Oshawa
PUC Networks Inc.
100 Simcoe Street South, Oshawa, Ontario L1H 7M7 • Tel. (905) 723-4623 • Fax (905) 723-7947 • E-mail contactus@opuc.on.ca

March 31, 2009

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

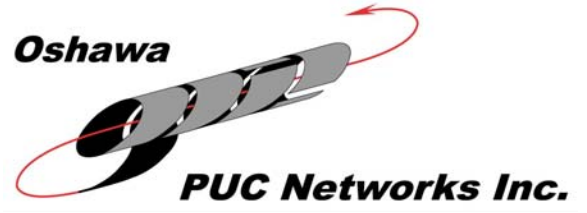
Dear Ms. Walli:

Re: Oshawa PUC Networks Inc. (ED-2002-0560)
Reporting of CDM Funded under Third Tranche of MARR for 2008

Please find enclosed an electronic copy of the report above. This filing consists of an Acrobat Adobe file containing the report and its Appendices and a separate filing of the Excel form of those Appendices. Three (3) hardcopies and two (2) electronic copies of this report will be delivered to your office shortly.

Yours truly,

Vivian Leppard
Regulatory Analyst
Phone: (905) 743-5220
Email: vleppard@opuc.on.ca



Oshawa PUC Networks Inc.
ED-2002-0560

CDM Third Tranche Funding

2008 Annual Report

March 31, 2009

Contents

1. Introduction

On December 10, 2004 Oshawa PUC Networks Inc. (OPUCN) was granted final approval for its Conservation and Demand Management (CDM) Plan as filed with the Ontario Energy Board (the "Board"). The Board's decision stated that annual reporting "should be done on a calendar year and should be filed with the Board no later than March 31st of the following year". On March 2, 2007 the Board issued an updated guideline on CDM reporting. This report has been prepared in accordance with those guidelines.

OPUCN serves 47,747 residential, 3,826 commercial and 557 industrial customers within its 149 square kilometers service area. Oshawa has traditionally been a winter peaking Utility with a large distribution of electric heating within its customer base. New construction along with continued growth in residential central air-conditioning in part created a summer peak for Oshawa in 2007 which continued into 2008.

OPUCN's Conservation and Demand Management plan was designed to identify, alter, and measure reductions in consumption and demand for all customer classifications.

OPUCN requested from the Ontario Energy Board an extension to its September 30, 2007 deadline for CDM funding expenditure. An extension was granted and in 2008 we completed work on most outstanding projects.

2. Evaluation of Overall Plan

Please refer to Appendix “C” for an evaluation of OPUCN’s Conservation and Demand Initiatives for the year ending December 31, 2008.

In reviewing the information provided in both Appendixes A, B, and C it should be noted that some of the work undertaken by OPUCN during 2008 was related to the continuance of programs from 2007. One such program is the University of Ontario Institute of Technology residential electrical usage baseline study that concluded in July of 2008.

We continued to work on a large hardware and software upgrade in our distribution system design and operation systems. This will lead toward our ability to better balance our distribution system and reduce our system operating losses.

Our cumulative kWh reductions total 31,477,049 with an associated demand reduction of 1.3 MW.

Discussion of the Programs

3.1 Residential Customers

University of Ontario Institute of Technology Energy Usage Study

Program Description

- In order to provide greater return on our CDM investment, we continue our quest to understand how and when consumers use electricity. Such an understanding will help us target programs that will provide the greatest return for each dollar invested. In late 2006, discussions began with the University Of Ontario Institute Of Technology (UOIT) and the Ontario Centres of Excellence to assist in the funding of this baseline energy usage study which will examine, analyze, and conclude valuable information about energy consumption habits of several different customer types.

Actions

- As part of the study requirement hourly usage data for a given customer was required. Three hundred locations for smart meters were selected at locations based on criteria such as income level, type of heating, age, and size of houses in 20 different categories.
- The balance of in depth surveys were compiled for each residence participating in the study. These surveys contained valuable questions on energy habits, types of appliances used, and views and beliefs on energy conservation.
- Smart meter data on homes was transmitted blindly to the University then captured and analysed to fully comprehend consumer usage patterns. This data acquisition was completed in 2008.
- Two compact fluorescent light bulbs (CFLs) were given to each household as an incentive for their participation in the study.
- 87 Energuide energy audits were scheduled and completed on participating households. The energy audits will establish a baseline and augment information we have on the homes today.

Target Group

- Residential customers

Benefits

- Allows the University to establish usage baselines given certain customer attributes. This information will be used to develop custom fit conservation measures for a given consumer group.

Results to Date

- A preliminary study was published by the University in December of 2007.
- Certain trends have been recognized from the preliminary study. The ongoing data will confirm these trends once a full year of seasonal data has been acquired and analysed.

Next Steps

- Data collection has been completed for the study.

- Release of the final study is anticipated in 2009.

Smart Meter Installations

Program Description

- Oshawa has been actively testing two types of smart meter installations. This is in keeping with testing technology that may be used in the provincial deployment of smart meters when the installation requirements are determined.

Target Customers

- Residential and Commercial

Benefits

- Understanding the value and benefits of certain types of smart meter technologies so we are prepared for the provincial deployment of Smart meters when mandated.

Actions to Date

- Installation of meters that use radio transmission technology and a mesh network to transmit meter data to a central collection hub. This technology has been used to feed the information to the UOIT customer usage study.
- Our second type of technology which ended in early 2008 saw us push meter readings down our own power lines. This project assesses the value of using our own infrastructure instead of others to transmit the meter data.

Results to Date

- The radio transmission meters have been used to feed meter usage data to the UOIT study for almost a year now in some cases. There have been some minor problems with the data transmission networks but all have been solvable. The meters in this technology have been approved for revenue billing and have proven to be stable in service.

- The second Powerline carrier data transmission meter has been dependable as well however there have not been meters available that have been sealed for revenue metering from this vendor. We were looking at going forward with a commercial study on this but given the lack of no approved meters the program wasn't launched.

Next Steps

- This project is complete

Watt Wise Energy Tips

Program Description

- This was a series of twelve video energy tips that were designed to create awareness of energy efficiency and educate customers about the savings available by making small changes in their homes.

Target

- Any electricity user

Benefits

- Raised awareness and perpetuates the importance of reducing electricity consumption. Part of the program was also used to dispel misconceptions about electrical usage.

Actions

- This program was not active in 2008

Next Steps

Although the tips are no longer running around the news on Roger's television we continue to make them available on our website.

Library Watt Reader Program

Program Description:

- This program was designed to assist electricity users in identifying the costs of plug-in appliances in their homes. "Watt Reader" devices were made available to customers through the Oshawa library system and the devices could be signed out like a book. With the return of each loaned unit the customer receives a free compact fluorescent light bulb.

Target

- All electricity users both residential and small business.

Benefits

- The program provides a simple tool to help customers identify the cost of operating appliances and provides them with a new compact fluorescent bulb to try.

Results to date

- 129 Watt Readers were loaned out in 2008. Watt Readers empower the customer with real time knowledge and the ability to target electricity costs within the home and adjust their consumption accordingly.

Next Steps:

- Our intention is to continue to make these devices available through the library system in Oshawa.

Compact Fluorescent Light (CFL) School Fundraiser Pilot

Program Description

- In April 2007, we partnered with 5 Oshawa schools to offer a fundraiser using CFL's as the fundraising items. Oshawa PUC Networks Inc. employees would visit the schools and give a presentation to the students on energy conservation. 191 students, named the "Watt Squad" would then sell the CFL's to friends and family, raising money for their schools and increasing customers' awareness about energy efficiency. At the end of the fundraising

period, a return visit to the schools gave the opportunity for the students to see the results of their fundraising efforts in terms of KW saved, and funds raised for their schools.

Target

- This was aimed at students between grade's five and eight. A total of five schools participated in the pilot group.

