforts on their part that could lead to onsite capital improvements to reduce their consumption and demand. We will be investigating adding more interval meters to our largest customers to use as a tool to promote a provincial energy awareness. Seeing will be believing.

A valued component of our CDM efforts is joint co-operation with the NEPA members. It is clear that consistent messaging and branding over a larger geographical area supports the long term goal of a sustained conservation culture. Our NEPA members continue to be a source of positive energy in maintaining the ongoing development of CDM in the

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province. We believe we are able to promote and deliver more cost effective programs than by operating on our own.

On the home front, we have continued to engage our very own “Kilowatt Busters”. Each staff member received home energy kits. We were pleased to work with Union Energy to spread the message of responsible energy use. Our staff continues to be our best ambassadors.

In 2007 we will continue to strive towards continued customer education.

5.0 Conclusion

2006 we focused on the engagement of our community. Extra effort was made to explore awareness. We looked to zero incremental cost measures such as the Mayor’s Blackout challenge, radio appearances, CDM messages on all bill inserts and staff awareness.

We are expecting to finalize the balance of our budget of \$42,489.37 by September 2007. Our primary focus will be our preparation to participate with the OPA on the four standard program offers that are due to commence June 15, 2007

Haldimand County Hydro has benefited by actively participating with the NEPA group to leverage programming, remaining adaptable to the regulatory changes, maintaining low cost initiatives through bulk purchasing and, whenever possible, fostering a regional solution for our customers. During the course of 2006, we have been able to maintain active participation with our current staff complement. Limited outside assistance has been contracted for TRC reporting purposes.

New in 2007

1. Low Income Program

Ongoing from 2005

1. Large User Energy Audit – ends March 31, 2007
2. Smart Metering Customers >50kW General Service
3. Customer Education
4. LED Christmas Light Exchange

We are committed to local delivery of CDM programming to our customers and look forward to continued cost effective innovative solutions in conjunction with the OPA.

Appendix A - Evaluation of the CDM Plan

Highlighted boxes are to be completed manually, white boxes are linked to Appendix C and will be brought forward automatically.

	⁵ Cumulative Totals Life-to-date	Total for 2006	Residential	Commercial	Institutional	Industrial	Agricultural	LDC System	⁴ Smart Meters	Other #1	Other #2
<i>Net TRC value (\$):</i>	-\$ 226,990	-\$ 272,768	\$ 65,683	\$ (4,320)	\$ -	\$ -	\$ -	\$ (331,193)		\$ -	\$ -
<i>Benefit to cost ratio:</i>	\$ 0.36	0.36	7.95	0.00	0.00	0.00	0.00	0.19		0.00	0.00
<i>Number of participants or units delivered:</i>	6370	2001	2000					1			
<i>Lifecycle (kWh) Savings:</i>	6,218,424	3,431,582	1,918,197	0	0	0	0	1,513,385		0	0
<i>Report Year Total kWh saved (kWh):</i>	733,769	490,714	427,657	0	0	0	0	63,058		0	0
<i>Total peak demand saved (kW):</i>	140	52	37	0	0	0	0	14		0	0
<i>Total kWh saved as a percentage of total kWh delivered (%):**</i>	0.193%	0.129%	0.113%	0.000%	0.000%	0.000%	0.000%	0.017%	0.000%	0.000%	0.000%
<i>Peak kW saved as a percentage of LDC peak kW load (%):</i>		0.061%	0.044%	0.000%	0.000%	0.000%	0.000%	0.017%	0.000%	0.000%	0.000%
¹ <i>Report Year Gross C&DM expenditures (\$):</i>	\$ 394,512	\$ 231,201	\$ 15,650	\$ 4,320	\$ -	\$ -	\$ -	\$ 190,751	\$ 17,542	\$ -	\$ -
² <i>Expenditures per kWh saved (\$/kWh):</i>	\$ 0.13	\$ 0.07	\$ 0.01	\$ -	\$ -	\$ -	\$ -	\$ 0.13		\$ -	\$ -
³ <i>Expenditures per kW saved (\$/kW):</i>	\$ 6,329.03	\$ 4,473.03	\$ 419.30	\$ -	\$ -	\$ -	\$ -	\$ 13,280.44		\$ -	\$ -
<i>Utility discount rate (%):</i>	7.52										

¹ Expenditures are reported on accrual basis.

