

## Cornerstone Hydro Electric Concepts Association Inc.

#### CHEC-RP-2004-0203/EB-2004-0502

# Conservation and Demand Management 2008 Annual Report

### 1.0 Introduction:

This 2008 Annual Report summarizes the activity and successes of the Cornerstone Hydro Electric Concepts (CHEC) Group with respect to conservation and demand management initiative undertaken as part of the third tranche funding. Included in this document are the sixteen (16) individual reports from the Local Distribution Companies (LDCs) that formed the CHEC Group.

Consistent with CHEC members' cooperative effort to seek approval of their CDM plans as a combined group, the Annual Report reflects their commitment to work together to provide cost effective programs and to share and learn from each other's experience. At the end of 2007 seven LDCs had exhausted their third tranche funding and continued to support the conservation effort by participating in the OPA programs. The remaining nine LDCs delivered third tranche funded projects in 2008.

The individual reports for the LDCs that delivered third tranche funding in 2008 provides to the reader a better understanding of the activity of each utility while this summary report provides an overview of the impact of the combined effort.

The additional Appendix D requested from the Ontario Energy Board (OEB) required each LDC, including those which completed their programs in previous years, to file a report. To ensure that the 2008 report reflects the full programs the reports for all LDCs contain the minimum of the following documents:

- Appendix A provided for 2008 or last year of plan delivery if completed prior to 2008
- Appendix C which lists the names of programs delivered over the life of the plan
- Appendix D the summary of all years of the plan and which breaks out "Low Income"
- Appendix B for each project where a project was completed in prior years the Appendix has been reduced to control the number of pages.

Within the 9 LDCs with fund remaining for 2008, there were a total of 25 initiatives worked on in 2008. This volume of programs in 2008 reflects the completion of the plan by many of the LDCs and the reduced amount of funds for investment in the year.

On the population of 25 initiatives, 20% had a positive TRC. Initiatives continued to focus on education, studies to prepare customers for continued energy conservation and of course continuation of the partnerships that were started in the first years of the CDM program.

In 2008 the LDCs continued to be actively engaged in the Ontario Power Authority (OPA) funded programs for conservation and demand management. The availability of these funds and programs allowed the LDCs to continue to provide programs supporting development of the conservation culture.

This combined report, in addition to meeting the regulatory requirement, provides a comprehensive summary to CHEC members of the impact of their combined effort.

## 2.0 Participating Members:

The 2008 Annual Report on Conservation and Demand Management Activities of the following utilities are included in this report:

Centre Wellington Hydro Ltd. **COLLUS Power Corp** Grand Valley Energy Inc. Innisfil Hydro Lakefront Utilities Inc. Lakeland Power Distribution Midland Power Utility Corp. Orangeville Hydro Ltd Orillia Power Distribution Corp. Parry Sound Power Rideau St. Lawrence Wasaga Distribution Inc. Wellington North Power Inc. West Coast Huron Energy Inc. Westario Power Woodstock Hydro Services

Where a LDC had completed the program in previous years their statistics are restated to maintain the completeness of the report.

## 3.0 Evaluation of the CDM Plan:

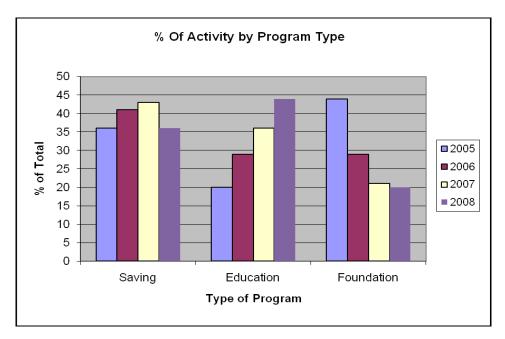
**2008 Portfolio:** The 9 LDCs with third tranche funding remaining collectively undertook a total of 25 initiatives in 2008. These programs fell within three categories:

- Savings: Delivery of energy saving products or processes: coupons, rebates, free products, etc.
- Education: Providing general energy management information through such activities as: website development, workshops, brochures, school programs, etc,
- Foundation: Preparatory work for future programs that include: program research and development, energy audits, system studies, demonstration projects, partnerships, etc. In many instances the continuation of these programs were based on directions set in the first two years.

The 2008 initiatives represent a total combined "Utility Cost" of \$305,200 representing the majority of the third tranche funds that remained.

Figure 1 illustrates program makeup from 2005 to 2008. Over the three year period there was strong support for education programs and for saving programs. In many instances programs were delivered with a dual focus allowing savings to be achieved while providing education at the same time. The Foundation programs were highest early in the programs as studies were initiated and completed that helped set the base for future programs and customer activity.





## **Savings Programs:**

Again in 2008 savings programs continued to focus on local partnerships and delivery channels. The programs continued to partner with community agencies such as social housing, school boards and community based environmental networks. The use of product incentives, delivered through partner agencies or directly to customers, was utilized to provide measures to targeted populations. With these products often educational material was also provided increasing the conservation awareness and knowledge.

**Education Programs:** The CHEC LDC's continued their support of the education portfolio and the School Boards in their service territories. A couple of programs focused directly on the school sector with programs delivered in 100% of the schools in the service territories. All member LDCs remain responsive to conservation information & support requests from area schools.

**Foundation Program:** As would be expected, in 2008 the numbers of "foundation" programs were on a decline. The 2008 "foundation" programs contained audit support for customers, provision of interval meter and data to provide specific information to the customer for savings and the completion of system optimization studies. While in many instances implementation has not occurred it is anticipated that the information and audits provided will encourage participation in programs such as ERIP.

**Net TRC Results:** The net TRC result of the programs delivered by the nine LDCs in 2008 is -\$120,800. The overall negative in 2008 TRC reflects a number of audit completions as well as continued support to education projects over the course of the year. With the framework of the 2008 programs a total of 2,642,800 kWh (lifecycle) have been saved and the education and audit work will assist with program and technology implementation moving forward.

## 4.0 Discussion of Programs:

The individual program discussions from each utility are included in the following sections of this report. These discussions provide the individual utility perspective on the programs as offered in their service territory. As noted previously the report for LDCs that had completed their programs prior to 2008 are included to ensure the completeness of the combined CHEC CDM Report.

## **Low Income Projects:**

For the 2008 report the OEB requested that programs with impact on low income customers be identified and the statistics broken out. The combined effort of the member LDCs resulted in an expenditure of \$146,800 on programs that provided specific benefits to low income with over 7,800 measures/contacts made within the term of the programs.

The low income expenditures, kWh saving and measures/contacts reported do not include impacts from coupon or general support programs. For example school based programs delivered to the general population provided benefits to a sector of low income however, these contacts were not accounted for in the low income reporting. It is anticipated that the benefits provided to this sector are greater than reported.

### 5.0 Lessons Learned Over the Duration of the CDM Plan:

**Partnerships and Sharing:** LDCs have developed a number of partners within and outside of their communities to assist with the delivery of conservation programs. The ability to engage third party partners or contractors have been instrumental in the delivery of programs while controlling in-house resources.