Benefits

- An educational assembly was held at each school that included an educational component about the value of saving energy and a visual representation of greenhouse gas savings based on certain sales targets. Each student was provided a lunch sack of eight bulbs to sell and they were allowed to keep the lunch sack as an incentive and to encourage a bag less lunch. The ultimate goal was to get as many CFL's in the community as possible.

Results

- A follow up meeting was held at each school and the results communicated to all the students. A total of 1,495 bulbs were sold through the five schools resulting in 732.5 MWH saved.

Next Steps

- This program was a pilot as a fundraiser and educational piece and has now been completed.

Generation Conservation

Program Description

- Generation Conservation was a pilot program designed to inspire and educate grade 5 students in both the Public and Separate school boards. A pilot was launched in the fall of 2006 and the results and teacher feedback was complied in 2007.

Target

- Grade five students and eventually all grade fives across the Durham region.

Benefits

- We strongly believe that in order to create a culture of conservation in the province we must start with Ontario's young citizens by helping them to understand the urgent need to conserve our energy resources and to help them understand some of the technology that is available to them and their parents today to do so.

Results to date

- Several school boards have implemented similar programs.

3.2 Commercial and Industrial Customers

Independent Electricity System Operator Demand Response Pilot Project (TDRP)

Program Description

- This program was designed to help customers benefit from the I.E.S.O's demand response pilot project. Customers were assisted in determining what load they could easily drop from when requested to do so by the I.E.S.O. This was a two-year pilot, directed at customers who can reduce demand when notified.

Target

- This program was aimed at interval metered larger customers who can shed loads on notification from the I.E.S.O.

Benefits

- Allows the I.E.S.O. to shed load in emergencies and high price point times quickly.

Action

- An email advisory program that was price driven was set up. This program sent alerts to a customer indicating a price threshold has been attained and that it would be beneficial for the system and for them financially to drop load.
- Given the cooler summer of 2007 there was less of a system loading issue.

Results to Date

- The program concluded in April 2007.

Next Steps

- The TDRP program raised awareness of some of the things that customers can do to reduce costs this in turn drove the interest in the OPA Electricity Incentive Programs.

Non-Profit Housing Lighting Retrofit

Program Description

- Our goal is to identify areas where retrofit funding will generate the greatest energy savings for the Non-Profit housing sector. The plan helps offset the capital costs associated with lighting, cooling and other energy retrofits. Submitted proposals are accepted and a Total Resource Cost analysis is completed to ensure the viability of the project. If the proposal provides a positive TRC the money is allocated until the program is completed. Verification of the retrofit must be presented and then Utilities portion of the funding is advanced.

Benefit

- Assist in the cost of energy retrofits providing funding for organizations that wouldn't normally be able to pay for the entire capital retrofit program.

Action

- Two applications for funding were received on four locations in Oshawa. Both were accepted with approximately $6,000 allocated to the first request and $40,000 to the second.
- The first retro fit involved lighting only and has been verified and the funds advanced. The second involved the upgrading lighting and the replacement of refrigerators. Verification of the work is now complete and the funding was advanced in early March of 2007.

Results to Date

- For these two locations alone, the annual energy savings total 230,400 kWh with a demand reduction of 106 kW.

Next Steps

- This program is now complete.

LED Traffic Light Initiative

Program Description

- This initiative involves replacing traffic signals at intersections with light-emitting diode (LED) technology that is quickly becoming the standard due to its long service life and energy saving.

Target

- 29 intersections in the City of Oshawa.

Benefits

- The LED technology in traffic lights reduces energy use by over 80%. Coincidental benefits include less maintenance (due to the longer life span) and improved signal visibility.

Action

- OPUCN and the City of Oshawa agreed on a funding formula of one third of the costs to a maximum of $42,000 to retrofit 29 intersections with LED technology.

Results to Date

- All intersections were updated by the end of 2007.

Next Steps

- This program is now complete.

HVAC Upgrade

Program Description

- This initiative was undertaken to upgrade the HVAC systems at the utility's offices. Four inefficient HVAC systems were replaced with highly efficient ones. Formerly, one of the units operated using electricity. All four now use natural gas as their energy source.

Target

- All four of the utility's main buildings.

Benefits

- The new system is more energy efficient than the old one.

Action

- The contractor was chosen using Oshawa PUC Networks Inc.'s RFP-based procurement procedures to ensure that the most efficient system was purchased at the best price.

Results to Date

- The system upgrade was competed in 2008.

Next Steps

- The contract has a provision for a 10% holdback which will come due in the summer of 2009.
- Oshawa PUC Networks Inc. is waiting for the installation of a safety fence on one of the buildings mandated by TSSA. This is estimated to cost approximately $6,000 and will be installed in the summer of 2009.

System Optimization

Program Description

- OPUCN has identified that it requires technology enhancements in order to properly perform distribution system optimization. The technology enhancement involves the purchase of distribution system software.

Results to Date

- Geographical information system (GIS) and distribution system optimization software was researched, selected and purchased.
- The GIS and distribution system optimization software has been delivered, installed and is operating.
- Multi speak exports from the GIS system to the system optimization software is currently under test to ensure proper operation.

Next Steps (2009)

- Perform distribution system optimization using GIS and distribution system software packages.
- Perform the necessary field operations to physically optimize the distribution system.
- Measure the actual results of optimizing the distribution system.

3. Lessons Learned

Working Together

We are pleased that we participated with the University of Ontario Institute of Technology (UOIT) and The Ontario Centres of Excellence in a jointly funded study of residential customer energy consumption patterns. Looking for synergies and partnerships in CDM is essential to the success of future CDM initiatives and maximizing the return for each CDM dollar invested.

The third tranche CDM funding for Oshawa helped the utility to engage the customer base in energy conservation. New programs from the Ontario Power Authority have helped us to continue to bring other conservation programs of value such as the Appliance Retirement, Summer Savings, peaksaver® and Electricity Retrofit Incentive Program to our customers.

Market Conditions

The commitment to conservation demonstrated by the Ministry of Energy and Infrastructure through the introduction of the Green Energy Act will help to maintain the momentum towards conservation and the development of environmentally sustainable energy sources for which the people of Ontario have demonstrated their support.

The continuing economic downturn may have a dampening effect on the momentum which has been developing over the past few years. Conservation and demand management programs for all consumers can require cash outlays which consumers can no longer afford. On the other hand, many consumers now understand that a commitment to conservation and the development of new energy sources is crucial for the health of our communities. Continuing assistance in the form of province wide programs will be crucial in sustaining the conservation culture developing in Ontario.

We believe that ongoing education and inspiration of all customers is the key ingredient to the success of all CDM initiatives. It is essential that we make the young energy users of today aware of the finite energy resources and encourage a culture of conservation that stays with them for a lifetime.

Regulatory and Policy Environment

Oshawa supports the direction taken by the Ministry of Energy and Infrastructure through the Green Energy Act. Provincial coordination of energy conservation measures will enhance the effects of those programs. Sustainable industrial development and its accompanying prosperity is dependent in part on the development of energy based industries. This type of industrial change is especially crucial in a community such as Oshawa which cannot continue to depend on the automotive sector to fuel local economic development.

4. Conclusion

Overall, 2008 has proved to be a year of wrap up for rate based Conservation and Demand programs. As programs funded through third tranche funding wound up and new programs from the Ontario power Authority began to take hold. We believe that this is the most effective and efficient method of encouraging conservation at this time. Oshawa looks forward to participating in any new initiatives brought forward in the future.

We believe that education is key to the sustainability of all CDM programs. Creating a "Culture of Conservation" is an ongoing process and with the appropriate funding model Local Distribution Companies will be able to play an important role in this area.

This report is respectfully submitted by Oshawa PUC Networks Inc. If there are any questions please contact the undersigned.