² Expenditures include all utility program costs (direct and indirect) for all programs which primarily generate energy savings.

³ Expenditures include all utility program costs (direct and indirect) for all programs which primarily generate capacity savings.

⁴ Please report spending related to 3rd tranche of MARR funding only. TRC calculations are not required for Smart Meters. Only actual expenditures for the year need to be reported.

⁵ Includes total for the reporting year, plus prior year, if any (for example, 2006 CDM Annual report for third tranche will include 2005 and 2004 numbers, if any).

Appendix B - Discussion of the Program

(complete this Appendix for each program)

A. **Name of the Program:** Co-Branded Mass Market

Description of the program (including intent, design, delivery, partnerships and evaluation):

2006 Program included:	LED Light
community Light Exchange Program - exchange incandescent lights for LED lights.	
Conservor Joe Website - Annual Hosting Fees.	Switch to Cold
Water Wash.	

Measure(s):

	5 Watt	Mini Watt	Switch to Cold
<i>Base case technology:</i>	5 WATT Christmas lights C-7(64 lights)	Incandescent Mini Lights	Average existing stock
<i>Efficient technology:</i>	LED Christmas Lights (indoor or outdoor)	LED Christmas Lights (indoor or outdoor)	Cold Water Washing (Detergent)
<i>Number of participants or units delivered for reporting year:</i>	1000	1000	601
<i>Measure life (years):</i>	30	30	1
<i>Number of Participants or units delivered life to date</i>	2273	2273	601

B. TRC Results:	Reporting Year	Life-to-date TRC Results:
¹ TRC Benefits (\$):	\$ 75,140	\$ 248,648
² TRC Costs (\$):		
<i>Utility program cost (excluding incentives):</i>	-\$ 1,150	-\$ 43,833
<i>Incremental Measure Costs (Equipment Costs)</i>	-\$ 8,308	-\$ 25,908
<i>Total TRC costs:</i>	-\$ 9,458	-\$ 69,741
Net TRC (in year CDN \$):	\$ 65,683	\$ 178,907
<i>Benefit to Cost Ratio (TRC Benefits/TRC Costs):</i>	7.95	3.57

C. **Results:** (one or more category may apply) **Cumulative Results:**

Conservation Programs:

<i>Demand savings (kW):</i>	<i>Summer</i>	13	22
	<i>Winter</i>	37	125

	<i>lifecycle</i>	<i>in year</i>	<i>Cumulative Lifecycle</i>	<i>Cumulative Annual Savings</i>
<i>Energy saved (kWh):</i>	1,918,197	427,657	4,705,038	670,712
<i>Other resources saved :</i>				
<i>Natural Gas (m3):</i>				
<i>Other (specify):</i>				

Demand Management Programs:

<i>Controlled load (kW)</i>	
<i>Energy shifted On-peak to Mid-peak (kWh):</i>	
<i>Energy shifted On-peak to Off-peak (kWh):</i>	
<i>Energy shifted Mid-peak to Off-peak (kWh):</i>	

Demand Response Programs:

<i>Dispatchable load (kW):</i>	
<i>Peak hours dispatched in year (hours):</i>	

Power Factor Correction Programs:

<i>Amount of KVar installed (KVar):</i>	
<i>Distribution system power factor at beginning of year (%):</i>	
<i>Distribution system power factor at end of year (%):</i>	

Line Loss Reduction Programs:

Peak load savings (kW):			
	<i>lifecycle</i>	<i>in year</i>	
Energy savings (kWh):			

Distributed Generation and Load Displacement Programs:

Amount of DG installed (kW):		
Energy generated (kWh):		
Peak energy generated (kWh):		
Fuel type:		

Other Programs (specify):

