



Cornerstone Hydro Electric Concepts Association Inc.

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

Conservation and Demand Management 2006 Annual Report

1.0 Introduction:

This report summarizes the activity and successes of the Cornerstone Hydro Electric Concepts (CHEC) Group with respect to conservation and demand management undertaken in 2006. Included in this document are the sixteen (16) individual reports from the CHEC members that discuss their specific program activities and the associated insights of the members.

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. In 2006 the CHEC group worked both individually and collectively to delivery CD&M programs. The individual reports from each utility provides to the reader a better understanding of the activity and focus of each utility while this summary report provides an overview of the impact of this combined effort.

In 2006 the level of activity varied significantly from member to member dependent on their remaining funds, resources and opportunities. Individual LDC activity level ranged from only being involved in "provincially led" initiatives to the development and delivery of a wide variety of programs. From a review of the programs it is interesting to note how opportunities, partnerships and delivery have matured at different rates in the different service territories.

Within the 16 utilities there have been a total of 104 initiatives worked on in 2006. As in the first year the initiatives represent projects specific to individual utilities and projects that are cooperative efforts between utilities or agencies (the OPA EKC Programs for example). While there were 104 initiatives included in the reporting many of the reports contained a number of separate activities joined in one Appendix B.

After the initial year where much of the ground work for future programs was started, one would expect that the majority of programs would be driving a positive TRC. On the population of 104 initiatives, 43% had a positive TRC. This low percentage of initiatives with a positive TRC indicates that many initiatives continued to focus on education, studies to prepare customers for

continued energy conservation and partnership building in the second year of the CDM program.

With the activity and experience gained in 2006 the CDM industry is moving towards the final year of third tranche funding and towards the new funding model. While the funding method will change the fundamental knowledge gained in delivering two years of CDM programming has proven and will continue to prove invaluable as programs continue to be offered to residential, commercial and industrial customers across the province.

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 CHEC Members:

The 2006 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

3.0 Evaluation of the CDM Plan:

Total Portfolio: The 16 CHEC members collectively undertook a total of 104 initiatives. These programs fell within three categories:

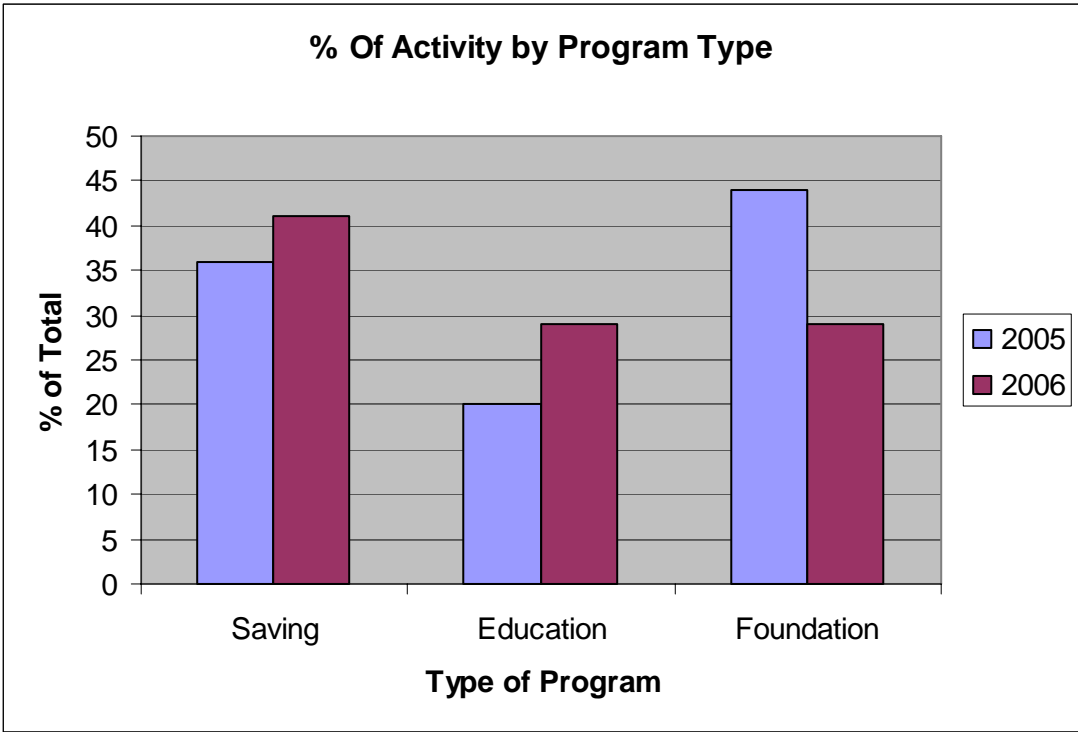
- Savings: Delivery of energy saving products or processes: coupons, rebates, free products, etc.
- Education: Providing general energy management information through such activities as: website development, workshops, brochures, etc,
- Foundation: Preparatory work for future programs that include: program research and development, energy audits, system studies, demonstration projects, partnerships, etc. This is a category that one might have expected to see reduced activity however it continues to be a major component.

The 2006 initiatives represent a total energy savings (lifecycle) of 129,330,000 kWh at a combined “Utility Cost” of \$1,185,000 or approximately 1 c/kWh. This low cost of energy saved was achieved while continuing the education and foundation building programs. To put the energy savings in perspective the 129 Million kWh represent the annual energy required by 10,700 homes (at 1000

kWh/month). Comparing this to incandescent bulbs the energy saved is equivalent to removing approximately 1.5 Million, 60 W incandescent bulbs operating 4 hours per day for a year.

Figure 1 illustrates the change in program makeup from 2005 to 2006. The percentage of programs focused on “saving” and “education” have increased while the number of foundation” programs have decreased. The reduced focus on “foundation” programs in the second year is to be expected as the program mature and initiatives move from planning to delivery thereby increasing the number of “savings” and ‘education’ initiatives. Many “foundation” programs continue into the third year and will form the basis for conservation activities beyond third tranche by both utilities and their partners.

Figure 1



While the Figure provides a general breakdown it should be noted that there are many education programs that are now incorporating savings into the deliverables. The ability to incorporate savings and education provides an immediate conservation benefit, a positive TRC for the program and sets the stage for continued customer interest in conservation in the future.

Savings Programs: Programs were initiated both at the local and provincial level. Key to the 2006 results was the active participation of CHEC members in the OPA Every Kilowatt Counts programs. These programs in many instances provided a “savings” and “education” program that members could support without depleting their third tranche funding.