The delivery channels created with the third tranche funding and the LDC support systems established have facilitated the successful continuation of LDCs in the delivery of CDM programs. These channels have continued to be important in the delivery and support of OPA programs which provide opportunities for our customers to conserve and for LDCs to reinforce the conservation culture.

CHEC members continue to share information between members and also with other LDCs. The hiring of a staff position by CHEC (in 2009) to continue to facilitate the combined effort of member LDCs is consistent with the success achieved during the third tranche programs.

**Availability of Funds:** The availability of funds at the local level to support conservation initiatives increased the penetration of projects in the service territories. On-going funding at the local level (through custom programs or community initiative funds) to ensure the continuation of the current momentum should prove beneficial to the conservation movement and the conservation culture that has developed.

The importance of multi-year financing cannot be understated when planning the development and delivery of programs. The third tranche funding allowed LDCs to maintain programs and activity over multiple years, reinforcing the conservation message and developing delivery channels. Moving forward the continued support of the government to provide stable financing and systematic and cost effective approvals will be important to effective program delivery.

**TRC:** The use of TRC is incorporated into the OPA program structure and provides a benchmark for project design. While TRC is one useful tool, the use of TRC does not adequately evaluate the benefits and impacts of general support and education programs. Without a delivered measure the impact of these programs is not determined in any manner. While education and general conservation information assists with the results of other programs it is unfortunate that there is not a defined value assigned to customer contact and engagement within the scope of program evaluation.

The further development and understanding of TRC and workshop support for LDCs, if there continues to be an expectation for design of programs, will be important. The manner in which associated costs, measure benefits and third

party costs are accounted for will be important in ensuring appropriate program design and evaluation.

Third Tranche and OPA Programs: Third tranche served as a precursor to the OPA programs and the existing model for conservation and demand management program delivery. While many of the third tranche programs were designed at the local level, the industry has benefited from provincially based programs designed by the OPA and delivered locally. A portfolio of both provincial and local programs provides cost effective design and per unit cost for large scale programs while providing local control and local programming for specific needs.

The Third Tranche funding was provided from the LDC rate adjustment and reinvested into the conservation portfolio. This funding, while raised locally and invested locally, was primarily aimed at providing a benefit to the entire electricity grid. While this benefit is shared by all, the costing model moving forward should more closely focus on providing the funding on a global perspective to better reflect the system nature of the benefit.

**Customer Readiness:** The residential customers have been responsive to programs over the delivery period. The awareness to energy conservation, due to the third tranche programs and other societal pressures has certainly increased over the last three to four years. The ability for LDCs to provide programs over the past four years has certainly assisted with this transition

The industrial and commercial customers continue to be difficult to engage. The resources within the company to focus on conservation initiatives have been lacking over the delivery period. Large and small companies all appear to be impacted by the lack of internal resources as well as the downturn in the economy. Programs aimed at providing resource assistance could improve the implementation of programs in this sector or the development of programs and program evaluations that are "turn key" in nature. It is realized however, by all involved conservation projects, that it takes commitment and time by the customer to implement. Helping the customer manage this time commitment may increase the engagement of this sector in the programs.

**Utility Resources:** Utility resources were challenged to meet the combined requirements of third tranche and OPA programs. In many instances the LDCs contracted incremental internal resources or hired external consultants to assist with program management and delivery. Moving forward, depending on the legislative direction set for conservation, the ability of LDCs to develop and maintain reliable resources (both internal and external) will be critical in the ongoing delivery of CDM. To best position these resources, the mechanism for

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continued LDC funding and cost effective approvals and reporting will be required.

## 6.0 Conclusion:

With this report the delivery of programs with third tranche funding has been completed pending some minor (committed) expenditure of remaining funds.

The third tranche funding allowed for local initiatives that provided kWh savings and education opportunities aimed at preparing customers for future initiatives. These programs, the resources and knowledge developed and the general awareness of the "conservation culture" will continue to benefit the delivery of CDM programs moving forward.

## 7.0 Appendices:

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Woodstock Hydro Services



**Energizing Our Community** 

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March 31, 2009

### 1.0 Introduction:

Orillia Power Distribution Corporation submits this report as per the reporting requirements of the Ontario Energy Board with respect to Third Tranche Funding.

### 2.0 Information Provided:

Third Tranche expenditures by Orillia Power Distribution Corporation were completed prior to 2008 and a final report for the period ending December 31, 2007 was previously submitted to the OEB.

Attached to this letter of transmittal, please find:

- CHEC Overview Report
- Appendix D new requirement summarizing the program over the entire period
- Previously provided Summary Report including:
  - Appendix A
  - Appendix C
  - Appendix B for each program

### 3.0 CHEC Overview Report:

Consistent with past reporting, an overview report outlining the programs delivered by the CHEC LDCs has been provided and forms part of our annual report.

Yours truly

Tha Aung CET

Engineering Administrator Tel.: 705 326 2495 Ext. 257





### ORILLIA POWER DISTRIBUTION CORPORATION

### **ANNUAL REPORT ON CDM ACTIVITIES**

## FOR THE YEAR ENDING DECEMBER 31, 2007

## INTRODUCTION:

Orillia Power Distribution Corporation ("Orillia Power") is pleased to present its final annual report on the activities and progress made in applying the conservation and demand management programs approved by the Ontario Energy Board ("the OEB") February 8, 2005 (Board file number EB-2004-0502). Attached to this report is Appendix A - Evaluation of 2005 - 2007 CDM Plan and Appendix C - Program and Portfolio Total.

Orillia Power has submitted its final Conservation and Demand Management Plan ("CDM Program") with the CHEC Group of LDC companies. The following programs and services were completed in 2007 with an annual program cost of \$16,286 and a total cost of \$206,954 since the start of the program. Orillia Power's third instalment of incremental MARR is \$206,304.

## PARTNERSHIP / SPONSORSHIP PROGRAMS

The intent of this program was to provide special incentive and discount programs in energy conservation for residential customers in partnership with federal and provincial government agencies, local municipalities and retailers.

## (1) LED Traffic Lights

In partnership with our local municipality, city traffic lights were changed from incandescent bulbs to LED lights as part of the energy conservation program. Anticipated results include savings in consumption over conventional lights and savings in maintenance costs as the life expectancy of the new LED bulbs are 3 to 4 times that of conventional light bulbs. The difference in energy consumption is 1037 kWh per month for conventional lights compared to 200 kWh per month for LED lights for each traffic intersection. Four traffic intersections were converted in 2005, ten in 2006 and seven in 2007.

## (2) Teaching the Teachers Program

The Energy Conservation Education for Teachers Project was a joint initiative with a group of utilities to sponsor a training workshop for teachers in the Simcoe County District School Board. The main intent of the workshop is to introduce energy conservation topics into elementary school curriculum. The outcome of the teacher's brainstorming sessions is the EcoSchool's Energy Conservation Ecological Literacy Guide. The

workshop included lesson plan development and implementation of a School Energy Conservation Action Plan and a Home Energy Audit.