Metric (specify):		
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<u>Actual Program Costs:</u>		<u>Reporting Year</u>	<u>Cumulative Life to Date</u>
Utility direct costs (\$):	<i>Incremental capital:</i>		
	<i>Incremental O&M:</i>	\$ 1,150	\$ 45,883
	<i>Incentive:</i>	\$ 14,500	\$ 34,630
	<i>Total:</i>	\$ 15,650	\$ 80,513
Utility indirect costs (\$):	<i>Incremental capital:</i>		
	<i>Incremental O&M:</i>		
	<i>Total:</i>		

E. Assumptions & Comments:

All TRC analysis completed using OEB published Assumptions/Measures List.
 Total 2006 TRC costs include expenditures for Conserver Joe Website and Cold Water Wash programs.
 Cumulative TRC results include 2005 results for Lighten your Electricity Bill program.
 2005 Customer Education program and staff training costs are included in total cumulative Life to Date Actual Program Costs

¹ Benefits should be estimated if costs have been incurred and the technology has been deployed. Benefits reflect the present value of the measure for the number of units deployed in the year, i.e. the number of units times the net present value per unit benefit specified in the TRC Guide.

² For technologies which have not been deployed but for which the LDC has incurred costs, report only the TRC costs on a present value basis. Incentives (e.g. rebates) from the LDC to a customer are not a component of the TRC costs. However, payments made to a third party service provider to run an incentives program are program costs, and are to be included as TRC costs under the "Utility Program Costs" line.

Appendix B - Discussion of the Program

(complete this Appendix for each program)

A. **Name of the Program:** Smart Meter <50 kW

Description of the program (including intent, design, delivery, partnerships and evaluation):

Smart Meter Study Program

Measure(s):

	Measure 1 (if applicable)	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:			
Efficient technology:			
Number of participants or units delivered for reporting year:			
Measure life (years):			
Number of Participants or units delivered life to date			

B. TRC Results:	Reporting Year	Life-to-date TRC Results:
¹ TRC Benefits (\$):		
² TRC Costs (\$):		
Utility program cost (excluding incentives):		
Incremental Measure Costs (Equipment Costs)		
Total TRC costs:		
Net TRC (in year CDN \$):		
Benefit to Cost Ratio (TRC Benefits/TRC Costs):		

C. Results: (one or more category may apply)	Cumulative Results:	
Conservation Programs:		
Demand savings (kW):	Summer	
	Winter	
	lifecycle	in year
Energy saved (kWh):		Cumulative Lifecycle
Other resources saved :		Cumulative Annual Savings
Natural Gas (m3):		
Other (specify):		
Demand Management Programs:		
Controlled load (kW)		
Energy shifted On-peak to Mid-peak (kWh):		
Energy shifted On-peak to Off-peak (kWh):		
Energy shifted Mid-peak to Off-peak (kWh):		
Demand Response Programs:		
Dispatchable load (kW):		
Peak hours dispatched in year (hours):		
Power Factor Correction Programs:		
Amount of KVar installed (KVar):		
Distribution system power factor at beginning of year (%):		
Distribution system power factor at end of year (%):		

Line Loss Reduction Programs:

Peak load savings (kW):			
	<i>lifecycle</i>	<i>in year</i>	
Energy savings (kWh):			

Distributed Generation and Load Displacement Programs:

Amount of DG installed (kW):		
Energy generated (kWh):		
Peak energy generated (kWh):		
Fuel type:		

Other Programs (specify):

Metric (specify):		
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<u>Actual Program Costs:</u>		<u>Reporting Year</u>	<u>Cumulative Life to Date</u>
Utility direct costs (\$):	Incremental capital:	\$ 7,614	\$ 13,603
	Incremental O&M:		
	Incentive:		
	Total:	\$ 7,614	\$ 13,603
Utility indirect costs (\$):	Incremental capital:		
	Incremental O&M:		
	Total:		

E. Assumptions & Comments:

¹ Benefits should be estimated if costs have been incurred and the technology has been deployed. Benefits reflect the present value of the measure for the number of units deployed in the year, i.e. the number of units times the net present value per unit b

² For technologies which have not been deployed but for which the LDC has incurred costs, report only the TRC costs on a present value basis. Incentives (e.g. rebates) from the LDC to a customer are not a component of the TRC costs. However, payments made