On the local level savings programs focused on local partnerships and delivery channels. Projects like municipal traffic light conversion built on the existing relationship with the municipality, provided benefits to the entire community and once installed ensured that the technology would remain in place once the benefits of lower cost and maintenance were recognized.

The use of product incentives and give-a-ways continued to play a significant role in the local programming. Capitalizing on the ability to participate in local events the provision of energy efficient product was a direct method of demonstrating the technology to the customer.

System optimization projects continue to be included in the portfolio. Nine initiatives focused on either completing the studies associated with system optimization or the implementation of field changes. System optimization continues to be an area for potential savings.

Education Programs: LDC's started to see opportunities to partner with others to provide programs into the education system. CHEC members along with other utilities in the service territory of Boards of Education are funding the development of programs for delivery in the schools. During 2006 third party providers (in many instances not-for-profits) made approaches to members for support and delivery of programs. As the conservation culture continues to develop the resources to provide this type of education will most likely continue to increase. The third tranche funding and the LDCs interest in partnering have helped this process.

Members have also been active in supporting education programs for the commercial and industrial sector. The challenge to date has been evaluating the results of this training. In most cases the proof of success is mostly anecdotal where mention is made of actions taken as a result of the training without any firm data. For this reason most education initiatives in this sector do not show a positive TRC.

Foundation Program: Many of the "foundation" type programs underway during 2006 were aimed at providing information to partners for further action. The CHEC members have actively supported alternate energy initiatives with a number of projects specific to these types of initiatives. The support provided at this stage, on the local level, can be pivotal on the success of future activities by community based groups.

In 2005 the "foundation" programs included initiatives such as: system optimization studies, smart meter preparation, customer audits and demonstration projects. In 2006 the increase in "education" and "savings" programs in some instances were the results of the 2005 foundation work. 2005 work on system optimization was a critical precursor to the project implementation in 2006 (and

2007). In some instances the full studies will only be completed in 2007 with the impact of implementation only being taken beyond the third tranche time frame.

Net TRC Results: The net TRC result of the combined CHEC CDM activity for 2006 is \$3,800,000 up from \$500,000 in 2005. The increase in TRC indicates the development of the industry over the first year resulting in deliverables in the second year.

Part of the development of the CDM industry was the provincial EKC programs – a program that built on the experience gained from the 2005 program coordinated by Energyshop.com and subscribed by a number of CHEC members. The involvement of CHEC members in the EKC programs resulted in 86% of the TRC results for member LDCs. The benefits of combining local support in wider based programs are clearly demonstrated by the success of these programs.

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. The complete Annual CDM Report for each utility is included in the appendices.

5.0 Lessons Learned:

Application of TRC: 2005 was the introduction to the TRC tool. While the tool can be used to evaluate programs to ensure a positive TRC result in many instances the 2006 programs were set prior to experience with the tool.

The principles of TRC are generally easy to understand: energy efficiency case vs base case. However the mechanics of determining the details of the evaluation can be quite complex depending on the application. CHEC members spent considerable time ensuring the assumptions and discounted costs were properly applied. In many instances the experience of one member was utilized to assist others within the group.

One of the greatest challenges with TRC remains the carryover of familiarity with its use. While the second year of applying the TRC was a bit more familiar the application is still a challenge as the use of the tool tends to occur in discreet measures (ie to do the Annual Report).

Funding: CHEC members in general have funds for continued programs in 2007 (with a few exceptions). With the advent of provincial programs the ability to stretch the third tranche funding has occurred. Hence the need for additional funding based on the LDCs plan can, to a large extent, be avoided until the LDCs Funding through the OPA is available.

Partnerships and Sharing: The ability to partner has increased in year two of the CDM Funding. Not-for-Profit Agencies, municipalities, local groups etc. have become aware of potential for partnering and have either approached members or have been very positive to LDC initiatives. It is anticipated that the ability to partner with a wide variety of groups within our communities should continue to grow. As such, it will be an important aspect of program delivery that the LDC community will need to broach with the OPA through 2008 and beyond.

The sharing of experience and insights by CHEC members is on-going. In 2006 CHEC members had the opportunity to participate in the development of the CDM industry structure for moving forward. The perspective brought by smaller participants helps to ensure the success of program delivery across the entire province in both large and small communities.

Customer Readiness: The results of the 2006 programs highlights that the conservation message is starting to be understood and that residential customers will take action.

In 2007 and beyond programs will need to reach beyond the compact fluorescent light to clearly demonstrate to customers that they have a wide variety of opportunities. There may be additional challenges to overcome to move these messages forward as the cost to implement and the payback may not be as favourable.

While programs have been successful with residential customers more work is required to make inroads into the commercial and industrial sector. These sectors continue to be difficult to get actively engaged. Future programs will need to take into account the customer's limited resources, long lead times, and provide demonstrated value of conservation to their business. Experience is showing that in this sector, the progression from initial discussion, to decision, to action is slow and methodical.

Utility Resources: Utilities continue to utilize internal resources for much of the CDM work as it is integrated into the systems of the LDC. CDM calls received, the manager's time to promote CDM, the accountant's time to record and report, are all functions immersed in the activities of existing positions. The ability to manage these requirements as the industry moves forward will need to be addressed by LDCs.

6.0 Conclusion:

The second year of CDM delivered a significant increase in the kWhs saved and continues to set the stage for on-going development of the CDM industry.

LDCs continue to support CDM and the involvement at the local level. CHEC members through their local programs, involvement in provincial programs and participation in the design of the industry continue to demonstrate their support for CDM, for the provincial initiative and their customers.

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**LAKEFRONT
UTILITIES
INC.**

**LAKEFRONT UTILITIES INC.
CDM PLAN
ANNUAL REPORT
FOR THE YEAR ENDED DECEMBER 31, 2006**

INTRODUCTION:

Lakefront Utilities Inc. (“LUI”) is pleased to submit its Annual Report on the progress made in applying the third tranche (\$170,000) monies to conservation and demand management programs. LUI submitted its conservation and demand management plan with the CHEC Group and has received a final order dated February 8, 2005 approving spending on the following programs:

DISCUSSION OF PROGRAMS:

The intent of the programs is to create an active conservation culture. Engaging the community as a whole and fostering the conservation culture through its infancy are the expected yield from the programs. Using economies of scale the costs are shared with other members of the CHEC group and the increased buying power of the group will leverage more value to customers and shareholders.

#1. NAME OF PROGRAM: CONSERVATION WEBSITE

DESCRIPTION OF PROGRAM: (design, delivery, partnerships and evaluation)

A CHEC conservation website is a significant avenue of opportunity to educate, inform, advertise and reach out to energy consumers. Development and maintenance costs were shared, resulting in a more robust and interactive website. This website would also be linked to LUI’s main website which would be enhanced to include a more robust conservation component. Work on LUI’s website is progressing in 2007. Components of the website would range from energy savings concepts to various industries and load profile services.