## **COSTS INCURRED IN 2007:**

LED TRAFFIC LIGHTS CONVERSION	\$ 7,000
TEACHING THE TEACHERS	\$ 2,511

TOTAL COSTS INCURRED TO DECEMBER 31, 2007 \$ 34,077

## **CUSTOMER EDUCATION**

Voluntary Blackout Day Challenge

This challenge was rolled out for a third year to give awareness to consumers of the major power blackout of August 14, 2003 and to encourage conservation during summer peak demand season. Woodstock Hydro once again sent a challenge to all LDC's to participate on August 14, 2007. The costs incurred for this program were for newspaper and radio advertising to educate the public and encourage them to participate.

COSTS INCURRED IN 2007	\$ 3,312
TOTAL COSTS INCURRED TO DECEMBER 31, 2007	\$ 13,317

## **ENERGY AUDITS, ENERGY EFFICIENT BUILDINGS & HOMES**

Dollars to Sense Workshop

This program delivered, May 10/07 by Natural Resources Canada, was a repeat of a workshop held Dec 14/05. Orillia Power decided to offer the workshop a second time based on interest expressed by its customers. The workshop provided information and training for industrial and commercial customers interested in energy conservation opportunities. Topics included potential for energy savings, energy audits, setting the framework for an energy conservation culture, monitoring and analysis of conservation measures, and available technologies.

COSTS INCURRED IN 2007	\$ 3,463
TOTAL COSTS INCURRED TO DECEMBER 31, 2007	\$ 5,800

The following programs were completed in the previous 2005 and 2006 CDM program years:

## **SYSTEM OPTIMIZATION**

The intent of this program was to improve system reliability and reduce distribution system losses. Initially distribution system design and load studies were conducted and a new substation was constructed at a strategic location to optimize load flows, power quality, load switching capability and reduce line losses.

The new substation was completed late 2006 and as a result, power quality and reliability have improved in a considerable part of the city with calculated benefits in line loss reduction. In addition to the procurement of energy efficient equipment, incremental operational costs directly related to this program were incurred including consultation fees and project design. The total capital cost of the project was \$695,000 and 15% of this cost is considered as part of the CDM initiative.

CAPITAL COSTS INCURRED	\$ 101,000
OPERATION COSTS INCURRED	\$ 34,463
COSTS INCURRED IN 2007	\$ 0
TOTAL COSTS INCURRED TO DECEMBER 31, 2007	\$ 135,463

## **SMART METER INITIATIVES**

As a member of the CHEC group, Orillia Power had joined the OUSM group of LDC's in monitoring the pilot implementation of smart meter technologies. Orillia Power will proceed with meter procurement beyond the completion of its CDM Program, but with OUSM group efforts, the essential processes of smart meter deployment were identified and put light on activities such as customer presentment, meter data repository requirements and back office integration work.

COSTS INCURRED IN 2007	\$ 0
TOTAL COSTS INCURRED TO DECEMBER 31, 2007	\$ 11,678

## **CONSERVATION WEBSITE**

Costs were shared with other members of the CHEC group to develop a website specifically designed to assist the customer in managing their electrical energy use. Components of the website range from energy savings concepts to various industries and load profile services. The site contains a

wide variety of energy conservation information and links to some excellent resources on the web.

COSTS INCURRED IN 2007

\$ 0

TOTAL COSTS INCURRED TO DECEMBER 31, 2007

6,619

## **EVALUATION OF ORILLIA POWER'S CDM PLAN:**

## LESSONS LEARNED/CONCLUSIONS/ GENERAL COMMENTS:

- 1. For 2007, the year to date total for net Total Resource Cost ("TRC") is a positive value of \$64,364 due to the delivery of the LED Traffic Lights Program and Blackout Day Challenge Program. Total spent in 2007 was \$16,286, which completed the total CDM budget of \$207,000. There were other educational programs such as Dollar to Sense Workshop for industrial customers and Teaching the Teachers Program of which TRC values cannot be calculated. The life to date total net TRC benefit is \$919,606.
- 2. Overall expenditure to save one kWh is \$.01, which is comparable to 2006 and an efficient number compared to 2005 number of \$0.0212. It demonstrates that Orillia Power made a good selection of conservation programs producing good results.
- The contribution to the LED traffic lights program was a success and the City has replaced most of the traffic lights. Changing the infrastructure equipment with energy efficient technology gives the most benefit for now and the future.
- 4. The Blackout Day Challenge was rolled out on a weekday and was recorded for the 8 hours peak consumption period. With weather normalization, Orillia Power achieved a modest reduction of 0.5% of total consumption. The most important results are customer education, learning how to conserve and awareness of the issues affecting our power supply. It creates a Culture of Conservation among all energy consumers, businesses and utilities alike, in implementing the necessary shift in behaviours and attitudes towards less energy usage.
- 5. The Dollar to Sense Workshop Program was rolled out again for the industrial customers. Commercial customers need to be more competitive in today's economy particularly as the Canadian dollar appreciates and will be better prepared to participate in the programs such as the Ontario Power Authority's Electricity Retrofit Program.

6. Teaching the Teachers Program was a good way to add energy conservation to the school curriculum in our community. It will be up to our youth, the future generation of consumers, to live and promote energy conservation habits.

Sincerely submitted by,

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## Appendix D - Total Life Evaluation of the CDM Plan

Table is to be completed manually by totalling the information from each year of activity

	5 Cumulative Totals Life-to- date	Residential	6 Low Income	Commercial	Institutional	Industrial	Agricultural	LDC System	4 Smart Meters	Other #1	Other #2
Net TRC value (\$):	\$ 896,327.00	\$ 67,211.00		\$	\$ 200,973.00	\$ 59,551.00	\$	\$ 513,366.00		71,376.00	- 16,150.00
Benefit to cost ratio:	3.66	4.02			2.40	5.58		4.79		12.33	0.00
Number of participants or units delivered:	13,346	2,684			654	2		1		2	10,003
Lifecycle (kWh) Savings:	25,699,960	2,329,556			3,877,244	1,275,430		18,156,570		61,160	-
Total kWh saved (kWh):	1,318,696	253,640			192,519	255,086		605,219		12,232	-
Total peak demand saved (kW):	770	137			98	0		77		361	97
Total kWh saved as a percentage of total kWh delivered (%):											
Peak kW saved as a percentage of LDC peak kW load (%):											
Gross C&DM expenditures (\$):	\$ 206,954	\$ 5,114		\$	\$ 26,451	\$ 5,800	\$	\$ 135,463	\$ 11,679	\$ 6,297	\$ 16,150
<sup>2</sup> Expenditures per KWh saved (\$/kWh):	\$ 0.0081	\$ 0.0022	\$	\$	\$ 0.0068	\$ 0.0045	\$	\$ 0.0075		\$ 0.1030	\$ -
3 Expenditures per KW saved (\$/kW):											
Utility discount rate (%):											

1 Expenditures are reported on cumulative basis.

<sup>&</sup>lt;sup>2</sup> Expenditures include all utility program costs (direct and indirect) for all programs which primarily generate energy savings.