Appendix B - Discussion of the Program

(complete this Appendix for each program)

A. **Name of the Program:** Smart Meter >50 kW

Description of the program (including intent, design, delivery, partnerships and evaluation):

Install and implement interval meters with all customer > 200 kW

Measure(s):

	Measure 1 (if applicable)	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:			
Efficient technology:			
Number of participants or units delivered for reporting year:			
Measure life (years):			
Number of Participants or units delivered life to date			

B. TRC Results:	Reporting Year	Life-to-date TRC Results:
¹ TRC Benefits (\$):		
² TRC Costs (\$):		
Utility program cost (excluding incentives):		
Incremental Measure Costs (Equipment Costs)		
Total TRC costs:		
Net TRC (in year CDN \$):		
Benefit to Cost Ratio (TRC Benefits/TRC Costs):		

C. Results: (one or more category may apply)	Cumulative Results:	
Conservation Programs:		
Demand savings (kW):	Summer	
	Winter	
	lifecycle	
Energy saved (kWh):	in year	
Other resources saved :	Cumulative Lifecycle	Cumulative Annual Savings
Natural Gas (m3):		
Other (specify):		
Demand Management Programs:		
Controlled load (kW)		
Energy shifted On-peak to Mid-peak (kWh):		
Energy shifted On-peak to Off-peak (kWh):		
Energy shifted Mid-peak to Off-peak (kWh):		
Demand Response Programs:		
Dispatchable load (kW):		
Peak hours dispatched in year (hours):		
Power Factor Correction Programs:		
Amount of KVar installed (KVar):		
Distribution system power factor at beginning of year (%):		
Distribution system power factor at end of year (%):		

Line Loss Reduction Programs:

Peak load savings (kW):			
	<i>lifecycle</i>	<i>in year</i>	
Energy savings (kWh):			

Distributed Generation and Load Displacement Programs:

Amount of DG installed (kW):		
Energy generated (kWh):		
Peak energy generated (kWh):		
Fuel type:		

Other Programs (specify):

Metric (specify):		
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<u>Actual Program Costs:</u>		<u>Reporting Year</u>	<u>Cumulative Life to Date</u>
Utility direct costs (\$):	Incremental capital:	\$ 9,929	\$ 14,914
	Incremental O&M:		
	Incentive:		
	Total:	\$ 9,929	\$ 14,914
Utility indirect costs (\$):	Incremental capital:		
	Incremental O&M:		
	Total:		

E. Assumptions & Comments:

¹ Benefits should be estimated if costs have been incurred and the technology has been deployed. Benefits reflect the present value of the measure for the number of units deployed in the year, i.e. the number of units times the net present value per unit b

² For technologies which have not been deployed but for which the LDC has incurred costs, report only the TRC costs on a present value basis. Incentives (e.g. rebates) from the LDC to a customer are not a component of the TRC costs. However, payments made

Appendix B - Discussion of the Program

(complete this Appendix for each program)

A. **Name of the Program:** Energy Audit Feasibility Study

Description of the program (including intent, design, delivery, partnerships and evaluation):

Breakfast Seminar with Customers > 250,000 annual kWh

Measure(s):

	Measure 1 (if applicable)	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:			
Efficient technology:			
Number of participants or units delivered for reporting year:			
Measure life (years):			
Number of Participants or units delivered life to date			

B. TRC Results:	Reporting Year	Life-to-date TRC Results:
¹ TRC Benefits (\$):		
² TRC Costs (\$):		
Utility program cost (excluding incentives):	-\$ 4,320	-\$ 5,381
Incremental Measure Costs (Equipment Costs)		
Total TRC costs:	-\$ 4,320	-\$ 5,381
Net TRC (in year CDN \$):	-\$ 4,320	-\$ 5,381
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	-	-

C. **Results:** (one or more category may apply) **Cumulative Results:**

Conservation Programs:

	Summer		Cumulative Lifecycle	Cumulative Annual Savings
	lifecycle	in year		
Demand savings (kW):				
Energy saved (kWh):				
Other resources saved :				
Natural Gas (m3):				
Other (specify):				

Demand Management Programs:

Controlled load (kW)		
Energy shifted On-peak to Mid-peak (kWh):		
Energy shifted On-peak to Off-peak (kWh):		
Energy shifted Mid-peak to Off-peak (kWh):		

Demand Response Programs:

Dispatchable load (kW):		
Peak hours dispatched in year (hours):		

Power Factor Correction Programs:

Amount of KVar installed (KVar):		
Distribution system power factor at beginning of year (%):		
Distribution system power factor at end of year (%):		

Line Loss Reduction Programs:

Peak load savings (kW):			
	<i>lifecycle</i>	<i>in year</i>	
Energy savings (kWh):			

Distributed Generation and Load Displacement Programs:

Amount of DG installed (kW):		
Energy generated (kWh):		
Peak energy generated (kWh):		
Fuel type:		

Other Programs (specify):

Metric (specify):		
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D. Actual Program Costs:

		<u>Reporting Year</u>	<u>Cumulative Life to Date</u>
Utility direct costs (\$):	<i>Incremental capital:</i>		
	<i>Incremental O&M:</i>	\$ 4,320	\$ 5,381
	<i>Incentive:</i>		\$ -
	<i>Total:</i>	\$ 4,320	\$ 5,381
Utility indirect costs (\$):	<i>Incremental capital:</i>		
	<i>Incremental O&M:</i>		
	<i>Total:</i>		

E. Assumptions & Comments:

TRC benefits to be determined in 2007 and will be included in the final CDM report.

¹ Benefits should be estimated if costs have been incurred and the technology has been deployed. Benefits reflect the present value of the measure for the number of units deployed in the year, i.e. the number of units times the net present value per unit b

² For technologies which have not been deployed but for which the LDC has incurred costs, report only the TRC costs on a present value basis. Incentives (e.g. rebates) from the LDC to a customer are not a component of the TRC costs. However, payments made

Appendix B - Discussion of the Program

(complete this Appendix for each program)

A. **Name of the Program:** Distribution Conversion

Description of the program (including intent, design, delivery, partnerships and evaluation):

Hagersville line voltage conversion from 4 kV to 27.6 kV

Measure(s):

	27.6 kV Conversion	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	4.16 kV System		
Efficient technology:	27.6 kV System		
Number of participants or units delivered for reporting year:	1		
Measure life (years):	25		
Number of Participants or units delivered life to date	0		

B. TRC Results:	Reporting Year	Life-to-date TRC Results:
¹ TRC Benefits (\$):	\$ 75,616	\$ 75,616
² TRC Costs (\$):		
Utility program cost (excluding incentives):	-\$ 406,810	-\$ 510,644
Incremental Measure Costs (Equipment Costs)	\$ -	\$ -
Total TRC costs:	-\$ 406,810	-\$ 510,644
Net TRC (in year CDN \$):	-\$ 331,193	-\$ 435,027
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	\$ 0.19	\$ 0.15

C. **Results:** (one or more category may apply) **Cumulative Results:**

Conservation Programs:

	Summer	Winter	Cumulative Lifecycle	Cumulative Annual Savings
Demand savings (kW):				
Energy saved (kWh):				
Other resources saved :				
Natural Gas (m3):				
Other (specify):				

Demand Management Programs:

Controlled load (kW)		
Energy shifted On-peak to Mid-peak (kWh):		
Energy shifted On-peak to Off-peak (kWh):		
Energy shifted Mid-peak to Off-peak (kWh):		

Demand Response Programs:

Dispatchable load (kW):		
Peak hours dispatched in year (hours):		

Power Factor Correction Programs:

Amount of KVar installed (KVar):		
Distribution system power factor at beginning of year (%):		
Distribution system power factor at end of year (%):		

Line Loss Reduction Programs:

Peak load savings (kW):		14	14
	<i>lifecycle</i>	<i>in year</i>	
Energy savings (kWh):	1,513,385	63,058	63,058

Distributed Generation and Load Displacement Programs:

Amount of DG installed (kW):		
Energy generated (kWh):		
Peak energy generated (kWh):		
Fuel type:		

Other Programs (specify):