Savings could be measured on up-take of programs, message penetration analysis and reports on the number of hits and website traffic.

TOTAL PROGRAM COST:	\$9,000.00
COSTS INCURRED IN 2006	\$1,365.00
Balance At December 31, 2006:	\$6,306.15

#2. NAME OF PROGRAM: EDUCATION/PROMOTION**DESCRIPTION OF PROGRAM:** (design, delivery, partnerships and evaluation)

Advancing the importance of understanding conservation to customers in all market sectors and in turn facilitating the programs to permit customers acting on the energy saving opportunities requires significant effort and consistent marketing. Common messages and approaches are implemented to achieve greatest possible penetration. It is also very important that LDC staff understand how the various activities included in the CDM plan will not only help the consumer but the LDC as well. The level of knowledge the staff has on the benefits of various programs can significantly affect the success level of any program.

Although savings cannot be quantitatively measured, it is through the knowledge, education and promotion activities that the consumer partakes in the conservation culture.

In 2006, LUI purchased additional brochures produced by the Ministry of Energy – “Conserve Energy and Save Money” and along with the flyers from the IESO, provided these to residential customers.

TOTAL PROGRAM COST:	\$10,000.00
COSTS INCURRED IN 2006	\$ 3,027.24
Balance At December 31, 2006:	\$ 4,818.49

#3. NAME OF PROGRAM: LIGHT BULB GIVEAWAY**DESCRIPTION OF PROGRAM:** (intent, design, delivery, partnerships and evaluation)

Compact Fluorescent Lamps (CFLs) have for the past 15 years been proven energy saving devices over their conventional incandescent light bulbs. This is a residential consumer and small business program targeting increased awareness and use of CFLs in this market. CFLs achieve up to 75% electricity savings over conventional incandescent bulbs and last up to 10 times longer. If used in applications where light is required a minimum of 4 hours per day or more, typical paybacks range from .7 to 3 years.

Program design included lamp specification, procurement, distribution, etc. Key considerations include lamp selection to ensure light quality and life expectancy is achieved. LUI is currently in the process of distributing, in partnership with a local community church, a CFL, brochure and flyer to each residential customer throughout our service territory.

TOTAL PROGRAM COST:	\$20,000.00
COSTS INCURRED IN 2006	\$ 3,614.41
At December 31, 2006:	\$ 4,620.46

#4. NAME OF PROGRAM: Customer Survey**DESCRIPTION OF PROGRAM:** (intent, design, delivery, partnerships and evaluation)

The intent of this program is to get a better understanding of the various types of residential appliances across our service territory. In June 06, Lakefront Utilities undertook a residential customer survey in conjunction with the CHEC group of utilities, and the results were used for planning purposes to target various promotions related to CDM. The information was also used in LUI's Cost Allocation Review filings to determine whether distinct load profiles for the residential class are required

TOTAL PROGRAM COST:	\$1,000.00
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COSTS INCURRED IN 2006 **\$ 1,000.00**
At December 31, 2006: **\$ 1,000.00**

#5. NAME OF PROGRAM: Renewable Energy Survey

DESCRIPTION OF PROGRAM: (intent, design, delivery, partnerships and evaluation)

In LUI's submission to the OEB for third tranche CDM funds, LUI indicated as part of its Tier 1 and 2 measures and budget, its intention to conduct a Renewable Energy study and allocated \$10,000 for this initiative, which was approved by the Board. This full cost was committed to Northumberland Hills Hospital to jointly complete a Green Energy Generation Study, a renewable green energy generation (Wind/Solar) study, to determine the feasibility of green energy initiatives for future energy savings.

TOTAL PROGRAM COST: **\$10,000.00**

COSTS INCURRED IN 2006 **\$ 10,000.00**
At December 31, 2006: **\$ 10,000.00**

#6. NAME OF PROGRAM: System Optimization & Implementation

DESCRIPTION OF PROGRAM: (intent, design, delivery, partnerships and evaluation)

The intent of this program is to target reductions in distribution system losses. The overall benefits of this program will be to identify and implement projects that will improve/reduce distribution system losses and improve system efficiency. Supporting corrective action either by taking direct control over an upgrade or support customer action will result in system demand reductions and relieve network capacity, on both a local and system wide basis.

Program #1: Transformer and other loss reductions: Infrared Study
 Through non-invasive investigations, this initiative identified overloaded equipment and investigate operational and equipment improvement opportunities. This study also investigate the integrity of the overhead and underground distribution systems for areas of hot spots which once repaired, will reduce line losses and improve system reliability. The study also investigate transformers owned by MPUC's large customers to identify overloaded equipment for customer improvement opportunities.

Program #2: Line Loss Reductions: System Optimization Study & Phase Balancing
 This study investigate and identify the benefits of optimizing the distribution system. It indicate areas of losses resulting from undersized conductors and undersized transformers. It further indicate where improvements may be made to the system through the implementation of proper feeder balancing. The study recommend system changes which will improve line losses and system reliability.

Program #3: Voltage Conversion Substation Upgrade
 This study investigate the benefits of increasing the distribution system voltage which will result in lower line losses, and may result in the elimination of either one or two of the existing municipal substations.

Program #4: Substation Study
 Subject to the results obtained from the Voltage Conversion Study, this study will investigate the existing condition of the municipal substations and provide a report on applicable upgrades to the substations to maximize system reliability.

Program #5: Load Data Study

This study satisfy the OEB requirement for an LDC-specific load shape analysis using the generic load shapes (residential and general service) as identified by the Province-wide group which included sampling design, customer selection and load shape analysis.

Base on the above studies by Enerspectrum, LUI commenced work in 2005 of a feeder voltage conversion for its F9 feeder from MS 2 in Cobourg. The feeder was and is currently operated at 4,160kV and serves the central downtown area of Cobourg, largely a residential area, with some commercial load. Upon conversion, the feed will operate at 27,600 kV. The line loss savings resulting in conversion are in the range of 3% - 5%, or 35 to 105 kW savings. Energy savings would amount to approximately 700 – 2000 kWh per day, with an average annual saving of 547,000 kWh per year.