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

<sup>4</sup> Please report spending related to 3rd tranche of MARR funding only. TRC calculations are not required for Smart Meters. Actual expenditures for the total third tranche period need to be reported.

<sup>5</sup> Includes total for the reporting year, plus prior years, if any (for example, 2008 CDM Annual report for third tranche will include 2007, 2006, 2005 and 2004 numbers, if any).

<sup>6</sup> Includes totals from Low Income programs that fall under both commerical and residential.

## 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 2007	Residential	Commercial	Institutional	Industrial	Agricultural	LDC System	4 Smart Meters	Other #1	Other #2
Net TRC value (\$):	896,326.76	\$ 64,364	- *	\$ -	\$ 66,995	\$ (3,463)	\$ -	\$ -		\$ 3,343	\$ (2,511)
Benefit to cost ratio:	3.66	2.15	0.00	0.00	2.44	0.00	0.00	0.00		2.01	0.00
Number of participants or units delivered:	13,346	172	0	0	168	1	0	0		1	2
Lifecycle (kWh) Savings:	25,699,960.75	1,286,649	0	0	1,265,544	0	0	0		21,105	0
Report Year Total kWh saved (kWh):	1,318,695.28	67,499	0	1	63,277	0	0	0		4,221	0
Total peak demand saved (kW):		280	63	0	97	0	0	0		23	97
Total kWh saved as a percentage of total kWh delivered (%):		0.02%	0.00%	0.00%			0%	0%			0%
Peak kW saved as a percentage of LDC peak kW load (%):		0%	0%	0%	0%	0%	0%	0%		0.04%	0%
Report Year Gross C&DM expenditures     (\$):		\$ 16,287	\$ -	\$ -	\$ 7,001	\$ 3,463	\$ -	\$ -	\$ -	\$ 3,312	\$ 2,511
<sup>2</sup> Expenditures per KWh saved (\$/kWh):	\$ 0.01	\$ 0.01	\$ -	\$ -	\$ 0.01	\$ -	\$ -	\$ -		\$ 0.16	\$ -
з Expenditures per KW saved (\$/kW):		\$ 58.16	\$ -	\$ -	\$ 72.46	\$ -	\$ -	\$ -		\$ 141.54	\$ 25.99

Utility discount rate (%):	
	7.625

<sup>&</sup>lt;sup>1</sup> Expenditures are reported on accrual basis. <sup>2</sup> Expenditures include all utility program costs (direct and indirect) for all programs which primarily generate energy savings.

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

<sup>4</sup> 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.

<sup>5</sup> 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 C - Program and Portfolio Totals

Report Year: 2008

## 1. Residential Programs

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

Note: To ensure the integrity of th		insert the addition		Benefit/Cost		Lifecycle (kWh) Savings	Total Peak Demand (kW) Saved	Report Year Gross C&DM Expenditures (\$)
2005-2006 Spring EKC Program	,	,	\$ -	0.00		3		p - a - a - c - (4)
2006 Fall EKC Program			\$ -	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	\$ -	\$ -	\$ -	0.00	0	0	C	- \$
Residential Indirect Costs not attributable to any specific program								
Total Residential TRC Costs		\$ -						
**Totals TRC - Residential	\$ -	\$ -	\$ -	0.00				

## 2. Commercial Programs

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

Note: To ensure the integrity of the	TRC Benefits (PV)		\$ Net TRC Benefits	Benefit/Cost	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 - Commercial	\$ -	\$ -	\$ -	0.00	0	0	O	\$ -

Commercial Indirect Costs not attributable to any specific program				
Total TRC Costs		<u> </u>		
**Totals TRC - Commercial	\$ -	\$ -	\$ -	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	TRC Benefits (PV)		al rows in the middl \$ Net TRC Benefits	Benefit/Cost	Report Year Total kWh Saved	Lifecycle (kWh) Savings	Total Peak Demand (kW) Saved	Report Year Gross C&DM Expenditures (\$)
Institutional LED Traffic Lights			\$ -	0.00				
Christmas Tree Lighting at City Centre	9		\$ -	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	<del></del>							
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	TRC Benefits (PV)	\$ Net TRC Benefits	Benefit/Cost	Lifecycle (kWh) Savings	Total Peak Demand (kW) Saved	Report Year Gross C&DM Expenditures (\$)
Industrial Dollar to Sense workshop		\$ -	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 *Totals App. B - Industrial	\$ -	\$ -	<u>\$</u> -	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	e formulas, please TRC Benefits (PV)		nal rows in the middl \$ Net TRC Benefits	Benefit/Cost		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	0	\$ -
Agricultural Indirect Costs not attributable to any specific program	<del></del>							
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 TRC Benefits	insert the addition	nal rows in the midd	le of the list be Benefit/Cost	Report Year Total	Lifecycle (kWh)	Total Peak Demand (kW)	Report Year Gross C&DM
	(PV)	TRC Costs (PV)	\$ Net TRC Benefits	Ratio	kWh Saved	Savings	Saved	Expenditures (\$)
2006 LDC Optimization project			\$ -	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 C			\$ -	0.00			
*Totals App. B - LDC System	\$ -	\$ -	\$ 	0.00	0	0	0 \$ -
LDC System Indirect Costs not attributable to any specific program	<del></del>						
Total TRC Costs		\$ -					
**Totals TRC - LDC System	\$ -	\$ -	\$ -	0.00			

## 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 (\$)

## 8. Other #1 Programs

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

Note: To ensure the integrity of the	TRC Benefits (PV)		nal rows in the middl \$ Net TRC Benefits	Benefit/Cost	Report Year Total kWh Saved	Lifecycle (kWh) Savings	Total Peak Demand (kW) Saved	Report Year Gross C&DM Expenditures (\$)
2007 Blackout day challenge			\$ -	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	C	- \$
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				le of the list be	elow.			
	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 (\$)
Advertising & delivery of conservation	n message		\$ -	0.00				
Website for Conservation			\$ -	0.00				
Teach the Teacher Program			\$ -	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	\$ -
Other #2 Indirect Costs not attributable to any specific program	<del></del>							
Total TRC Costs		\$ -						
**Totals TRC - Other #2	\$ -	\$ -	\$ -	0.00				

## **LDC's CDM PORTFOLIO TOTALS**

	TRC Benefits (PV)	TRC Costs (PV)	\$ Net TRC Benefits		Report Year Total kWh Saved	Lifecycle (kWh) Savings	Total Peak Demand (kW) Saved	Report Year Gross C&DM Expenditures (\$)
*TOTALS FOR ALL APPENDIX B	\$ -	\$ -	\$ -	0.00	\$ -	\$ -	\$ -	\$ -
Any other Indirect Costs not attributable to any specific program								
TOTAL ALL LDC COSTS **LDC' PORTFOLIO TRC	\$ -	\$ - \$ -	\$ -	0.00				

<sup>\*</sup> The savings and spending information from this row is to be carried forward to Appendix A.

<sup>\*\*</sup> The TRC information from this row is to be carried forward to Appendix A.