Metric (specify):		
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<u>Actual Program Costs:</u>		<u>Reporting Year</u>	<u>Cumulative Life to Date</u>
Utility direct costs (\$):	Incremental capital:	\$ 190,751	\$ 294,585
	Incremental O&M:		
	Incentive:		
	Total:	\$ 190,751	\$ 294,585
Utility indirect costs (\$):	Incremental capital:		
	Incremental O&M:		
	Total:		

E. Assumptions & Comments:

No TRC reported in 2005 since conversion work was not complete.
Total TRC costs include non 3rd tranche funding of 216,059.
Total Cumulative Life to Date expenditures of \$295,585 represents total 3rd tranche funding.
Since the voltage conversion was completed in 2 phases, 2006 TRC results included avoided energy and peak benefits as well as 2006 TRC costs only; 2005 expenditures were included in Cumulative Life to Date TRC costs.

¹ Benefits should be estimated if costs have been incurred and the technology has been deployed. Benefits reflect the present value of the measure for the number of units deployed in the year, i.e. the number of units times the net present value per unit b

² For technologies which have not been deployed but for which the LDC has incurred costs, report only the TRC costs on a present value basis. Incentives (e.g. rebates) from the LDC to a customer are not a component of the TRC costs. However, payments made

Appendix C - Program and Portfolio Totals

Report Year: 2006

1. Residential Programs

List each Appendix B in the cells below; Insert additional rows as required.

Note: To ensure the integrity of the formulas, please insert the additional rows in the middle of the list below.

	TRC Benefits (PV)	TRC Costs (PV)	\$ Net TRC Benefits	Benefit/Cost Ratio	Report Year Total kWh Saved	Lifecycle (kWh) Savings	Total Peak Demand (kW) Saved ***	Report Year Gross C&DM Expenditures (\$)
Co-Branded Mass Market	\$ 75,140	\$ 9,458	\$ 65,683	7.95	427,657	1,918,197	37	\$ 15,650
Name of Program B			\$ -	0.00				
Name of Program C			\$ -	0.00				
Name of Program D			\$ -	0.00				
Name of Program E			\$ -	0.00				
Name of Program F			\$ -	0.00				
Name of Program G			\$ -	0.00				
Name of Program H			\$ -	0.00				
Name of Program I			\$ -	0.00				
Name of Program J			\$ -	0.00				
*Totals App. B - Residential	\$ 75,140	\$ 9,458	\$ 65,683	7.95	427,657	1,918,197	37	\$ 15,650
Residential Indirect Costs not attributable to any specific program	→							
Total Residential TRC Costs		\$ 9,458						
**Totals TRC - Residential	\$ 75,140	\$ 9,458	\$ 65,683	7.95				

2. Commercial Programs

List each Appendix B in the cells below; Insert additional rows as required.

Note: To ensure the integrity of the formulas, please insert the additional rows in the middle of the list below.

	TRC Benefits (PV)	TRC Costs (PV)	\$ Net TRC Benefits	Benefit/Cost Ratio	Report Year Total kWh Saved	Lifecycle (kWh) Savings	Total Peak Demand (kW) Saved	Report Year Gross C&DM Expenditures (\$)
Energy Audit Feasibility Study		\$ 4,320	-\$ 4,320	0.00				\$ 4,320
Name of Program B			\$ -	0.00				
Name of Program C			\$ -	0.00				
Name of Program D			\$ -	0.00				
Name of Program E			\$ -	0.00				
Name of Program F			\$ -	0.00				
Name of Program G			\$ -	0.00				
Name of Program H			\$ -	0.00				
Name of Program I			\$ -	0.00				
Name of Program J			\$ -	0.00				
*Totals App. B - Commercial	\$ -	\$ 4,320	-\$ 4,320	0.00	0	0	0	\$ 4,320

Commercial Indirect Costs not attributable to any specific program



Total TRC Costs		\$	4,320				
**Totals TRC - Commercial	\$	-	\$	4,320	-\$	4,320	0.00

3. Institutional Programs

List each Appendix B in the cells below; Insert additional rows as required.

Note: To ensure the integrity of the formulas, please insert the additional rows in the middle of the list below.