Vivian Leppard
Regulatory Analyst
Oshawa PUC Networks Inc.
100 Simcoe St. South.
Oshawa, Ontario, L1H 7M7
vleppard@opuc.on.ca
Toll free: (905) 743-5220
www.opuc.on.ca

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 2008	Residential	Commercial	Institutional	Industrial	Agricultural	LDC System	[4] Smart Meters	Other #1	Other #2
Net TRC value ($):	*1602.73*	**-$ 269**	**$ (106)**	**$ -**	**$ -**	**$ -**	**$ -**	**$ (163)**		**$ -**	**$ -**
Benefit to cost ratio:	*1.34*	0.01	0.03	0.00	0.00	0.00	0.00	0.00		0.00	0.00
Number of participants or units delivered:	*48,709*	*2,648*	2,648	0	0						
Lifecycle (kWh) Savings:	*31,477,049*	13,416	4,182,148	0	0	0	0	0		0	0
Report Year Total kWh saved (kWh):	*3,134,923*	13,416	13,416	0	0	0	0	0		0	0
Total peak demand saved (kW):	*1245*	90	54	0	36	0	0	0		0	0
Total kWh saved as a percentage of total kWh delivered (%):	100%	100%	100%	0%	0%	0%	0%				
Peak kW saved as a percentage of LDC peak kW load (%):		100%	60%	0%	40%	0%	0%				
[1] *Report Year Gross C&DM expenditures ($000's):*	*1197*	$ 409	$ 202	$ -	$ 41	$ 3	$ -	$ 163	$ -	$ -	$ -
[2] *Expenditures per KWh saved ($/kWh):*	*0.38*	$ 0.03	$ 0.00	$ -	$ -	$ -	$ -	$ -		$ -	$ -
[3] *Expenditures per KW saved ($/kW):*	*961.45*	$ 4.53	$ 3.74	$ -	$ 1.14	$ -	$ -	$ -		$ -	$ -

Utility discount rate (%):	8.13%

[1] Expenditures are reported on accrual basis.
[2] Expenditures include all utility program costs (direct and indirect) for all programs which primarily generate energy savings
[3] Expenditures include all utility program costs (direct and indirect) for all programs which primarily generate capacity savings.
[4] Please report spending related to 3rd tranche of MARR funding only. TRC calculations are not required for Smart Meters. Only actual expenditures for the year need to be reported.
[5] Includes total for the reporting year, plus prior year, if any (for example, 2006 CDM Annual report for third tranche will include 2005 and 2004 numbers, if any.

Appendix B - Discussion of the Program

(complete this Appendix for each program)

A. **Name of the Program:** Library Watt Reader Program - CFL GiveAway — CDM-108D

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

Please see 2006 CDM Report (page 7) for additional description of this Program. Loan a 60 watt reader to customer through library program. Anticipate customer to understand their electrical consumption patterns and to adjust accordingly to allow conservation. Each customer receives lightbulb, book mark, and printed material for borrowing reader.

Measure(s):

	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	60W Incandescent		
Efficient technology:	CFL Screw-In 15W		
Number of participants or units delivered for reporting year:	129		
Measure life (years):	4		
Number of Participants or units delivered life to date	402		

B. **TRC Results:**

	Reporting Year	Life-to-date TRC Results:
[1] *TRC Benefits ($):*	$ 3.20	$ 9.30
[2] *TRC Costs ($):*		
Utility program cost (excluding incentives):	$ -	$ 0.20
Incremental Measure Costs (Equipment Costs)		$ 0.60
Total TRC costs:		$ 0.60
Net TRC (in year CDN $):	$ -	$ 3.11
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	$ -	$ -

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

Conservation Programs:

Demand savings (kW):	*Summer*	0	
	Winter	3	9

	lifecycle	*in year*	*Cumulative Lifecycle*	Cumulative Annual Savings
Energy saved (kWh):	53664	13,416	227443.6	147,732
Other resources saved :				
Natural Gas (m3):				
Other (specify):				

Demand Management Programs:

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

Demand Response Programs:

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

Power Factor Correction Programs:

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

Line Loss Reduction Programs:

Peak load savings (kW):		
	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. **Actual Program Costs:** — **Reporting Year** — **Cumulative Life to Date**

Utility direct costs ($):	*Incremental capital:*	$ -	$ 0.60
	Incremental O&M:		
	Incentive:		
	Total:		
Utility indirect costs ($):	*Incremental capital:*		
	Incremental O&M:		$ 0.20
	Total:	$ -	$ 0.80

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 benefit specified in the TRC Guide.

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

Appendix B - Discussion of the Program

(complete this Appendix for each program)

A. **Name of the Program:** Retrofit Non-profit Housing CDM-103

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

Please see 2006 CDM Report (page 10) for additional description of this Program. Retrofit no profit housing (The Cornerstone Community) buildings in Oshawa. Buildings retrofited with energy efficient T-8 bulbs, reflectors, all exit lights with LED technology, and all rooms lighting replaced with compact fluorescents lightbulbs.

Measure(s):

	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	2 - 15W (30W) Incandescent EX	60W Incandescent	60W Incandescent
Efficient technology:	3W LED EXIT sign	15W Screw-In CFL	13W CFL fixture w/EM ballast
Number of participants or units delivered for reporting year:			
Measure life (years):	25	2	3
Number of Partipants or unites delievered lfe to date	60	610	56
Base case technology:	4 - T12 34W (156W) 4' Lamps w	2 - T12 75W (184W) 8' HO Lamp	
Efficient technology:	2 - T8 32W (58 W) reflectorized	4 - T8 32W (112W) 4' Lamps w/E	
Number of participants or units delivered for reporting year:			
Measure life (years):	5	5	
Number of Partipants or unites delievered lfe to date	140	3	

B. **TRC Results:**

	Reporting Year	Life-to-date TRC Results:
[1] *TRC Benefits ($):*	$ -	$ 56.43
[2] *TRC Costs ($):*		
Utility program cost (excluding incentives):	$ -	$ 45.77
Incremental Measure Costs (Equipment Costs)	$ -	5.1
Total TRC costs:	$ -	$ 19.44
Net TRC (in year CDN $):	$ -	$ - $ 32.10
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	$ -	1.23

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

Cumulative Results:

Conservation Programs:

Demand savings (kW): *Summer* 34.11678285

Winter 35.912403

	lifecycle	*in year*	*Cumulative Lifecycle*	Cumulative Annual Savings
Energy saved (kWh):	*0*	0	3653451	146138.04
Other resources saved :				
Natural Gas (m3):				
Other (specify):				

Demand Management Programs:

Controlled load (kW)

Energy shifted On-peak to Mid-peak (kWh):

Energy shifted On-peak to Off-peak (kWh):

Energy shifted Mid-peak to Off-peak (kWh):

Demand Response Programs:

Dispatchable load (kW):

Peak hours dispatched in year (hours):

Power Factor Correction Programs:

Amount of KVar installed (KVar):

Distribution system power factor at begining 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):	

D. **Actual Program Costs:**

		Reporting Year	Cumlative Life to Date
Utility direct costs ($):	*Incremental capital:*		$ 5.10
	Incremental O&M:	$ -	$ 4.97
	Incentive:		
	Total:		
Utility indirect costs ($):	*Incremental capital:*		
	Incremental O&M:		
	Total:		

E. Assumptions & Comments:

We will be working with local government and social agencies to identify opportunities to reduce energy costs for non-profit housing and low income earners.
It is very important that OPUCN take a lead in working with social agencies to ensure that residents in non-profit housing can participate in conservation.
Target users: Non profit and fixed income i.e. pensioner
Evaluation: Possible lighting retro fits, appliance upgrade, and water heater optimizations are being considered as saving measures at this time.

[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 Appendix for each program)

A. **Name of the Program:** Christmas Light Retro Fit OPUC CDM-300A

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

Please see 2006 CDM Report (page 15) for additional description of this Program. Retrofitted the Christmas lighting on front of OPUC building. Old load 900 times 7 watts replacing with .5 watts LED lights.