#### A. Name of the Program:

2005-2006 Spring EKC Program

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

In partnership with the OPA provided customer incentives for energy efficient technologies. Involved both direct mail and instore promotion along with local advertising and support.

#### Measure(s):

	Measure 1	Measure 2	Measure 3	Measure 4	Measure 5
Base case technology:	0	0.00	0.00	0.00	0.00
Efficient technology:	CFLs	Ceiling Fan	Timers	Progr. Thermostats	Seasonal LED lights
Number of participants or					
units delivered:	0.00	0.00	0.00	0.00	0.00
Measure life (years):	4.00	20.00	20.00	18.00	0.00
Number of participants or uni	397	21	52	70	181
Number of Participants or					
units delivered life-to-date	397.00	21.00	52.00	70.00	181.00

TRC Results:	Reporting Year	20	005-2006 TRC Results	<u>Li</u>	fe-to-date TRC Results:
TRC Benefits (\$):		\$	34,272.30	\$	34,272.30
Measure's Costs (\$):					
Utility program cost (less incentives):	\$ -	\$	4,527.10	\$	4,527.10
Incremental Measure Costs (Equipment Costs)		\$	5,659.16	\$	5,659.16
Total TRC costs:	\$ -	\$	10,186.26	\$	10,186.26
Net TRC (in year CDN \$):	\$0.00	\$	24,086.04	\$	24,086.04
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	0.00	\$	3.36	\$	3.36

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

#### **Cumulative Results:**

#### **Conservation Programs:**

Demand savings (kW):	Summer	0.61	Report Winter	Demand (kW)
	Winter	0.00	0.	61
				Cumulative Annual
	lifecycle	in year	Cumulative Lifecycle	Savings
Energy saved (kWh):			642309.93	62027.196
			2005 Lifecycle	2005 Annual
			642309.93	62027.196
044				

Other resources saved:

Natural Gas (m3):	0	0
Water (I)	0	0

D.	Program Costs*:			2005-2006 Costs	Cum	<u>Date</u>
	Utility direct costs (\$):	Incremental capital:	\$ -		\$	-
		Incremental O&M:	\$ -	\$ 5,114.00	\$	5,114.00
		Incentive:	\$ -	\$ -	\$	-
		Total:	\$ -	\$ 5,114.00	\$	5,114.00
	Utility indirect costs (\$):	Incremental capital:	\$ -		\$	-
		Incremental O&M:	\$ -		\$	-
		Total:	\$ -	\$ -	\$	-
	Total Utility Cost of Program		\$ -	5,114.00		5,114.00

## Orillia 2008 Annual Report

#### (complete this section for each program)

A. Name of the Program: 2006 Fall EKC Program

Natural Gas (m3):

Water (I)

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

Residential Baseboard pStats, Dimmers, Energy Star CFL,Motion Sensor, Programmable Thermostats and Seasonal LEDs discount coupon program organized by OPA during Fall of 2006. Discount coupons were sent out to 11,000 customer addresses.

#### Measure(s):

	Measure 1	Measure 2	Measure 3	Measure 4	Measure 5	Measure 6
Base case technology:	Manual Thermostat	normal switch	Incandesent bulb	Manual light switch	Manual adjust thermostat	Seasonal lights
Efficient technology:	Base Board pStat	Dimmer	Energy Star CFL	Motion sensor switch	Programmable thermostat	Seasonal LED lights
Number of participants or units						
delivered:	0.00	0.00	0.00	0.00	0.00	0.00
Measure life (months):	216.00	120.00	51.72	120.00	216.00	360.00
Number of participants or units 20	8	120	1102	25	110	598
Number of Participants or units						
delivered life-to-date	8.00	120.00	1,102.00	25.00	110.00	598.00

TRC Results:	Reporti	ng Year	2006	TRC Results	Li	fe-to-date TRC Results:
1 TRC Benefits (\$):			\$	55,206.95	\$	55,206.95
<sup>2</sup> Measure's Costs (\$):						ĺ
Utility program cost (less incent	tives): \$	-			\$	-
Incremental Measure Costs (Equipment C	costs)		\$	12,082.00	\$	12,082.00
Total TRC o	costs: \$	-	\$	12,082.00	\$	12,082.00
Net TRC (in year CDN \$):		\$0.00	\$	43,124.95	\$	43,124.95
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	#DIV/0!		\$	4.57	\$	4.57

C.	Results: (one or more category	Cumulative Results:				
	Conservation Programs:					
	Demand savings (kW):	Summer	8.24	Report Winte	er Demand (kW)	
		Winter 62.77		62.77		
		lifecycle	in year	Cumulative Lifecycle	Cumulative Annual Savings	
	Energy saved (kWh):		0.00	1687246.495	191612.4977	
				2006 Lifecycle	2006 Annual	
				1687246.495	191612.4977	
	Other resources saved :					

0

					Cumi	ative Life to
D.	Program Costs*:			2005 Costs		<u>Date</u>
	Utility direct costs (\$):	Incremental capital:	\$ -		\$	-
		Incremental O&M:	\$ -		\$	-
		Incentive:	\$ -		\$	-
		Total:	\$ -	\$ -	\$	-
	Utility indirect costs (\$):	Incremental capital:	\$ -		\$	-
		Incremental O&M:	\$ -		\$	-
		Total:	\$ -	\$ -	\$	-
	Total Utility Cost of Program		\$ -	-		-

## (complete this section for each program)

#### A. Name of the Program: Institutional LED Traffic Lights

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

Energy conservation program by replacing existing incandescent traffic lights to LED traffic lights. Requires bulb replacement only performed by contractor. Orillia Power paid \$1000 per traffic intersection to the municipality. 168 LED bulbs were changed covering 7 intersections. Estimated cost to convert was \$7,500 per intersection. Base case allowed for annual relamping.

#### Measure(s):

	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	1037 kWh/mth per intersection		
Efficient technology:	LED 200 kwh/mth per intersection		
Number of participants or			
units delivered:	168.00	0	0
Measure life (years):	20.00		
Number of units in 2005 &			
2006	336		
Number of Participants or			
units delivered life-to-date	504.00		

TRC Results:		Reporting Year	20	005-2006 TRC Results	L	ife-to-date TRC Results:
<sup>1</sup> TRC Benefits (\$):	\$	113,614.44	\$	228,084.11	\$	341,698.55
<sup>2</sup> TRC Costs (\$):						
Utility program cost (less incentives):	\$	-			\$	-
Incremental Measure Costs (Equipment Costs)	\$	46,619.50	\$	93,238.99	\$	139,858.49
Total TRC costs:	\$	46,619.50	\$	93,238.99	\$	139,858.49
Net TRC (in year CDN \$):	\$	66,994.94	\$	134,845.12	\$	201,840.06
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	2.44		\$	2.45	\$	2.44

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

#### **Cumulative Results:**

#### Conservation Programs:

Conservation Frograms.							
Demand savings (kW):	Summer	96.62		Report Winter Demand (kW)			
	Winter	96.62	96.62				
	lifecycle	in year	Cumulative Lifecycle	Cumulative Annual Savings			
Energy saved (kWh):	1,265,544.00	63,277.20	3,796,632.00	189,831.60			
			2005-2006 Lifecycle	2005-2006 Annual			
		<b>.</b>	2,531,088.00	126,554.40			
Other resources saved :							