TOTAL PROGRAM COST:	\$105,000.00
COSTS INCURRED IN 2006	\$ 47,983.32
At December 31, 2006:	\$ 118,007.32

LESSONS LEARNED/CONCLUSIONS/ GENERAL COMMENTS:

1. **Administration and coordination of programs and the supply of reporting documentation costs have been allocated to all programs on a prorata sharing, based on the gross amount allocated to each program in the year. LUI believes that more administrative type costing will be incurred on larger programs. Once the program has been completed no future administration costs will be allocated to the program.**
2. **For the year 2006, the net TRC is a positive value of \$462,261, mainly due to the system optimization program and EKC.**
3. **Overall expenditures per kWh saved is \$.0067. Lakefront has reached over 9100 users of electricity in the Town of Cobourg. We will continue to foster a conservation culture as we build programs in the future.**
4. **LUI feel that the delivery of CFLs would provide better customer penetration than a coupon program at this time. LUI feels that this initial give away program will support the EKC coupon program in Spring 2007.**
5. **As smart metering implementation becomes reality, LUI believes that the combined focus of the CHEC Group has provides great economies of scale for us. Through this group we will be investigation partnership for procurement and installation as opposed to “going it alone”.**

Sincerely,

Dereck C. Paul
Manager; Regulatory Compliance and Finance

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>	716465	\$ 462,261	\$ 227,054	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 235,207	\$ -
<i>Benefit to cost ratio:</i>	6.87	6.19	7.71	0.00	0.00	0.00	0.00	0.00		5.26	0.00
<i>Number of participants or units delivered:</i>	15,389	6,288	6,285	0	0	0	0	0		3	0
<i>Lifecycle (kWh) Savings:</i>	19783169.5	12,976,110	5,546,110	0	0	0	0	0		7,430,000	0
<i>Report Year Total kWh saved (kWh):</i>	1466302.296	1,081,724	710,223	1	0	0	0	0		371,500	0
<i>Total peak demand saved (kW):</i>		136	136	0	0	0	0	0		0	0
<i>Total kWh saved as a percentage of total kWh delivered (%):</i>	0.25%	0.36%	0.97%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#VALUE!	#DIV/0!
<i>Peak kW saved as a percentage of LDC peak kW load (%):</i>		0%	0%	0%	0%	0%	0%	0%		0%	0%
¹ <i>Report Year Gross C&DM expenditures (\$):</i>	132005.56	\$ 64,224	\$ 9,007	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 55,216	\$ -
² <i>Expenditures per kWh saved (\$/kWh):</i>	0.0067	0.0049	0.0016	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 0.01	\$ -
³ <i>Expenditures per kW saved (\$/kW):</i>		\$ 472.73	\$ 66.30	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -	\$ -
<i>Utility discount rate (%):</i>	9%										

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 C - Program and Portfolio Totals

Report Year:

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		\$ Net TRC Benefits	Benefit/Cost Ratio	Report Year	Lifecycle	Total Peak Demand (kW) Saved	Report Year Gross C&DM Expenditures (\$)
	(PV)	TRC Costs (PV)			Total kWh Saved			
Education and Promotion and Website	\$ -	\$ 4,392	\$ -4,392	0.00	0	0	0	\$ 4,392
CFL Rebate Program	\$ 6,517	\$ 4,121	\$ 2,396	1.58	26,403	113,805	6	\$ 3,615
Customer Survey	\$ -	\$ 1,000	\$ -1,000	0.00	0	0	0	\$ 1,000
Spring Every Kilowatt Counts (EKC) Program	\$ 65,170	\$ 9,043	\$ 56,128	7.21	209,957	1,179,329	3	\$ -
Fall Every Kilowatt Counts (EKC) Program	\$ 189,216	\$ 15,294	\$ 173,922	12.37	473,864	4,252,976	127	\$ -
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	\$ 260,904	\$ 33,850	\$ 227,054	7.71	710,223	5,546,110	136	\$ 9,007
Residential Indirect Costs not attributable to any specific program		\$ -			Total Residential kWh Delivered in 2006		73,151,720	
Total Residential TRC Costs		\$ 33,850			Residential Peak in 2006 in kW		42,624	
**Totals TRC - Residential	\$ 260,904	\$ 33,850	\$ 227,054	7.71				

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		\$ Net TRC Benefits	Benefit/Cost Ratio	Report Year	Lifecycle	Total Peak Demand (kW) Saved	Report Year Gross C&DM Expenditures (\$)
	(PV)	TRC Costs (PV)			Total kWh Saved			
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	1			
*Totals App. B - Commercial	\$ -	\$ -	\$ -	0.00	1	0	0	\$ -
Commercial Indirect Costs not attributable to any specific program					Total Commercial kWh Delivered in 2006			
Total TRC Costs		\$ -			Commercial Peak in 2006 in kW		42,624	
**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 formulas, please insert the additional rows in the middle of the list below.

	TRC Benefits		\$ Net TRC Benefits	Benefit/Cost Ratio	Report Year	Lifecycle	Total Peak Demand (kW) Saved	Report Year Gross C&DM Expenditures (\$)
	(PV)	TRC Costs (PV)			Total kWh Saved			
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 - Institutional	\$ -	\$ -	\$ -	0.00	0	0	0	\$ -
Institutional Indirect Costs not attributable to any specific program					Total Institutional kWh Delivered in 2006			
Total TRC Costs		\$ -			Institutional Peak in 2006 in kW		42,624	
**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		\$ Net TRC Benefits	Benefit/Cost Ratio	Report Year	Lifecycle	Total Peak Demand (kW) Saved	Report Year Gross C&DM Expenditures (\$)
	(PV)	TRC Costs (PV)			Total kWh Saved			
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 -	\$ -	\$ -	\$ -	0.00	0	0	0	\$ -
Industrial Indirect Costs not attributable to any specific program					Total Industrial kWh Delivered in 2006			
Total TRC Costs		\$ -			Industrial Peak in 2006 in kW		42,624	
**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		\$ Net TRC Benefits	Benefit/Cost Ratio	Report Year	Lifecycle	Total Peak Demand (kW) Saved	Report Year Gross C&DM Expenditures (\$)
	(PV)	TRC Costs (PV)			Total kWh Saved			
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 -	\$ -	\$ -	\$ -	0.00	0	0	0	\$ -
Agricultural Indirect Costs not attributable to any specific program					Total Agricultural kWh Delivered in 2006			
Total TRC Costs		\$ -			Agricultural Peak in 2006 in kW		42,624	
**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		\$ Net TRC Benefits	Benefit/Cost Ratio	Report Year	Lifecycle	Total Peak Demand (kW) Saved	Report Year Gross C&DM Expenditures (\$)
	(PV)	TRC Costs (PV)			Total kWh Saved			
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 -	\$ -	\$ -	\$ -	0.00	0	0	0	\$ -
LDC System Indirect Costs not attributable to any specific program					Total Losses kWh Delivered in 2006			
Total TRC Costs		\$ -			LDC Peak in 2006 in kW		42,624	
**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 formulas, please insert the additional rows in the middle of the list below.