Measure(s):

	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	5 WATT Christmas lights C-7(64 lights)		
Efficient technology:	LED Christmas Lights (indoor or outdoor)		
Number of participants or units delivered for reporting year:	0		
Measure life (years):	30		
Number of Partipants or unites delievered lfe to date	900		

B. **TRC Results:**

	Reporting Year	Life-to-date TRC Results:
[1] *TRC Benefits ($):*	$ -	$ 11.60
[2] *TRC Costs ($):*	$ -	
Utility program cost (excluding incentives):		
Incremental Measure Costs (Equipment Costs)	$ -	1.7
Total TRC costs:	$ -	$ 1.70
Net TRC (in year CDN $):	$ -	-$ 3.18
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	$ -	6.82

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

Conservation Programs:

Demand savings (kW):

Summer	0
Winter	0

	lifecycle	*in year*	*Cumulative Lifecycle*	Cumulative Annual Savings
Energy saved (kWh):	*0*	0	19347.0768	645
Other resources saved :				
Natural Gas (m3):				
Other (specify):				

Demand Management Programs:

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

Demand Response Programs:

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

Power Factor Correction Programs:

Amount of KVar installed (KVar):
Distribution system power factor at begining 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):

D. **Actual Program Costs:** **Reporting Year** **Cumlative Life to Date**

Utility direct costs ($):	*Incremental capital:*	$ -	$ 1.70
	Incremental O&M:		
	Incentive:		
	Total:	$ -	$ 1.70
Utility indirect costs ($):	*Incremental capital:*		
	Incremental O&M:		$ -
	Total:		

E. Assumptions & Comments:

[1] Benefits should be estimated if costs have been incurred and the technology has been deployed. Benefits reflect the present value of the measure for the number of units deployed in the year, i.e. the 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 Appendix for each program)

A. **Name of the Program:** Every Kilowatt Counts (Spring) CDM-108a

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

Please see 2006 CDM Report (page 8 and 9) for additional description of this Program. Campaign associated with OPA to provide c

Measure(s):

	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	**60W Incandescent**	**Average existing stock**	
Efficient technology:	**CFL Screw-In 15W**	**Programmable Thermostat (sp**	**Timers**
Number of participants or units delivered for reporting year:			
Measure life (years):	4	18	20
Number of Participants or units delivered life to date	15880	0	0

Measure(s):

	Measure 4	Measure 5 (if applicable)	Measure 6 (if applicable)
Base case technology:			
Efficient technology:	**Ceiling Fans**		
Number of participants or units delivered for reporting year:			
Measure life (years):	20		
Number of Participants or units delivered life to date	0		

B. **TRC Results:**

	Reporting Year	Life-to-date TRC Results:
[1] *TRC Benefits ($):*	$ -	$ 477.90
[2] *TRC Costs ($):*		
Utility program cost (excluding incentives):		
Incremental Measure Costs (Equipment Costs)	$ -	83.65
Total TRC costs:	$ -	$ 39.35
Net TRC (in year CDN $):	$ -	218.38
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	$ -	12.14

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

Cumulative Results:

Conservation Programs:

Demand savings (kW):	*Summer*	0	17
	Winter	0	

	lifecycle	*in year*	*Cumulative Lifecycle*	Cumulative Annual Savings
Energy saved (kWh):	*0*	0	5087264	667,795
Other resources saved :				
Natural Gas (m3):				
Other (specify):				

Demand Management Programs:

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

Demand Response Programs:

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

Power Factor Correction Programs:

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

Line Loss Reduction Programs:

Peak load savings (kW):		
	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. **Actual Program Costs:**

		Reporting Year	Cumulative Life to Date
Utility direct costs ($):	*Incremental capital:*		
	Incremental O&M:	$ -	$ 83.65
	Incentive:		
	Total:	$ -	$ 83.65
Utility indirect costs ($):	*Incremental capital:*		
	Incremental O&M:		
	Total:		

E. Assumptions & Comments:

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

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

Appendix B - Discussion of the Program

(complete this Appendix for each program)

A. **Name of the Program:** Every Kilowatt Counts (Fall/ Winter) CDM-108b

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

Please see 2006 CDM Report (page 8 and 9) for additional description of this Program. Campaign associated with OPA to provide c

Measure(s):

	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	**60W Incandescent**		**5 watt Christmas lights**
Efficient technology:	**CFL Screw-In 15W**	**Dimmer switch**	**LED Christmas Lights**
Number of participants or units delivered for reporting year:	0	0	0
Measure life (years):	4	10	30
Number of Participants or units delivered life to date	23586	326	5197

Measure(s):

	Measure 4	Measure 5 (if applicable)	Measure 6 (if applicable)
Base case technology:	**Average existing stock**	**Average existing stock**	**3 100 Watt incandescent bulbs**
Efficient technology:	**Programmable Thermostat**	**Programmable Thermostat (sp**	**Motion Sensor**
Number of participants or units delivered for reporting year:	0	0	0
Measure life (years):	18	18	10
Number of Participants or units delivered life to date	709	404	101

B. **TRC Results:**

	Reporting Year	Life-to-date TRC Results:
[1] *TRC Benefits ($):*	$ -	$ 715.90
[2] *TRC Costs ($):*		
Utility program cost (excluding incentives):		
Incremental Measure Costs (Equipment Costs)	$ -	79.1
Total TRC costs:	$ -	$ 79.10
Net TRC (in year CDN $):	$ -	9.05
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	$ -	14.64

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

		Reporting Year	Cumulative Results:
Conservation Programs:			
Demand savings (kW):	*Summer*	0	6
	Winter	0	1003

	lifecycle	*in year*	*Cumulative Lifecycle*	Cumulative Annual Savings
Energy saved (kWh):		0		1881634
Other resources saved :				
Natural Gas (m3):				
Other (specify):				

Demand Management Programs:		
Controlled load (kW)		
Energy shifted On-peak to Mid-peak (kWh):		
Energy shifted On-peak to Off-peak (kWh):		
Energy shifted Mid-peak to Off-peak (kWh):		
Demand Response Programs:		
Dispatchable load (kW):		
Peak hours dispatched in year (hours):		
Power Factor Correction Programs:		
Amount of KVar installed (KVar):		
Distribution system power factor at beginning of year (%):		
Distribution system power factor at end of year (%):		

Line Loss Reduction Programs:

Peak load savings (kW):			
	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. **Actual Program Costs:**

		Reporting Year	Cumulative Life to Date
Utility direct costs ($):	*Incremental capital:*		
	Incremental O&M:	$ -	$ 0.15
	Incentive:		
	Total:	$ -	$ 0.15
Utility indirect costs ($):	*Incremental capital:*		
	Incremental O&M:		
	Total:		

E. Assumptions & Comments:

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

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

Appendix B - Discussion of the Program

(complete this Appendix for each program)

A. **Name of the Program:** Residential - Establish Baselines and Measuring Impacts | CDM-100

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

Please see 2006 CDM Report (page 6 and 7) for additional description of this Program. To establish baselines to benchmark the measurement and analysis of future results that are to be submitted to the regulators. Baselines may apply to specific customer groups or they may be based on the penetration of identified energy efficient technologies. Data capture is taking place through 55 "Smart meters" and will be analyzed based on connected loads, workings lifestyles, family size and several other categories

Measure(s):

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

B. **TRC Results:**

	Reporting Year	Life-to-date TRC Results:
[1] *TRC Benefits ($):*		
[2] *TRC Costs ($):*		
Utility program cost (excluding incentives):	$ -	$ 150.78
Incremental Measure Costs (Equipment Costs)		
Total TRC costs:		$ 150.78
Net TRC (in year CDN $):		
Benefit to Cost Ratio (TRC Benefits/TRC Costs):		

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

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

D. **Actual Program Costs:**

	Reporting Year	Cumlative Life to Date

Utility direct costs ($):	*Incremental capital:*		
	Incremental O&M:	$ -	$ 150.78
	Incentive:		
	Total:	$ -	$ 150.78
Utility indirect costs ($):	*Incremental capital:*		
	Incremental O&M:		
	Total:		