	TRC Benefits (PV)	TRC Costs (PV)	\$ Net TRC Benefits	Benefit/Cost Ratio	Report Year Total kWh Saved	Lifecycle (kWh) Savings	Total Peak Demand (kW) Saved	Report Year Gross C&DM Expenditures (\$)
Name of Program A			\$ -	0.00				
Name of Program B			\$ -	0.00				
Name of Program C			\$ -	0.00				
Name of Program D			\$ -	0.00				
Name of Program E			\$ -	0.00				
Name of Program C			\$ -	0.00				
Name of Program G			\$ -	0.00				
Name of Program H			\$ -	0.00				
Name of Program I			\$ -	0.00				
Name of Program J			\$ -	0.00				
*Totals App. B - Institutional	\$ -	\$ -	\$ -	0.00	0	0	0	\$ -

Institutional Indirect Costs not attributable to any specific program



Total TRC Costs		\$	-		
**Totals TRC - Institutional	\$	-	\$	-	0.00

4. Industrial Programs

List each Appendix B in the cells below; Insert additional rows as required.

Note: To ensure the integrity of the formulas, please insert the additional rows in the middle of the list below.

	TRC Benefits (PV)	TRC Costs (PV)	\$ Net TRC Benefits	Benefit/Cost Ratio	Report Year Total kWh Saved	Lifecycle (kWh) Savings	Total Peak Demand (kW) Saved	Report Year Gross C&DM Expenditures (\$)
Name of Program A			\$ -	0.00				
Name of Program C			\$ -	0.00				
Name of Program C			\$ -	0.00				
Name of Program D			\$ -	0.00				
Name of Program E			\$ -	0.00				
Name of Program F			\$ -	0.00				
Name of Program G			\$ -	0.00				
Name of Program H			\$ -	0.00				

Name of Program I			\$	-	0.00							
Name of Program J			\$	-	0.00							
*Totals App. B - Industrial	\$	-	\$	-	\$	-	0.00	0	0	0	\$	-
Industrial Indirect Costs not attributable to any specific program	→											
Total TRC Costs			\$	-								
**Totals TRC - Industrial	\$	-	\$	-	\$	-	0.00					

5. Agricultural Programs

List each Appendix B in the cells below; Insert additional rows as required.

Note: To ensure the integrity of the formulas, please insert the additional rows in the middle of the list below.

	TRC Benefits (PV)	TRC Costs (PV)	\$ Net TRC Benefits	Benefit/Cost Ratio	Report Year Total kWh Saved	Lifecycle (kWh) Savings	Total Peak Demand (kW) Saved	Report Year Gross C&DM Expenditures (\$)	
Name of Program A			\$	-	0.00				
Name of Program C			\$	-	0.00				
Name of Program C			\$	-	0.00				
Name of Program D			\$	-	0.00				
Name of Program E			\$	-	0.00				
Name of Program F			\$	-	0.00				
Name of Program G			\$	-	0.00				
Name of Program H			\$	-	0.00				
Name of Program I			\$	-	0.00				
Name of Program J			\$	-	0.00				
*Totals App. B - Agricultural	\$	-	\$	-	0.00	0	0	\$	-
Agricultural Indirect Costs not attributable to any specific program	→								
Total TRC Costs			\$	-					
**Totals TRC - Agricultural	\$	-	\$	-	0.00				

6. LDC System Programs

List each Appendix B in the cells below; Insert additional rows as required.

Note: To ensure the integrity of the formulas, please insert the additional rows in the middle of the list below.

	TRC Benefits (PV)	TRC Costs (PV)	\$ Net TRC Benefits	Benefit/Cost Ratio	Report Year Total kWh Saved	Lifecycle (kWh) Savings	Total Peak Demand (kW) Saved	Report Year Gross C&DM Expenditures (\$)
Distribution Conversion	\$ 75,616	\$ 406,810	-\$ 331,193	0.19	63,058	1,513,385	14	\$ 190,751
Name of Program B			\$	-	0.00			