	TRC Benefits (PV)		\$ Net TRC Benefits	Benefit/Cost Ratio	Report Year	Lifecycle (kWh) Savings	Total Peak Demand (kW) Saved	Report Year Gross C&DM Expenditures (\$)
	(PV)	TRC Costs (PV)			Total kWh Saved			
Renewable Energy Study	\$ -	\$ 10,000	-\$ 10,000	0.00	0	0	0	\$ 10,000
System Optimization	\$ 290,424	\$ 38,983	\$ 251,440	7.45	371,500	7,430,000	0	\$ 38,983
System Optimization Study	\$ -	\$ 6,233	-\$ 6,233	0.00	0	0	0	\$ 6,233
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 -	\$ 290,424	\$ 55,216	\$ 235,207	5.26	371,500	7,430,000	0	\$ 55,216
Other #1 Indirect Costs not attributable to any specific program					Total Other kWh Delivered in 2006			
Total TRC Costs		\$ 55,216			"Other" Peak in 2006 in kW		42,624	
**Totals TRC - Other #1	\$ 290,424	\$ 55,216	\$ 235,207	5.26				

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)		\$ Net TRC Benefits	Benefit/Cost Ratio	Report Year	Lifecycle (kWh) Savings	Total Peak Demand (kW) Saved	Report Year Gross C&DM Expenditures (\$)
	(PV)	TRC Costs (PV)			Total kWh Saved			
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 -	\$ -	\$ -	\$ -	0.00	0	0	0	\$ -
Other #2 Indirect Costs not attributable to any specific program					Total Other kWh Delivered in 2006			
Total TRC Costs		\$ -			"Other" Peak in 2006 in kW		42,624	
**Totals TRC - Other #2	\$ -	\$ -	\$ -	0.00				

LDC's CDM PORTFOLIO TOTALS

	TRC Benefits (PV)		\$ Net TRC Benefits	Benefit/Cost Ratio	Report Year	Lifecycle (kWh) Savings	Total Peak Demand (kW) Saved	Report Year Gross C&DM Expenditures (\$)
	(PV)	TRC Costs (PV)			Total kWh Saved			
*TOTALS FOR ALL APPENDIX B	\$ 551,327	\$ 89,066	\$ 462,261	6.19	\$ 1,081,724	\$ 12,976,110	\$ 136	\$ 64,224
Any other Indirect Costs not attributable to any specific program		\$ -			Total kWh Delivered in 2006		298,860,253.0	
TOTAL ALL LDC COSTS		\$ 89,066			Total Peak in 2006 in kW		42,624	
**LDC' PORTFOLIO TRC	\$ 551,327	\$ 89,066	\$ 462,261	6.19				
					Total kWh Delivered in 2005		282,160,110	

* 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.

Appendix B - Discussion of the Program

(complete this section for each program)

A. **Name of the Program:** Education and Promotion and Website Conservation

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

In conjunction with giving away a CFL, utilize the opportunity to deliver brochures and develop / enhance website to promote conservation culture across community

Measure(s):

	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	Brochures, website		
Efficient technology:	0		
Number of participants or units delivered:	0.00		
Measure life (years):	0.00		
Number of participants or units 2005	8500		
Number of Participants or units delivered life-to-date	8,500.00		

TRC Results:

	Reporting Year	Life-to-date	
		2005 TRC Results	TRC Results:
B. ¹ TRC Benefits (\$):	\$ -	\$ -	\$ -
² TRC Costs (\$):			
Utility program cost (less incentives):	\$ 4,392.24	\$ 6,732.40	\$ 11,124.64
Incremental Measure Costs (Equipment Costs)	\$ -	\$ -	\$ -
Total TRC costs:	\$ 4,392.24	\$ 6,732.40	\$ 11,124.64
Net TRC (in year CDN \$):	\$ (4,392.24)	-\$ 6,732.40	\$(11,124.64)
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	0.00	\$ -	\$ -

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

Cumulative Results:

Conservation Programs:

Demand savings (kW):	Summer	0.00	Report Summer Demand (kW)	
			0.00	
	Winter	0.00	Cumulative Lifecycle	Cumulative Annual Savings
Energy saved (kWh):	lifecycle	0.00	0	0
	in year	0.00	2005 Lifecycle	2005 Annual
Other resources saved :				
Natural Gas (m3):	0	0		
Water (l)	0	0		

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):	
Energy savngs (kWh):	lifecycle
	in year

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):

		<u>Reporting Year</u>	<u>2005 Costs</u>	<u>Cumulative Life to Date</u>
D. Program Costs*:				
Utility direct costs (\$):	Incremental capital:	\$ 4,392.24	\$ 6,732.40	\$ 11,124.64
Includes Measure's Cost - ensure full cost of measure entered in TRC/L15	Incremental O&M:	\$ -	\$ -	\$ -
	Incentive:	\$ -	\$ -	\$ -
	Total:	\$ 4,392.24	\$ 6,732.40	\$ 11,124.64
Utility indirect costs (\$):	Incremental capital:	\$ -	\$ -	\$ -
	Incremental O&M:	\$ -	\$ -	\$ -
	Total:	\$ -	\$ -	\$ -
Total Utility Cost of Program		\$ 4,392.24	\$ 6,732.40	\$ 11,124.64

E. Assumptions & Comments:

In Lakefront Utilities Inc. ("LUI") submission to the Ontario Energy Board to access third tranche CDM funds, LUI proposed a budget of \$9,000 for development of a conservation website and \$10,000 for customer education and promotion. Thus far, in 2005 and 2006, LUI has spent \$6,306.15 on website development and \$4,818.49 on customer education and promotion and anticipate in 2007 to be within budget for both these initiatives.

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 section for each program)

A. **Name of the Program:** CFL Rebate Program

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

An energy conservation program aimed at providing residential customers with 13W CFLs and educating them on the cost saving advantages of conservation. Value of a six-pack CFLs is \$12.54.