E. Assumptions & Comments:

[1] Benefits should be estimated if costs have been incurred and the technology has been deployed. Benefits reflect the present value of the measure for the number of units deployed in the year, i.e. the 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 Appendix for each program)

A. **Name of the Program:** Residential 155 Colbourne Replace Bulk with Individual Meters CDM-100A

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

Please see 2006 CDM Report (page 14) for additional description of this Program. Switch bulk meter to individual meters (Residenti

Measure(s):

	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	Existing Inventory		
Efficient technology:	Individual Meter		
Number of participants or units delivered for reporting year:	0		
Measure life (years):	20		
Number of Partipants or unites delievered lfe to date	8		

B. **TRC Results:**

	Reporting Year	Life-to-date TRC Results:
[1] *TRC Benefits ($):*	$ -	$ 1.70
[2] *TRC Costs ($):*		
Utility program cost (excluding incentives):		
Incremental Measure Costs (Equipment Costs)	$ -	3.2
Total TRC costs:	$ -	$ 3.20
Net TRC (in year CDN $):	$ -	$ 3.20
Benefit to Cost Ratio (TRC Benefits/TRC Costs):	$ -	$ 0.53

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

Conservation Programs:

Demand savings (kW): *Summer* 2

Winter 2

	lifecycle	*in year*	*Cumulative Lifecycle*	Cumulative Annual Savings
Energy saved (kWh):	*0*	0	864000	43200
Other resources saved :				
Natural Gas (m3):				
Other (specify):				

Demand Management Programs:

Controlled load (kW)

Energy shifted On-peak to Mid-peak (kWh):

Energy shifted On-peak to Off-peak (kWh):

Energy shifted Mid-peak to Off-peak (kWh):

Demand Response Programs:

Dispatchable load (kW):

Peak hours dispatched in year (hours):

Power Factor Correction Programs:

Amount of KVar installed (KVar):

Distribution system power factor at begining 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):

D. **Actual Program Costs:** **Reporting Year** **Cumlative Life to Date**

Utility direct costs ($):	*Incremental capital:*		$ 3.20
	Incremental O&M:		
	Incentive:		
	Total:		
Utility indirect costs ($):	*Incremental capital:*		
	Incremental O&M:		
	Total:		

E. Assumptions & Comments:

[1] Benefits should be estimated if costs have been incurred and the technology has been deployed. Benefits reflect the present value of the measure for the number of units deployed in the year, i.e. the 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 Appendix for each program)

A. **Name of the Program:** AMR/ DTM Pilot Project CDM-100B and CDM-500

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

Please see 2006 CDM Report (page 12) for additional description of this Program. A five and Fifty Points Pilot Project (installing a sp

Measure(s):

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

B. **TRC Results:**

	Reporting Year	Life-to-date TRC Results:
[1] *TRC Benefits ($):*		
[2] *TRC Costs ($):*		
Utility program cost (excluding incentives):	$ -	$ 31.11
Incremental Measure Costs (Equipment Costs)		0
Total TRC costs:	$ -	$ 31.11
Net TRC (in year CDN $):		
Benefit to Cost Ratio (TRC Benefits/TRC Costs):		

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

Cumulative Results:

Conservation Programs:

Demand savings (kW): *Summer*

Winter

	lifecycle	*in year*	*Cumulative Lifecycle*	Cumulative Annual Savings
Energy saved (kWh):				
Other resources saved :				
Natural Gas (m3):				
Other (specify):				

Demand Management Programs:

Controlled load (kW)

Energy shifted On-peak to Mid-peak (kWh):

Energy shifted On-peak to Off-peak (kWh):

Energy shifted Mid-peak to Off-peak (kWh):

Demand Response Programs:

Dispatchable load (kW):

Peak hours dispatched in year (hours):

Power Factor Correction Programs:

Amount of KVar installed (KVar):

Distribution system power factor at begining 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):

D. **Actual Program Costs:**

	Reporting Year	Cumlative Life to Date

Utility direct costs ($):	*Incremental capital:*		
	Incremental O&M:	$ -	$ 31.58
	Incentive:		
	Total:		
Utility indirect costs ($):	*Incremental capital:*		
	Incremental O&M:		
	Total:		

E. Assumptions & Comments:

[1] Benefits should be estimated if costs have been incurred and the technology has been deployed. Benefits reflect the present value of the measure for the number of units deployed in the year, i.e. the 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 Appendix for each program)

A. **Name of the Program:** Residental System Prototype and Pilot CDM-100C

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

Please see 2006 CDM Report (page 6) for additional description of this Program. A Residential baseline measurement. System protype and pilot testing.

Measure(s):

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

B. **TRC Results:**

	Reporting Year	Life-to-date TRC Results:
[1] *TRC Benefits ($):*		0
[2] *TRC Costs ($):*	$ -	$ 16.20
Utility program cost (excluding incentives):		
Incremental Measure Costs (Equipment Costs)	$ -	0
Total TRC costs:	$ -	$ 16.20
Net TRC (in year CDN $):		
Benefit to Cost Ratio (TRC Benefits/TRC Costs):		

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

Conservation Programs:

Demand savings (kW): *Summer*

Winter

	lifecycle	*in year*	*Cumulative Lifecycle*	Cumulative Annual Savings
Energy saved (kWh):				
Other resources saved :				
Natural Gas (m3):				
Other (specify):				

Demand Management Programs:

Controlled load (kW)

Energy shifted On-peak to Mid-peak (kWh):

Energy shifted On-peak to Off-peak (kWh):

Energy shifted Mid-peak to Off-peak (kWh):

Demand Response Programs:

Dispatchable load (kW):

Peak hours dispatched in year (hours):

Power Factor Correction Programs:

Amount of KVar installed (KVar):

Distribution system power factor at begining 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):

D. **Actual Program Costs:** **Reporting Year** **Cumlative Life to Date**

Utility direct costs ($):	*Incremental capital:*			
	Incremental O&M:	$ -	$	16.20
	Incentive:			
	Total:	$ -		$ -
Utility indirect costs ($):	*Incremental capital:*			
	Incremental O&M:			
	Total:			

E. Assumptions & Comments:

[1] Benefits should be estimated if costs have been incurred and the technology has been deployed. Benefits reflect the present value of the measure for the number of units deployed in the year, i.e. the 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 Appendix for each program)

A. **Name of the Program:** Residential Customer Satisfaction Survey CDM-100D

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

Please see 2006 CDM Report (page 6) for additional description of this Program. Customer satisfaction survey. A observation of 400 residential customers for 2006 customer satisfaction survey for electric utilities. Data to include analyzing and reporting.

Measure(s):

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

B. **TRC Results:**

	Reporting Year	Life-to-date TRC Results:
[1] *TRC Benefits ($):*		
[2] *TRC Costs ($):*		
Utility program cost (excluding incentives):	$ -	$ 15.70
Incremental Measure Costs (Equipment Costs)		
Total TRC costs:	$ -	$ 15.70
Net TRC (in year CDN $):		
Benefit to Cost Ratio (TRC Benefits/TRC Costs):		

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

Cumulative Results:

Conservation Programs:

Demand savings (kW): *Summer*

Winter

	lifecycle	*in year*	*Cumulative Lifecycle*	Cumulative Annual Savings
Energy saved (kWh):				
Other resources saved :				
Natural Gas (m3):				
Other (specify):				

Demand Management Programs:

Controlled load (kW)

Energy shifted On-peak to Mid-peak (kWh):

Energy shifted On-peak to Off-peak (kWh):

Energy shifted Mid-peak to Off-peak (kWh):

Demand Response Programs:

Dispatchable load (kW):

Peak hours dispatched in year (hours):

Power Factor Correction Programs:

Amount of KVar installed (KVar):

Distribution system power factor at begining 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):