Name of Program C			\$	-	0.00				
Name of Program D			\$	-	0.00				
Name of Program E			\$	-	0.00				
Name of Program F			\$	-	0.00				
Name of Program G			\$	-	0.00				
Name of Program H			\$	-	0.00				
Name of Program I			\$	-	0.00				
Name of Program C			\$	-	0.00				
*Totals App. B - LDC System	\$ 75,616	\$ 406,810	-\$ 331,193	0.19		63,058	1,513,385	14	\$ 190,751

LDC System Indirect Costs not attributable to any specific program →

Total TRC Costs		\$ 406,810			
**Totals TRC - LDC System	\$ 75,616	\$ 406,810	-\$ 331,193	0.19	

7. Smart Meters Program

Only spending information that was authorized under the 3rd tranche of MARR is required to be reported for Smart Meters.

Report Year Gross C&DM Expenditures (\$) → 17,542

8. Other #1 Programs

List each Appendix B in the cells below; Insert additional rows as required.

Note: To ensure the integrity of the formulas, please insert the additional rows in the middle of the list below.

	TRC Benefits (PV)	TRC Costs (PV)	\$ Net TRC Benefits	Benefit/Cost Ratio	Report Year Total kWh Saved	Lifecycle (kWh) Savings	Total Peak Demand (kW) Saved	Report Year Gross C&DM Expenditures (\$)
Name of Program A			\$ -	0.00				
Name of Program B			\$ -	0.00				
Name of Program C			\$ -	0.00				
Name of Program D			\$ -	0.00				
Name of Program E			\$ -	0.00				
Name of Program F			\$ -	0.00				
Name of Program G			\$ -	0.00				
Name of Program H			\$ -	0.00				
Name of Program I			\$ -	0.00				
Name of Program J			\$ -	0.00				
*Totals App. B - Other #1	\$ -	\$ -	\$ -	0.00	0	0	0	\$ -


Other #1 Indirect Costs not attributable to any specific program →

Total TRC Costs		\$ -			
**Totals TRC - Other #1	\$ -	\$ -	\$ -	0.00	


9. Other #2 Programs

List each Appendix B in the cells below; Insert additional rows as required.

Note: To ensure the integrity of the formulas, please insert the additional rows in the middle of the list below.

	TRC Benefits (PV)	TRC Costs (PV)	\$ Net TRC Benefits	Benefit/Cost Ratio	Report Year Total kWh Saved	Lifecycle (kWh) Savings	Total Peak Demand (kW) Saved	Report Year Gross C&DM Expenditures (\$)
Name of Program A			\$ -	0.00				
Name of Program B			\$ -	0.00				
Name of Program C			\$ -	0.00				
Name of Program D			\$ -	0.00				
Name of Program E			\$ -	0.00				
Name of Program C			\$ -	0.00				
Name of Program G			\$ -	0.00				
Name of Program H			\$ -	0.00				
Name of Program I			\$ -	0.00				
Name of Program J			\$ -	0.00				
*Totals App. B - Other #2	\$ -	\$ -	\$ -	0.00	0	0	0	\$ -
<i>Other #2 Indirect Costs not attributable to any specific program</i>								
Total TRC Costs		\$ -						
**Totals TRC - Other #2	\$ -	\$ -	\$ -	0.00				

LDC's CDM PORTFOLIO TOTALS

	TRC Benefits (PV)	TRC Costs (PV)	\$ Net TRC Benefits	Benefit/Cost Ratio	Report Year Total kWh Saved	Lifecycle (kWh) Savings	Total Peak Demand (kW) Saved	Report Year Gross C&DM Expenditures (\$)
*TOTALS FOR ALL APPENDIX B	\$ 150,756	\$ 420,587	-\$ 269,830	0.36	\$ 490,714	\$ 3,431,582	\$ 52	\$ 231,201
<i>Any other Indirect Costs not attributable to any specific program</i>		\$ 2,938						
TOTAL ALL LDC COSTS		\$ 423,524						
**LDC' PORTFOLIO TRC	\$ 150,756	\$ 423,524	-\$ 272,768	0.36				

* The savings and spending information from this row is to be carried forward to Appendix A.

** The TRC information from this row is to be carried forward to Appendix A.

***Peak demand displayed represents winter peak demand