Measure(s):

	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	60 W Incandescent		
Efficient technology:	13 W CFL		
Number of participants or units delivered:	281.00		
Measure life (years):	4.31		
Number of participants or units 2005	600		
Number of Participants or units delivered life-to-date	881.00		

TRC Results:

	Reporting Year	2005 TRC Results	Life-to-date TRC Results:
¹ TRC Benefits (\$):	\$ 6,517.14	\$ 14,141.37	\$ 20,658.51
² TRC Costs (\$):			
Utility program cost (less incentives):	\$ 3,614.95	\$ 1,438.05	\$ 5,053.00
Incremental Measure Costs (Equipment Costs)	\$ 505.80		\$ 505.80
Total TRC costs:	\$ 4,120.75	\$ 1,438.05	\$ 5,558.80
Net TRC (in year CDN \$):	\$ 2,396.39	\$ 12,703.32	\$ 15,099.71
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	1.58	\$ 9.83	\$ 3.72

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

Cumulative Results:

Conservation Programs:

	Summer	Winter	Report Summer Demand (kW)	
Demand savings (kW):	0.00	5.69	0.00	
			Cumulative Lifecycle	Cumulative Annual Savings
Energy saved (kWh):	113,805.00	26,402.76	356805	82778.76
			2005 Lifecycle	2005 Annual
			243000	56376
Other resources saved :				
Natural Gas (m3):	0	0		
Water (l)	0	0		

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):	
lifecycle	
in year	

Energy savngs (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):

--

		<u>Reporting Year</u>	<u>2005 Costs</u>	<u>Cumulative</u> <u>Life to Date</u>
D. Program Costs*:				
Utility direct costs (\$):	<i>Incremental capital:</i>	\$ 3,614.95	\$ 1,005.51	\$ 4,620.46
Includes Measure's Cost - ensure full cost of measure entered in TRCIL15	<i>Incremental O&M:</i>	\$ -	\$ -	\$ -
	<i>Incentive:</i>	\$ -	\$ -	\$ -
	<i>Total:</i>	\$ 3,614.95	\$ 1,005.51	\$ 4,620.46
Utility indirect costs (\$):	<i>Incremental capital:</i>	\$ -	\$ -	\$ -
	<i>Incremental O&M:</i>	\$ -	\$ -	\$ -
	<i>Total:</i>	\$ -	\$ -	\$ -
Total Utility Cost of Program		\$ 3,614.95	1,005.51	4,620.46

E. Assumptions & Comments:

Lakefront Utilities Inc. included \$20,000 for CFL giveaway in the third tranche CDM report to the Ontario Energy Board and will give away one CFL to each residential customer in our service territory to promote the electricity conservation culture. CFLs achieve up to 75% electricity savings over conventional incandescent bulbs and last up to 10 times longer. Typical paybacks range from .7 to 3 years.

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 numebr 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 section for each program)

A. **Name of the Program:** Customer Survey

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

In June 06, Lakefront Utilities undertook a residential customer survey in conjunction with the CHEC group of utilities and the results used for planning purposes and to determine whether distinct load profiles for the residential class are required. The information was also used in LUI's Cost Allocation Review filing.

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:	100.00		
Measure life (years):	0.00		
Number of participants or units 2005			
Number of Participants or units delivered life-to-date	100.00		

TRC Results:

	Reporting Year		2005 TRC Results	Life-to-date TRC Results:
		2005	2006	2005
¹ TRC Benefits (\$):	-	-	-	-
² TRC Costs (\$):				
Utility program cost (less incentives):	\$ 1,000.00	-	\$ 1,000.00	\$ 1,000.00
Incremental Measure Costs (Equipment Costs)	-	-	-	-
Total TRC costs:	\$ 1,000.00	-	\$ -	\$ 1,000.00
Net TRC (in year CDN \$):	\$ (1,000.00)	\$ -	\$ -	\$ (1,000.00)
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	0.00	#DIV/0!	\$ -	-

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

Cumulative Results:

Conservation Programs:

	Summer	Winter	Report	Summer Demand (kWh)
Demand savings (kW):	0.00	0.00		0.00
			Lifecycle	Cumulative Annual Savings
Energy saved (kWh):	0.00	0.00	0	0
			2005 Lifecycle	2005 Annual
Other resources saved :				
Natural Gas (m3):	0	0		
Water (l)	0	0		

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):	
lifecycle	
in year	

Energy savngs (kWh):

[Redacted]

Distributed Generation and Load Displacement Programs:

Amount of DG installed (kW):

[Redacted]

Energy generated (kWh):

[Redacted]

Peak energy generated (kWh):

[Redacted]

Fuel type:

[Redacted]

Other Programs (specify):

Metric (specify):

[Redacted]

D. Program Costs*:

Utility direct costs (\$):

Includes Measure's Cost - ensure full cost of measure entered in TRCIL15

	Reporting Year	2005 Costs	Cumulative Life to Date
Incremental capital:			#VALUE!
Incremental O&M:	\$ 1,000.00		\$ 1,000.00
Incentive:	\$ -		\$ -
Total:	\$ 1,000.00	\$ -	\$ 1,000.00

Utility indirect costs (\$):

Incremental capital:	\$ -		\$ -
Incremental O&M:	\$ -		\$ -
Total:	\$ -	\$ -	\$ -

Total Utility Cost of Program

	\$ 1,000.00	-	1,000.00
--	-------------	---	----------

E. Assumptions & Comments:

[Redacted]

¹ ... present value per unit b
² ... costs. However, payments made

Appendix B - Discussion of the Program

(complete this section for each program)

A. **Name of the Program:** Renewable Energy Study

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

Lakefront Utilities Inc. undertook, jointly with the Northumberland Hills Hospital a renewable green energy generation (Wind/Solar) study to determine the feasibility of green initiatives. Lakefront contributed \$10,000 towards this study for future energy savings.

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 (years):	0.00		
Number of participants or units 2005			
Number of Participants or units delivered life-to-date	1.00		

	Reporting Year	2005 TRC Results	Life-to-date TRC Results:
TRC Results:			
B. ¹ TRC Benefits (\$):	\$ -		\$ -
² TRC Costs (\$):			
Utility program cost (less incentives):	\$ 10,000.00		\$ 10,000.00
Incremental Measure Costs (Equipment Costs)	\$ -		\$ -
Total TRC costs:	\$ 10,000.00	\$ -	\$ 10,000.00
Net TRC (in year CDN \$):	\$ (10,000.00)	\$ -	\$ (10,000.00)
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):	Summer	0.00	Report Summer Demand (kW)	
	Winter	0.00	0.00	
			Cumulative Lifecycle	Cumulative Annual Savings
Energy saved (kWh):	lifecycle	in year	0	0
	0.00	0.00	2005 Lifecycle	2005 Annual
Other resources saved :				
Natural Gas (m3):	0	0		
Water (l)	0	0		

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):	
	lifecycle
Energy savngs (kWh):	
	in year

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):