D. **Actual Program Costs:**

	Reporting Year	Cumlative Life to Date

Utility direct costs ($):	*Incremental capital:*		
	Incremental O&M:	$ -	$ 15.70
	Incentive:		
	Total:	$ -	$ 15.70
Utility indirect costs ($):	*Incremental capital:*		
	Incremental O&M:		
	Total:		

E. Assumptions & Comments:

[1] Benefits should be estimated if costs have been incurred and the technology has been deployed. Benefits reflect the present value of the measure for the number of units deployed in the year, i.e. the 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 Appendix for each program)

A. **Name of the Program:** Residential DSM Indentification -Water Heater Data CDM-101

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

Water Heater Extraction and update of information for Residential Load Control

Measure(s):

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

B. **TRC Results:**

	Reporting Year	Life-to-date TRC Results:
[1] *TRC Benefits ($):*		
[2] *TRC Costs ($):*		
Utility program cost (excluding incentives):	$ -	$ 0.65
Incremental Measure Costs (Equipment Costs)		
Total TRC costs:	$ -	0.65
Net TRC (in year CDN $):		
Benefit to Cost Ratio (TRC Benefits/TRC Costs):		

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

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

D. **Actual Program Costs:**

	Reporting Year	Cumlative Life to Date

Utility direct costs ($):	*Incremental capital:*		
	Incremental O&M:	$ -	$ 0.65
	Incentive:		
	Total:	$ -	$ 0.65
Utility indirect costs ($):	*Incremental capital:*		
	Incremental O&M:		
	Total:		

E. Assumptions & Comments:

[1] Benefits should be estimated if costs have been incurred and the technology has been deployed. Benefits reflect the present value of the measure for the number of units deployed in the year, i.e. the 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 Appendix for each program)

A. **Name of the Program:** Smart Meter Pilot (Residential- Tantalus Systems) CDM-106

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

Please see 2006 CDM Report (page 12) for additional description of this Program. Residential 500 Point Smart Meter Pilot. Testing

Measure(s):

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

B. **TRC Results:**

	Reporting Year	Life-to-date TRC Results:
[1] *TRC Benefits ($):*		
[2] *TRC Costs ($):*		
Utility program cost (excluding incentives):	$ 1.94	$ 251.14
Incremental Measure Costs (Equipment Costs)		
Total TRC costs:	$ 1.94	$ 251.14
Net TRC (in year CDN $):		
Benefit to Cost Ratio (TRC Benefits/TRC Costs):		

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

Conservation Programs:

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

Demand Management Programs:

	Reporting Year
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:

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

Power Factor Correction Programs:

	Reporting Year
Amount of KVar installed (KVar):	
Distribution system power factor at begining of year (%):	
Distribution system power factor at end of year (%):	

Line Loss Reduction Programs:

		Reporting Year
Peak load savings (kW):		
	lifecycle	*in year*
Energy savngs (kWh):		

Distributed Generation and Load Displacement Programs:

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

Other Programs (specify):

	Reporting Year
Metric (specify):	

D. **Actual Program Costs:** **Reporting Year** **Cumlative Life to Date**

Utility direct costs ($):	*Incremental capital:*	$ 1.94	$ 251.21
	Incremental O&M:		
	Incentive:		
	Total:		
Utility indirect costs ($):	*Incremental capital:*		
	Incremental O&M:		
	Total:		

E. Assumptions & Comments:

A pilot program for 200 residential SMART meters was deployed to enable the assessment of metering, communications, settlement, load control and other technologies that may be used to accommodate the universal application of SMART meters in the future. Although the formal definition of a SMART meter has not been decided the Board the Utility felt it prudent to perform a technological assessment of systems available today.
This program supports the Minister of Energy's commitment to the installation of 800,000 SMART meters across Ontario by 2007. It will provide OPUCN with the experience and knowledge needed to efficiently expand the use of SMART meters over the next several years. On the commercial side we have purchased a product that we are testing called power view. It is a web based system that can allow customers to look at their interval meter data, profile their usage and see the results.
Target users: Eventually 500 residential customers throughout the City.
Benefits: Proof that certain forms of technology will perform satisfactory and that customers can match their usage to less expensive off peak hours when rate structures send the correct price signals.

[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 Appendix for each program)

A. **Name of the Program:** Smart Meter - Residential (Operation Group Fee) CDM-107

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

Please see 2006 CDM Report (page 12) for additional description of this Program. Smart Meter - Residential. Operations 2006 Wor

Measure(s):

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

B. **TRC Results:**

	Reporting Year	Life-to-date TRC Results:
[1] *TRC Benefits ($):*		
[2] *TRC Costs ($):*		
Utility program cost (excluding incentives):	$ -	$ 14.81
Incremental Measure Costs (Equipment Costs)		
Total TRC costs:	$ -	$ 14.81
Net TRC (in year CDN $):		
Benefit to Cost Ratio (TRC Benefits/TRC Costs):		

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

Cumulative Results:

Conservation Programs:

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

Demand Management Programs:

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

Demand Response Programs:

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

Power Factor Correction Programs:

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

Line Loss Reduction Programs:

	lifecycle	in year
Peak load savings (kW):		
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):	

D. **Actual Program Costs:**

	Reporting Year	Cumlative Life to Date

Utility direct costs ($):	*Incremental capital:*		
	Incremental O&M:	$ -	$ 14.81
	Incentive:		
	Total:		
Utility indirect costs ($):	*Incremental capital:*		
	Incremental O&M:		
	Total:		

E. Assumptions & Comments:

[1] Benefits should be estimated if costs have been incurred and the technology has been deployed. Benefits reflect the present value of the measure for the number of units deployed in the year, i.e. the 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 Appendix for each program)

A. **Name of the Program:** Customer Awareness Education — CDM-108

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

Please see 2006 CDM Report (page 14) for additional description of this Program. Customer awareness and education are key factors in achieving a heightened change in energy efficiency. Programs will be targeted at home and business These programs will illustrate the principal areas of consumption and demonstrate the savings impact available through changing consumption patterns and conservation. These programs could

· An internet portal where customers can create custom profiles of their home or business and understand where they

Media Program F

Measure(s):

	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	**60W Incandescent**		
Efficient technology:	**CFL Screw-In 15W**		
Number of participants or units delivered for reporting year:	0		
Measure life (years):	4		
Number of Partipants or unites delievered lfe to date	168		

B. **TRC Results:**

	Reporting Year	Life-to-date TRC Results:
[1] *TRC Benefits ($):*	$ -	3.74767
[2] *TRC Costs ($):*		
Utility program cost (excluding incentives):	$ -	$ 106.81
Incremental Measure Costs (Equipment Costs)	$ -	0.3
Total TRC costs:	$ -	$ 107.11
Net TRC (in year CDN $):	$ -	(0.30)
Benefit to Cost Ratio (TRC Benefits/TRC Costs):		0.035

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

Cumulative Results:

Conservation Programs:

Demand savings (kW): *Summer* 0; *Winter* 3

	lifecycle	*in year*	*Cumulative Lifecycle*	Cumulative Annual Savings
Energy saved (kWh):	*0*	0	63140	15785
Other resources saved :				
Natural Gas (m3):				
Other (specify):				

Demand Management Programs:

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

Demand Response Programs:

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

Power Factor Correction Programs:

Amount of KVar installed (KVar):
Distribution system power factor at begining 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):

D. **Actual Program Costs:** **Reporting Year** **Cumlative Life to Date**

Utility direct costs ($):	*Incremental capital:*		
	Incremental O&M:	$ -	$ 106.81
	Incentive:		
	Total:		
Utility indirect costs ($):	*Incremental capital:*		
	Incremental O&M:		
	Total:		

E. Assumptions & Comments:

[1] Benefits should be estimated if costs have been incurred and the technology has been deployed. Benefits reflect the present value of the measure for the number of units deployed in the year, i.e. the 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 Appendix for each program)

A. **Name of the Program:** Generation Conservation CDM-109

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

Please see 2006 CDM Report (page 8) for additional description of this Program. Develop and deploy Conservation Projects for Gra