Other resources saved	:

Natural Gas (m3):	0	0
Water (I)	0	0

					Cum	nlative Life to
D.	Program Costs*:		Reporting Year	2005-2006 Costs		Date
	Utility direct costs (\$):	Incremental capital:	\$ -		\$	-
		Incremental O&M:	\$ -		\$	-
		Incentive:	\$ 7,000.56	\$ 14,001.12	\$	21,001.68
		Total:	\$ 7,000.56	\$ 14,001.12	\$	21,001.68
	Utility indirect costs (\$):	Incremental capital:	\$ -		\$	-
	$\sigma$ and $\sigma$	Incremental O&M:	\$ -		\$	-
		Total:	\$ =	\$ -	\$	-
	Total Utility Cost of Progra	am	\$ 7,000.56	14,001.12		21,001.68

## E. Assumptions & Comments:

Out of 24 bulbs per inter section there will be 8 bulbs lit at any given time. Each LED bulb saves about 100 kWh per year. For 8 bulbs x 7 intersections it will be 5600kWh/year savings converted to 0.639kW demand savings.

## (complete this section for each program)

A. <b>N</b>	lame of the Program:	Industrial Dollar to Sense workshop
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Description of the program (including intent, design, delivery, partnerships and evaluation):

2005 Project - Energy Conservation Workshop co-sponsored by NRCan.

Water (I)

Measure(s):			
	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	0		
Efficient technology:	0		
Number of participants or units			
delivered:	1.00	0	0
Measure life (years):	5.00		
Number of participants or units 2005	1		
Number of Participants or units delivered			
life-to-date	2.00		

TRC Results:		Reporting Year			Lif	e-to-date TRC
	_		20	005 TRC Results		Results:
<sup>1</sup> TRC Benefits (\$):	\$	-	\$	72,550.75	\$	72,550.75
<sup>2</sup> TRC Costs (\$):						
Utility program cost (less incentives):	\$	3,462.99	\$	2,337.00	\$	5,799.99
Incremental Measure Costs (Equipment Costs)	\$	-	\$	7,200.00	\$	7,200.00
Total TRC costs:	\$	3,462.99	\$	9,537.00	\$	12,999.99
Net TRC (in year CDN \$):	-\$	3,462.99	\$	63,013.75	\$	59,550.76
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	0.00		\$	7.61	\$	5.58

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

**Cumulative Results:** 

Conservation Programs:						
Demand savings (kW):	Summer	0.	00		Report Winter D	Demand (kW)
	Winter	0.	00		0.00	0
		C		Cumulative Annual		
	life	cycle	in year		Cumulative Lifecycle	Savings
Energy saved (kWh):	0	.00	0.00		1275430	255086
					2005 Lifecycle	2005 Annual
					1275430	255086
Other resources saved:						
Nati	ural Gas (m3):	0		0		

						Cu	mlative Life to
D.	Program Costs*:			Reporting Year	2005 Costs		<u>Date</u>
	Utility direct costs (\$):	Incremental capital:	\$	3,462.99	\$ 2,337.00	\$	5,799.99
		Incremental O&M:	\$	-		\$	-
		Incentive:	\$	-		\$	-
		Total:	\$	3,462.99	\$ 2,337.00	\$	5,799.99
	Utility indirect costs (\$):	Incremental capital:	\$	-		\$	-
		Incremental O&M:	<u>\$</u>	-		\$	-
		Total:	\$	-	\$ -	\$	-
	Total Utility Cost of Program		\$	3,462.99	2,337.00		5,799.99

## (complete this section for each program)

#### A. Name of the Program: 2006 LDC Optimization project

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

Load flows and voltage drop studies were performed to reduce losses and increase power quality. A new substation was constructed and located strategically where it would give the minimum line losses and voltage drop. An inefficient old station will be taken out of service. We can omit the calculation of operating cost as the number of substations is not changed. Energy savings due to reduced losses are calculated with the comparison between the old system setup versus the new setup. Other benefits such as system reliability and power quality improvements were realized. Measured life is conservatively kept at 30 years. Free reider rate is assumed as 0% as it is a one of project.

Measure(s):			
	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	Old distribution system		
Efficient technology:	Distribution System with new substn.		
Number of participants or units			
delivered:	0.00		
Measure life (years):	30.00		

Number of participants or units 2005

Number of Participants or units
delivered life-to-date

1.00

TRC Results: B.	Repor	ting Year	2006 TRC Results		Life	e-to-date TRC Results:
<sup>1</sup> TRC Benefits (\$):			\$	648,828.71	\$	648,828.71
<sup>2</sup> TRC Costs (\$):						ļ
Utility program cost (less incentives):	\$	-			\$	-
Incremental Measure Costs (Equipment Costs)			\$	135,463.00	\$	135,463.00
Total TRC costs:	\$	-	\$	135,463.00	\$	135,463.00
Net TRC (in year CDN \$):	\$	-	\$	513,365.71	\$	513,365.71
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	#DIV/0!		\$	4.79	\$	4.79

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

#### Cumulative Results:

#### Conservation Programs:

Conservation Programs:						
Demand savings (kW):	Demand savings (kW): Summer 0		Report Summer Demand (kW)			
	Winter	0.00	0.	.00		
			Cumulative	Cumulative		
	lifecycle	in year	Lifecycle	Annual Savings		
Energy saved (kWh):	0.00	0.00	18156570	605219		
			2006 Lifecycle	2006 Annual		
			18156570	605219		
Other resources saved:						

Other resources savea :	
Natural Gas (m3):	0

Water (I)

						Cun	nlative Life to
D.	Program Costs*:		Reporting Year	200	5-2006 Costs		<u>Date</u>
	Utility direct costs (\$):	Incremental capital:	\$ -			\$	-
		Incremental O&M:	\$ -	\$	135,463.00	\$	135,463.00
		Incentive:	\$ -			\$	-
		Total:	\$ -	\$	135,463.00	\$	135,463.00
	Utility indirect costs (\$):	Incremental capital:	\$ -			\$	-
		Incremental O&M:	\$ -			\$	-
		Total:	\$ -	\$	-	\$	-
	Total Utility Cost of Program		\$ -		135,463.00		135,463.00

## (complete this section for each program)

#### A. Name of the Program: Smart Meter Initiatives

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

The cost incurred is solely for Smart meter initiatives and monitor the pilot projects of other utilities. Installation and implementation will be coordinated with other utilities.