		Reporting Year	2005 Costs	Cumulative Life to Date
D. Program Costs*:				
Utility direct costs (\$):	Incremental capital:	\$ -		\$ -
Includes Measure's Cost - ensure full cost of measure entered in TRCIL15	Incremental O&M:	\$ 10,000.00		\$ 10,000.00
	Incentive:	\$ -		\$ -
	Total:	\$ 10,000.00	\$ -	\$ 10,000.00
Utility indirect costs (\$):	Incremental capital:	\$ -		\$ -
	Incremental O&M:	\$ -		\$ -
	Total:	\$ -	\$ -	\$ -
Total Utility Cost of Program		\$ 10,000.00	\$ -	10,000.00

E. Assumptions & Comments:

In Lakefront Utilities Inc. ("LUI") submission to the OEB for third tranche CDM funds, LUI indicated as part of its Tier 1 and 2 measures and budget, its intention to conduct a Renewable Energy study and allocated \$10,000 for this initiative, which was approved by the Board. This full cost was committed to Northumberland Hills Hospital to jointly complete the Green Energy Generation Study

¹ value per unit b
² However, payments made

Appendix B - Discussion of the Program

(complete this section for each program)

A. **Name of the Program:** System Optimization

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

Work on distribution losses of a feeder voltage conversion. The feeder operates at 4,160 Volts pre-conversion and will operate at 27,000 Volts post conversion. Work is in progress by Lakefront Utilities and the utility paid for the cost of the work. Estimated completion is in 2007.

Measure(s):

	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	4,160 V supply transformer		
Efficient technology:	27,000 V supply transformer		
Number of participants or units delivered:	1.00		
Measure life (years):	20.00		
Number of participants or units 2005	1		
Number of Participants or units delivered life-to-date	2.00		

TRC Results:	Reporting Year	2005 TRC Results	Life-to-date TRC Results:
B. ¹ TRC Benefits (\$):	\$ 290,423.57	\$ 272,982.81	\$ 563,406.38
² TRC Costs (\$):			
Utility program cost (less incentives):	\$ 38,983.32	\$ 15,750.05	\$ 54,733.37
Incremental Measure Costs (Equipment Costs)	\$ -	\$ -	\$ -
Total TRC costs:	\$ 38,983.32	\$ 15,750.05	\$ 54,733.37
Net TRC (in year CDN \$):	\$ 251,440.25	\$ 257,232.76	\$ 508,673.01
 Benefit to Cost Ratio (TRC Benefits/TRC Costs):	7.45	\$ 17.33	\$ 10.29

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

Conservation Programs:

			Report Summer Demand (kW)	
			Summer	Winter
Demand savings (kW):		0.00	0.00	
		0.00		
	lifecycle	in year	Cumulative Lifecycle	Cumulative Annual Savings
Energy saved (kWh):	7,430,000.00	371,500.00	13994060	699703
			2005 Lifecycle	2005 Annual
			6564060	328203
Other resources saved :				
Natural Gas (m3):	0	0		
Water (l)	0	0		

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):		
	lifecycle	in year
Energy savngs (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):

--

		<u>Reporting Year</u>	<u>2005 Costs</u>	<u>Cumulative Life to Date</u>
D. Program Costs*:				
Utility direct costs (\$):	Incremental capital:	\$ 38,983.32	\$ 51,044.14	\$ 90,027.46
Includes Measure's Cost - ensure full cost of measure entered in TRC:L15	Incremental O&M:	\$ -	\$ -	\$ -
	Incentive:	\$ -	\$ -	\$ -
	Total:	\$ 38,983.32	\$ 51,044.14	\$ 90,027.46
Utility indirect costs (\$):	Incremental capital:	\$ -	\$ -	\$ -
	Incremental O&M:	\$ -	\$ -	\$ -
	Total:	\$ -	\$ -	\$ -
Total Utility Cost of Program		\$ 38,983.32	\$ 51,044.14	\$ 90,027.46

E. Assumptions & Comments:

Lakefront Utilities Inc. has been pursuing a line loss mitigation project in the Town of Cobourg that resulted in system optimization line loss reduction in the range of 3% to 5% in the areas of voltage conversion. Some of this work was completed in 2005 and additional work started in 2006 and is anticipated to be completed in 2007. In 2005, \$51,044.14 was spent in transformers and conductors upgrade and \$15,222.96 was spent initially on the Distribution System Loss Assessment and Study for a total of \$66,267.10 (study on separate Appendix B). The cost so far in 2006 is \$38,983.32. Approximate kWh savings were used to calculate the 2006 TRC. The potential savings for this initiative will be fully realized upon completion of the entire Feeder (F9) conversion.

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 section for each program)

A. **Name of the Program:** System Optimiazation Study

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

2005 distribution system loss study.

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 2005			
Number of Participants or units delivered life-to-date	1.00		

	<u>Reporting Year</u>	<u>2005 TRC Results</u>	<u>Life-to-date TRC Results:</u>
B. <u>TRC Results:</u>			
¹ TRC Benefits (\$):	\$ -		\$ -
² TRC Costs (\$):			
Utility program cost (less incentives):	\$ 6,233.00	\$ 9,000.00	\$ 15,233.00
Incremental Measure Costs (Equipment Costs)	\$ -		\$ -
Total TRC costs:	\$ 6,233.00	\$ 9,000.00	\$ 15,233.00
<u>Net TRC (in year CDN \$):</u>	<u>-\$ 6,233.00</u>	<u>-\$ 9,000.00</u>	<u>-\$ 15,233.00</u>
 Benefit to Cost Ratio (TRC Benefits/TRC Costs):	 0.00	 \$ -	 \$ -

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

Conservation Programs:

			Report Summer Demand (kW)	
Demand savings (kW):	Summer	0.00	0.00	
	Winter	0.00		
Energy saved (kWh):	lifecycle	in year	Cumulative Lifecycle	Cumulative Annual Savings
	0.00	0.00	0	0
			2005 Lifecycle	2005 Annual
 Other resources saved :				
Natural Gas (m3):	0	0		
Water (l)	0	0		

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): lifecycle in year

Energy savngs (kWh): lifecycle in year

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): _____

		<u>Reporting Year</u>	<u>2005 Costs</u>	<u>Cumulative Life to Date</u>
D. <u>Program Costs*:</u>				
Utility direct costs (\$):	Incremental capital:	\$ -	\$ -	\$ -
Error: Choose Measure's cost paid by:	Incremental O&M:	\$ 6,233.00	\$ 9,000.00	\$ 15,233.00
	Incentive:	\$ -	\$ -	\$ -
	Total:	\$ 6,233.00	\$ 9,000.00	\$ 15,233.00
Utility indirect costs (\$):	Incremental capital:	\$ -	\$ -	\$ -
	Incremental O&M:	\$ -	\$ -	\$ -
	Total:	\$ -	\$ -	\$ -
Total Utility Cost of Program		\$ 6,233.00	\$ 9,000.00	\$ 15,233.00

E. Assumptions & Comments:

Now is the time for all good men

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 numebr 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 section for each program)

A. **Name of the Program:** Spring Every Kilowatt Counts (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 in-store promotion along with local advertising and support.