Measure(s):

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

B. **TRC Results:**

	Reporting Year	Life-to-date TRC Results:
[1] *TRC Benefits ($):*		
[2] *TRC Costs ($):*		
Utility program cost (excluding incentives):	$ -	$ 53.82
Incremental Measure Costs (Equipment Costs)		
Total TRC costs:	$ -	$ 53.82
Net TRC (in year CDN $):		
Benefit to Cost Ratio (TRC Benefits/TRC Costs):		

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

Conservation Programs:

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

Demand Management Programs:

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

Demand Response Programs:

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

Power Factor Correction Programs:

Amount of KVar installed (KVar):	
Distribution system power factor at begining 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):	

D. **Actual Program Costs:** **Reporting Year** **Cumlative Life to Date**

Utility direct costs ($):	*Incremental capital:*		
	Incremental O&M:	$ -	$ 53.82
	Incentive:		$ -
	Total:		
Utility indirect costs ($):	*Incremental capital:*		
	Incremental O&M:		
	Total:		

E. Assumptions & Comments:

Powerwise has recently been adopted as the mass market programming approach to foster the conservation culture in Ontario. This alliance will hopefully maximize economies of scale, and will continue to include incentives to the consumer such as Christmas lights, school based education and other programs aimed at customers to encourage their reduction of energy usage. We are currently investigating the costs to join the Powerwise branding process. We also delivered the cold water wash campaign flyer in our bills to promote the use of cold water washing.
Target users: All customers in the Oshawa service area.
Benefits: The benefits of this program will include increased awareness, improved product supply, culture shift and reduction of energy usage. It will also educate the customer on valuing the commodity.
Evaluation: None at this time

[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 Appendix for each program)

A. **Name of the Program:** School Pilot CFL Fundraiser CDM 110

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

School CFL Bulb Fundraiser

Measure(s):

	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	**60W Incandescent**		
Efficient technology:	**CFL Screw-In 15W**		
Number of participants or units delivered for reporting year:	0		
Measure life (years):	4		
Number of Partipants or unites delievered lfe to date	1495		

B. **TRC Results:**

	Reporting Year	Life-to-date TRC Results:
[1] *TRC Benefits ($):*	$ -	33.7
[2] *TRC Costs ($):*		
Utility program cost (excluding incentives):	$ -	$ 0.82
Incremental Measure Costs (Equipment Costs)		
Total TRC costs:	$ -	$ 0.82
Net TRC (in year CDN $):		40.89805825
Benefit to Cost Ratio (TRC Benefits/TRC Costs):		

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

Cumulative Results:

Conservation Programs:

Demand savings (kW):	*Summer*				
	Winter	30			
	lifecycle	*in year*	*Cumulative Lifecycle*	Cumulative Annual Savings	
Energy saved (kWh):	*0*	0	3745880	187294	
Other resources saved :					
Natural Gas (m3):					
Other (specify):					

Demand Management Programs:

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

Demand Response Programs:

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

Power Factor Correction Programs:

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

Line Loss Reduction Programs:

	lifecycle	in year
Peak load savings (kW):		
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):	

D. **Actual Program Costs:**

		Reporting Year	Cumlative Life to Date
Utility direct costs ($):	*Incremental capital:*		
	Incremental O&M:	$ -	$ 0.82
	Incentive:		$ -
	Total:		
Utility indirect costs ($):	*Incremental capital:*		
	Incremental O&M:		
	Total:		

E. Assumptions & Comments:

Powerwise has recently been adopted as the mass market programming approach to foster the conservation culture in Ontario. This alliance will hopefully maximize economies of scale, and will continue to include incentives to the consumer such as Christmas lights, school based education and other programs aimed at customers to encourage their reduction of energy usage. We are currently investigating the costs to join the Powerwise branding process. We also delivered the cold water wash campaign flyer in our bills to promote the use of cold water washing.
Target users: All customers in the Oshawa service area.
Benefits: The benefits of this program will include increased awareness, improved product supply, culture shift and reduction of energy usage. It will also educate the customer on valuing the commodity.
Evaluation: None at this time

[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 Appendix for each program)

A. **Name of the Program:** Commercial and Industrial System Protype and Pilot CDM-300A

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

System Protoype and pilot for Commercial/ Industrial class customers

Measure(s):

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

B. **TRC Results:**

	Reporting Year	Life-to-date TRC Results:
[1] *TRC Benefits ($):*		
[2] *TRC Costs ($):*		
Utility program cost (excluding incentives):	$ -	$ 41.81
Incremental Measure Costs (Equipment Costs)		
Total TRC costs:	$ -	$ 41.81
Net TRC (in year CDN $):		
Benefit to Cost Ratio (TRC Benefits/TRC Costs):		

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

Cumulative Results:

Conservation Programs:

Demand savings (kW): *Summer*

Winter

	lifecycle	*in year*	*Cumulative Lifecycle*	Cumulative Annual Savings
Energy saved (kWh):				
Other resources saved :				
Natural Gas (m3):				
Other (specify):				

Demand Management Programs:

Controlled load (kW)

Energy shifted On-peak to Mid-peak (kWh):

Energy shifted On-peak to Off-peak (kWh):

Energy shifted Mid-peak to Off-peak (kWh):

Demand Response Programs:

Dispatchable load (kW):

Peak hours dispatched in year (hours):

Power Factor Correction Programs:

Amount of KVar installed (KVar):

Distribution system power factor at begining 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):

D. **Actual Program Costs:**

	Reporting Year	Cumlative Life to Date

Utility direct costs ($):	*Incremental capital:*		
	Incremental O&M:	$ -	$ 36.84
	Incentive:		
	Total:	$ -	$ 36.84
Utility indirect costs ($):	*Incremental capital:*		
	Incremental O&M:		
	Total:		

E. Assumptions & Comments:

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

A. **Name of the Program:** Independent Market Operator Demand Response Pilot Project CDM-303

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

Please see 2006 CDM Report (page 13) for additional description of this Program. This program is a two year pilot that is assisting the Independent Electricity System Operator to enroll and work with customers to shed load.
The program identifies customers who can shed load on short notice. The notification is driven by a price spike and delivered to them by e-mail.
Target users Customers who have the ability to drop load
Benefits: To the IESO to see how much load can be dropped in an emergency and customer to curtail energy costs. Evaluation: We are currently evaluating the cost benefit of continuing this program.

Measure(s):

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

B. **TRC Results:**

	Reporting Year	Life-to-date TRC Results:
[1] *TRC Benefits ($):*		
[2] *TRC Costs ($):*		
Utility program cost (excluding incentives):	$ -	$ 24.96
Incremental Measure Costs (Equipment Costs)		
Total TRC costs:	$ -	$ 24.96
Net TRC (in year CDN $):		
Benefit to Cost Ratio (TRC Benefits/TRC Costs):		

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

Cumulative Results:

Conservation Programs:

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

Demand Management Programs:

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

Demand Response Programs:

Dispatchable load (kW):	0
Peak hours dispatched in year (hours):	

Power Factor Correction Programs:

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

Line Loss Reduction Programs:

	lifecycle	in year
Peak load savings (kW):		
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):

D. **Actual Program Costs:**

		Reporting Year	Cumlative Life to Date
Utility direct costs ($):	*Incremental capital:*		
	Incremental O&M:	$ -	$ 24.96
	Incentive:		
	Total:	$ -	$ 24.96
Utility indirect costs ($):	*Incremental capital:*		
	Incremental O&M:		
	Total:		

E. Assumptions & Comments:

[1] Benefits should be estimated if costs have been incurred and the technology has been deployed. Benefits reflect the present value of the measure for the number of units deployed in the year, i.e. the 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 Appendix for each program)

A. **Name of the Program:** HVAC Upgrade

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

This initiative was undertaken to upgrade the HVAC systems at the utility's offices. The fuel source was changed to natural gas from electricity and a modern, controllable, control system was added. This allows the heat and air conditioning to be controlled by zones to stabilize the system and eliminate wide variations of temperature within individual buildings. The system automatically lowers temperatures in winter and raises them in summer outside of regular working hours to save energy at times when no staff are on site.