Measure(s):			
	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	0		
Efficient technology:	0		
Number of participants or units delivered:	0.00	0	0
Measure life (years):	0.00		
Number of participants 2005-2006	0		
Number of Participants or units delivered life-to-date	0.00		

В.	TRC Results:		Reporting Year	2	2005-2006 TRC Results	Life	e-to-date TRC Results:
1	<sup>1</sup> TRC Benefits (\$):	\$	-			\$	-
2	<sup>2</sup> TRC Costs (\$):						1
	Utility program cost (less incentives):			\$	11,679.00	\$	11,679.00
	Incremental Measure Costs (Equipment Costs)	\$	-			\$	-
	Total TRC costs:	\$	-	\$	11,679.00	\$	11,679.00
	Net TRC (in year CDN \$):	\$	-	-\$	11,679.00	-\$	11,679.00
					_		•
	Benefit to Cost Ratio (TRC Benefits/TRC Costs):	#DIV/0!		\$	-	\$	-

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

Water (I)

**Cumulative Results:** 

Conservation Programs:					
Demand savings (kW):	Summer	0.00		Report Winter D	emand (kW)
	Winter	0.00		0.00	)
	lifecycle	i	in year	Cumulative Lifecycle	Cumulative Annual Savings
Energy saved (kWh):	0.00		0.00	0	0
				2005 Lifecycle	2005 Annual
Other resources saved :					
Natural Gas (m3	):	0	C		

D.	Program Costs*:		Reporting Year		2005	i-2006 Costs	Cum	lative Life to Date
	Utility direct costs (\$):	Incremental capital:	\$	-	\$	11,679.00	\$	11,679.00
		Incremental O&M:	\$	-			\$	-
		Incentive:	\$	-			\$	-
		Total:	\$	-	\$	11,679.00	\$	11,679.00
	Utility indirect costs (\$):	Incremental capital:	\$	-			\$	-
		Incremental O&M:	\$	-			\$	-
		Total:	\$	-	\$	-	\$	-
	Total Utility Cost of Program		\$	-		11,679.00		11,679.00

(complete this section for each program)

#### A. Name of the Program:

2007 Blackout day challenge

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

Blackout Day Challenge is to give awareness to consumers of the major blackout of August 14, 2003 and to conserve energy during summer peak demand season. Woodstock Hydro has done a voluntary blackout day for their community in 2004 and had achieved a 4% reduction in energy usage. We participated in 2006 and in 2007 it was on a week day, August 14, 2007. The cost incurred for this program was newspaper and radio advertisement to organize and inform the public.

Measure(s):			
	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	0		
Efficient technology:	0		
Number of participants or units			
delivered:	1.00	0	0
Measure life (years):	5.00		
Number of participants or units 2	1.00		
Number of Participants or units delivered life-to-date	2.00		

TRC Results:		Reporting Year	2006 TRC Results	Lif	e-to-date TRC Results:
<sup>1</sup> TRC Benefits (\$):	\$	6,654.63	\$ 71,018.84	\$	77,673.47
<sup>2</sup> TRC Costs (\$):					1
Utility program cost (less incentives):	\$	3,312.00	\$ 2,985.00	\$	6,297.00
Incremental Measure Costs (Equipment Costs)	\$			\$	-
Total TRC costs:	\$	3,312.00	\$ 2,985.00	\$	6,297.00
Net TRC (in year CDN \$):	\$	3,342.63	\$ 68,033.84	\$	71,376.47
			_		
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	2.01		\$ 23.79	\$	12.33

#### . Results: (one or more category may apply)

Cumulative Results:

Conservation Programs: Demand savings (kW):	Summer Winter	23.40 0.00	Report Winter Demar 0.00	nd (kW)
	lifecycle	in year	Cumulative Lifecycle	Cumulative Annual Savings
Energy saved (kWh):	21,105.00	4,221.00	61159.5	12231.9
			2006 Lifecycle	2006 Annual
			40054.5	8010.9

Other resources saved :		
Natural Gas (m3):	0	0
Water (I)	0	0

D.	Program Costs*:		Reporting Year	2006 Costs	Cui	mlative Life to Date
	Utility direct costs (\$):	Incremental capital:	\$		\$	-
		Incremental O&M:	\$ 3,312.00	\$ 2,985.00	\$	6,297.00
		Incentive:	\$ •		\$	-
		Total:	\$ 3,312.00	\$ 2,985.00	\$	6,297.00
	Utility indirect costs (\$):	Incremental capital:	\$ -		\$	-
		Incremental O&M:	\$		\$	-
		Total:	\$	\$ -	\$	-
	Total Utility Cost of Program		\$ 3,312.00	2,985.00		6,297.00

### 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

#### Orillia 2007 Voluntary Blackout Day Results

Projected Daily Savings in Energy and Peak Demand								
Daily Consumption Values	kWh	Difference in kWh (Absolute)	Difference in kWh (Percentage)					
Voluntary Blackout Day	903,589							
Baseline 1 (Translated)	908,279	4,690	0.5%					
Baseline 2 (Scaled)	904,501	912	0.1%					
Daily Peak Demand Values	kW Demand	Reduction in kW (Absolute)	Reduction in kW (Percentage)					
Voluntary Blackout Day	44,782							
Baseline 1 (Translated)	44,808	26	0.1%					
Baseline 2 (Scaled)	44 263	-519	-1.2%					

<sup>&</sup>lt;sup>2</sup> 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

## (complete this section for each program)

A.	Name of the Program:	Advertising & delivery of conserv	ation message
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Description of the program (including intent, design, delivery, partnerships and evaluation):

To convey educational materials, safety messages and update of government regulation changes through billing stuffers and advertising.

#### Measure(s):

	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	0		
Efficient technology:	0		
Number of participants or units delivered:	1.00		
Measure life (months):	0.00		
Number of participants or units 20	10000		
Number of Participants or units			
delivered life-to-date	10,001.00		

TRC Results:	Repo	rting Year		2005 TRC Results	Life	e-to-date TRC Results:
<sup>1</sup> TRC Benefits (\$):	\$	-			\$	-
<sup>2</sup> TRC Costs (\$):						
Utility program cost (less incentives):	\$	-	\$	7,020.20	\$	7,020.20
Incremental Measure Costs (Equipment Costs)	\$	-			\$	-
Total TRC costs:	\$	-	\$	7,020.20	\$	7,020.20
Net TRC (in year CDN \$):	\$	-	-\$	7,020.20	-\$	7,020.20
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	#DIV/0!		\$	-	\$	-

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

Natural Gas (m3): Water (l)

### **Cumulative Results:**

#### **Conservation Programs:**

Conservation Programs:						
Demand savings (kW):	Summer 0.00		Report Summer Demand (kW)			
	Winter	0.00	0.	00		
			Cumulative	Cumulative		
	lifecycle	in year	Lifecycle	Annual Savings		
Energy saved (kWh):	0.00	0.00	0	0		
			2005 Lifecycle	2005 Annual		
Other resources saved:						

							Cum	lative Life to
D.	Program Costs*:		Re	eporting Year	20	005 Costs		Date
	Utility direct costs (\$):	Incremental capital:	\$	-			\$	-
		Incremental O&M:	\$	-	\$	7,020.20	\$	7,020.20
		Incentive:	\$	-			\$	-
		Total:	\$	-	\$	7,020.20	\$	7,020.20
	Utility indirect costs (\$):	Incremental capital:	\$	-			\$	-
		Incremental O&M:	\$				\$	-
		Total:	\$	-	\$	-	\$	-
	Total Utility Cost of Program		\$	-		7,020.20		7,020.20

## (complete this section for each program)

A. Name of the Program: Website for Conservation

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

To host website on energy conservation along with other CHEC members - on line in 2006.