Measure(s):

	Measure 1	Measure 2	Measure 3	Measure 4	Measure 5	Measure 6
<i>Base case technology:</i>	0	0.00	0.00	0.00	0.00	0.00
<i>Efficient technology:</i>	CFLs	Ceiling Fans	Timers	Progr. Thermostats	0.00	0.00
<i>Number of participants or units delivered:</i>	2,000.00	24.00	49.00	59.00	0.00	0.00
<i>Measure life (years):</i>	4.00	20.00	20.00	18.00	0.00	0.00
<i>Number of participants or units 2005</i>						
<i>Number of Participants or units delivered life-to-date</i>	2,000.00	24.00	49.00	59.00	0.00	0.00

B. TRC Results:	<u>Reporting Year</u>		<u>Life-to-date TRC Results:</u>	
	<u>2005 TRC Results</u>			
¹ TRC Benefits (\$):	\$ 65,170.47		\$ 65,170.47	
² Measure's Costs (\$):				
<i>Utility program cost (less incentives):</i>	\$ -		\$ -	
<i>Participant cost:</i>	\$ 9,042.75		\$ 9,042.75	
<i>Total TRC costs:</i>	\$ 9,042.75	\$ -	\$ 9,042.75	
Net TRC (in year CDN \$):	\$56,127.72	\$ -	\$ 56,127.72	
<i>Benefit to Cost Ratio (TRC Benefits/TRC Costs):</i>	7.21	#DIV/0!	7.21	

C. Results: (one or more category may apply)				Cumulative Results:		
Conservation Programs:						
<i>Demand savings (kW):</i>	Summer	2.96	Report Summer Demand (kW)			
	Winter	0.00	2.96			
<i>Energy saved (kWh):</i>	lifecycle	in year	Cumulative Lifecycle	Cumulative Annual Savings		
			1179328.5	209956.536		
				2005 Lifecycle	2005 Annual	
<i>Other resources saved :</i>						
Natural Gas (m3):	0	0				
Water (l)	0	0				
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):
lifecycle in year
 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):

D. Program Costs*:		2005 Costs	Cumulative Life to Date
Utility direct costs (\$):	Incremental capital:	\$ -	\$ -
Error Choose Measures Cost Paid By on TRC ¹	Incremental O&M:	\$ -	\$ -
	Incentive:	\$ -	\$ -
	Total:	\$ -	\$ -
Utility indirect costs (\$):	Incremental capital:	\$ -	\$ -
	Incremental O&M:	\$ -	\$ -
	Total:	\$ -	\$ -
Total Utility Cost of Program		\$ -	\$ -

E. Comments:

LUI electricity service territory is Cobourg and Colborne. Base on the results provided by SeeLine Group on EKC, LUI calculated the TRC results

¹ Benefits should be estimated if costs have been incurred and technology has been deployed. Benefits reflect the present value of the measure for the number of years deployed in the year, not the number of times the net present value per unit benefit specified in the TRC Guide.
² The TRC costs include the incremental costs, operating and maintenance costs, and program 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 section for each program)

A. **Name of the Program:** Fall Every Kilowatt Counts (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 in-store promotion along with local advertising and support.

Measure(s):

	Measure 1	Measure 2	Measure 3	Measure 4	Measure 5	Measure 6
<i>Base case technology:</i>	0	0.00	Dimmers & Motions Sensor	0.00	0.00	0.00
<i>Efficient technology:</i>	CFLs	Seasonal LEDs	Dimmers & Motion Sens	Progr. Thermostats		
<i>Number of participants or units delivered:</i>	1,324.00	2,231.00	47.00	170.00	0.00	0.00
<i>Measure life (years):</i>	4.00	30.00	10.00	18.00	30.00	0.00
<i>Number of participants or units 2005</i>						
<i>Number of Participants or units delivered life-to-date</i>	1,324.00	2,231.00	47.00	170.00	0.00	0.00

B. TRC Results:	Reporting Year		2005 TRC Results	Life-to-date TRC Results:
	<i>TRC Benefits (\$):</i>	\$	189,216.00	
<i>Measure's Costs (\$):</i>				
<i>Utility program cost (less incentives):</i>	\$	-		\$ -
<i>Incremental Measure Costs (Equipment Costs)</i>	\$	15,294.00		\$ 15,294.00
<i>Total TRC costs:</i>	\$	15,294.00	\$ -	\$ 15,294.00
<i>Net TRC (in year CDN \$):</i>		\$173,922.00	\$ -	\$ 173,922.00
<i>Benefit to Cost Ratio (TRC Benefits/TRC Costs):</i>		12.37	#DIV/0!	\$ 12.37

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

Conservation Programs:

<i>Demand savings (kW):</i>	Summer	6.47	Report Winter Demand (kW)	
	Winter	127.21	6.47	
<i>Energy saved (kWh):</i>	lifecycle	4,252,976.00	in year	473,864.00
			Cumulative Lifecycle	Cumulative Annual Savings
			4252976	473864
			2005 Lifecycle	2005 Annual
<i>Other resources saved :</i>				
<i>Natural Gas (m3):</i>	0	0		
<i>Water (l)</i>	0	0		

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 savngs (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):

			<u>2005 Costs</u>	<u>Cumulative Life to Date</u>
D. <u>Program Costs*:</u>				
Utility direct costs (\$):	Incremental capital:	\$ -		\$ -
		\$ -		\$ -
Error Choose Measures Cost Paid By on TRC1	Incremental O&M:	\$ -		\$ -
	Incentive:	\$ -		\$ -
	Total:	\$ -	\$ -	\$ -
Utility indirect costs (\$):	Incremental capital:	\$ -		\$ -
	Incremental O&M:	\$ -		\$ -
	Total:	\$ -	\$ -	\$ -
Total Utility Cost of Program		\$ -	\$ -	\$ -

E. Assumptions & Comments:

Lakefront Utilities Inc, direct mail totals were: Baseboard pStats: 9, Dimmers: 22, CFLs: 164, Motion Sensor Switches: 4, Thermostats: 33 and LED: 100.
 Instore coupons were: Baseboard pStats: 56, Dimmers: 17, CFLs: 1160, Motion Sensor Switches: 3, Thermostats: 65 and LEDs: 2131

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.