#### Measure(s):

	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	0		
Efficient technology:	0		
Number of participants or			
units delivered:	0.00		
Measure life (months):	0.00		
Number of participants or uni	1		
Number of Participants or			
units delivered life-to-date	1.00		

TRC Results:	Report	ing Year	2005	TRC Results	Lif	e-to-date TRC Results:
<sup>1</sup> TRC Benefits (\$):	\$	-			\$	-
<sup>2</sup> TRC Costs (\$):						1
Utility program cost (less incentives):	\$	-	\$	6,619.13	\$	6,619.13
Incremental Measure Costs (Equipment Costs)	\$	-			\$	-
Total TRC costs:	\$	-	\$	6,619.13	\$	6,619.13
Net TRC (in year CDN \$):	\$	-	-\$	6,619.13	-\$	6,619.13
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	#DIV/0!		\$	-	\$	-

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

### **Cumulative Results:**

Conservation Programs:		
Demand savings (kW):	Summer	0.00
	Winter	0.00
	lifecycle	i

0.00	Report Summer Demand (kW)				
0.00	0	.00			
in year	Cumulative Lifecycle	Cumulative Annual Savings			
0.00	0	0			
	2005 Lifecycle	2005 Annual			

Other resources saved:

Energy saved (kWh):

Natural Gas (m3):	0	0
Water (I)	0	0

0.00

D.	Program Costs*:		Reporting Year	2	2005 Costs	Cur	nlative Life to Date
	Utility direct costs (\$):	Incremental capital:	\$			\$	-
		Incremental O&M:	\$ -	\$	6,619.13	\$	6,619.13
		Incentive:	\$ -			\$	-
		Total:	\$ -	\$	6,619.13	\$	6,619.13
	Utility indirect costs (\$):	Incremental capital:	\$ -			\$	-
		Incremental O&M:	\$ -			\$	-
		Total:	\$ -	\$	-	\$	-
	Total Utility Cost of Progran	า	\$		6,619.13		6,619.13

## (complete this section for each program)

A.	Name of the Program:	Christmas Tree Lighting at C	ity Centre								
	Description of the program (including intent, design, delivery, partnerships and evaluation):										
	2005 project										
	Measure(s):										
	Dana anna taobhraíonn	Measure 1	Measure 2 (if applicab	le)	Measure 3 (	if applicable)					
	Base case technology: Efficient technology:	0 Seasonal LEDs									
	Number of participants or units	Ocasonal EEDs									
	delivered:	0.00									
	Measure life (months):	0.00									
	Number of participants or units 2005	150									
	Number of Participants or units										
	delivered life-to-date	150.00									
	TRC Results:		Reporting Year			Life-to-date TRC					
B.					2005 TRC Results	Results:					
	1 TRC Benefits (\$):		\$	-	\$ 2,439.10	\$ 2,439.10					
•	<sup>2</sup> TRC Costs (\$):	gram cost (less incentives):	¢		\$ 3,306.00	\$ 3,306.00					
		re Costs (Equipment Costs)		- :	3,306.00	\$ 3,306.00					
	meremental measu	Total TRC costs:		-	\$ 3,306.00						
	Net TRC (in year CDN \$):		\$	-	-\$ 866.90						
	Benefit to Cost Ratio (TRC Benefits/TF	RC Costs):	#DIV/0!		\$ 0.74	\$ 0.74					
C.	Results: (one or more category may a	oply)			Cumulativ	ve Results:					
	Conservation Programs:										
		Summer	0.00		Report Summe	er Demand (kW)					
	3. ( )		0.00		•	00					
						Cumulative Annual					
		lifecycle	in year		Cumulative Lifecycle						
	Energy saved (kWh):	0.00	0.00		80612.82 2005 Lifecycle	2687.09 2005 Annual					
					80612.82	2687.09					
	Other resources saved :				00012.02	200.100					
	Natural Gas (m3):	0		0							
	Water (I)	0		0							
						Cumlative Life to					
D.	Program Costs*:		Reporting Year		2005 Costs	Date					
	Utility direct costs (\$):	Incremental capital:	\$	-	_	\$ -					
		Incremental O&M:	\$	-	\$ 5,449.50						
		Incentive:	\$		<b>6</b> 5 440 50	\$ -					
		Total:	\$	-	\$ 5,449.50	\$ 5,449.50					
	Utility indirect costs (\$):	Incremental capital:	\$	-		\$ -					

Incremental O&M:

Total:

Total Utility Cost of Program

## (complete this section for each program)

A. Name of the Program: Teach the Teacher Program

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

Along with other LDCs in the Simcoe County area supported School Board in developing curriculum for grade 5 classes.

Measure(s):			
	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:			
Efficient technology:			
Number of participants or			
units delivered:	1.00		
Measure life (years):	5.00		
Number of units in 2005 &			
2006	0		
Number of Participants or			
units delivered life-to-date	1.00		

B.	TRC Results:		Reporting Year		2005-2006 TRC Results		fe-to-date TRC Results:
	<sup>1</sup> TRC Benefits (\$):	\$	-	\$	-	\$	-
	<sup>2</sup> TRC Costs (\$):						
	Utility program cost (less incentives):	\$	2,511.00			\$	2,511.00
	Incremental Measure Costs (Equipment Costs)	\$	-	\$	-	\$	-
	Total TRC costs:	\$	2,511.00	\$	-	\$	2,511.00
	Net TRC (in year CDN \$):	-\$	2,511.00	\$	-	-\$	2,511.00
	Benefit to Cost Ratio (TRC Benefits/TRC Costs):	0.00		#DIV	/0!	\$	-

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

Cumulative Results:

Conservation Programs:								
Demand savings (kW):	Demand savings (kW): Summer				Report Winter Demand (kW)			
	Winter	96.62	96.62		96.62			
				ĺ		Cumulative Annual		
	lifecycle	)	in year		Cumulative Lifecycle	Savings		
Energy saved (kWh):	0.00		0.00		0.00	0.00		
					2005-2006 Lifecycle	2005-2006 Annual		
					0.00	0.00		
Other resources saved :					_			
Natural Gas (m3)	:	0		0				
Water (	")	0		0				

D.	Program Costs*:		Reporting Year	2005-2006 Costs	Cuml	ative Life to Date
	Utility direct costs (\$):	Incremental capital:	\$ -		\$	-
		Incremental O&M:	\$ 2,511.00		\$	2,511.00
		Incentive:	\$ -	\$ -	\$	-
		Total:	\$ 2,511.00	\$ -	\$	2,511.00
	Utility indirect costs (\$):	Incremental capital:	\$ -		\$	-
		Incremental O&M:	\$ -		\$	-
		Total:	\$ -	\$ -	\$	-
	Total Utility Cost of Progra	am	\$ 2,511.00			2,511.00