Measure(s):

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

B. **TRC Results:**

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

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

Cumulative Results:

Conservation Programs:

Demand savings (kW):	*Summer*	0	
	Winter		

	lifecycle	*in year*	*Cumulative Lifecycle*	Cumulative Annual Savings
Energy saved (kWh):	*0*	0		
Other resources saved :				
Natural Gas (m3):				
Other (specify):				

Demand Management Programs:

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

Demand Response Programs:

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

Power Factor Correction Programs:

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

Line Loss Reduction Programs:

	lifecycle	in year	
Peak load savings (kW):			
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. **Actual Program Costs:**

		Reporting Year	Cumulative Life to Date
Utility direct costs ($):	*Incremental capital:*	$ 121.30	$ 121.30
	Incremental O&M:		
	Incentive:		
	Total:		
Utility indirect costs ($):	*Incremental capital:*		
	Incremental O&M:		$ -
	Total:	$ 121.30	$ 121.30

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 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

A. **Name of the Program:** System Optimization CDM-400

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

Please see 2006 CDM Report (page 16) for additional description of this Program. The objective of this portion of OPUCN's plan is to be able to identify the major causes of losses on OPUCN's distribution feeders. This first involves a high level analysis of losses from distribution lines and transformers, and estimation of the percentage contribution of each to the total system losses. This information will be used to develop a loss reduction strategy. A further objective would be to identify specific opportunities for loss mitigation on the distribution systems. Detailed feeder modeling would be required to assess the financial impact of particular mitigation techniques on individual feeders. This work would establish areas where implementation of loss reduction techniques could be cost justified.
The overall intent of the study would be to illustrate where cost savings would be available and the methodology by which savings could be achieved. The loss reduction techniques that
could be applied most easily by the utility to achieve the greatest return with the least investment in time or equipment would be determined.
Target users: The Distribution system
Benefits: A reduction is energy losses within the distribution system. Evaluation: To soon to do so.

Measure(s):

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

B. **TRC Results:**

	Reporting Year	Life-to-date TRC Results:
[1] *TRC Benefits ($):*		
[2] *TRC Costs ($):*		
Utility program cost (excluding incentives):	$ -	$ 35.54
Incremental Measure Costs (Equipment Costs)		
Total TRC costs:	$ -	$ 35.54
Net TRC (in year CDN $):		
Benefit to Cost Ratio (TRC Benefits/TRC Costs):		

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

Cumulative Results:

Conservation Programs:

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

Demand Management Programs:

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

Demand Response Programs:

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

Power Factor Correction Programs:

Amount of KVar installed (KVar):	
Distribution system power factor at begining 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):	

D. **Actual Program Costs:**

		Reporting Year	Cumlative Life to Date
Utility direct costs ($):	*Incremental capital:*		
	Incremental O&M:	$ -	$ 35.54
	Incentive:		
	Total:	$ -	$ 35.54
Utility indirect costs ($):	*Incremental capital:*		
	Incremental O&M:		
	Total:		

E. Assumptions & Comments:

[1] Benefits should be estimated if costs have been incurred and the technology has been deployed. Benefits reflect the present value of the measure for the number of units deployed in the year, i.e. the 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 Appendix for each program)

A. **Name of the Program:** CDM Web Infrastructure CDM-401&CDM-402

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

Set up of CDM Web infrastructure (one time fee). Software Design.

Measure(s):

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

B. **TRC Results:**

	Reporting Year	Life-to-date TRC Results:
[1] *TRC Benefits ($):*		
[2] *TRC Costs ($):*		
Utility program cost (excluding incentives):	$ -	$ 273.93
Incremental Measure Costs (Equipment Costs)		
Total TRC costs:	$ -	$ 273.93
Net TRC (in year CDN $):		
Benefit to Cost Ratio (TRC Benefits/TRC Costs):		

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

Cumulative Results:

Conservation Programs:

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

Demand Management Programs:

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

Demand Response Programs:

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

Power Factor Correction Programs:

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

Line Loss Reduction Programs:

	lifecycle	in year
Peak load savings (kW):		
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):	

D. **Actual Program Costs:**

	Reporting Year	Cumlative Life to Date

Utility direct costs ($):	*Incremental capital:*	$ -	$ 273.93
	Incremental O&M:	$ -	
	Incentive:		
	Total:	$ -	$ 273.93
Utility indirect costs ($):	*Incremental capital:*		
	Incremental O&M:		
	Total:		

E. Assumptions & Comments:

[1] Benefits should be estimated if costs have been incurred and the technology has been deployed. Benefits reflect the present value of the measure for the number of units deployed in the year, i.e. the 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 Appendix for each program)

A. **Name of the Program:** Total Resource Cost Tool for OEB Reporting CDM-403

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

TRC tool for calculation of data to appease OEB reporting for CDM projects

Measure(s):

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

B. **TRC Results:**

	Reporting Year	Life-to-date TRC Results:
[1] *TRC Benefits ($):*		
[2] *TRC Costs ($):*		
Utility program cost (excluding incentives):	$ -	$ 4.75
Incremental Measure Costs (Equipment Costs)		
Total TRC costs:	$ -	$ 4.75
Net TRC (in year CDN $):		
Benefit to Cost Ratio (TRC Benefits/TRC Costs):		

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

Cumulative Results:

Conservation Programs:

Demand savings (kW): *Summer*

Winter

	lifecycle	*in year*	*Cumulative Lifecycle*	Cumulative Annual Savings
Energy saved (kWh):				
Other resources saved :				
Natural Gas (m3):				
Other (specify):				

Demand Management Programs:

Controlled load (kW)

Energy shifted On-peak to Mid-peak (kWh):

Energy shifted On-peak to Off-peak (kWh):

Energy shifted Mid-peak to Off-peak (kWh):

Demand Response Programs:

Dispatchable load (kW):

Peak hours dispatched in year (hours):

Power Factor Correction Programs:

Amount of KVar installed (KVar):

Distribution system power factor at begining 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):

D. **Actual Program Costs:**

	Reporting Year	Cumlative Life to Date

Utility direct costs ($):	*Incremental capital:*	$ -	$ 4.75
	Incremental O&M:		
	Incentive:		
	Total:	$ -	$ 4.75
Utility indirect costs ($):	*Incremental capital:*		
	Incremental O&M:		
	Total:		

E. Assumptions & Comments:

[1] Benefits should be estimated if costs have been incurred and the technology has been deployed. Benefits reflect the present value of the measure for the number of units deployed in the year, i.e. the 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 Appendix for each program)

A. **Name of the Program:** Consulting CDM Reporting CDM 510

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

Measure(s):

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

B. **TRC Results:**

	Reporting Year	Life-to-date TRC Results:
[1] *TRC Benefits ($):*		
[2] *TRC Costs ($):*		
Utility program cost (excluding incentives):	$ -	$ 36.54
Incremental Measure Costs (Equipment Costs)		
Total TRC costs:	$ -	$ 36.54
Net TRC (in year CDN $):		
Benefit to Cost Ratio (TRC Benefits/TRC Costs):		

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

Cumulative Results:

Conservation Programs:

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

Demand Management Programs:

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

Demand Response Programs:

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

Power Factor Correction Programs:

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

Line Loss Reduction Programs:

	lifecycle	in year
Peak load savings (kW):		
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):	

D. **Actual Program Costs:**

		Reporting Year	Cumlative Life to Date
Utility direct costs ($):	*Incremental capital:*	$ -	$ 8.94
	Incremental O&M:		$ 33.01
	Incentive:		
	Total:	$ -	$ 41.94
Utility indirect costs ($):	*Incremental capital:*		
	Incremental O&M:		
	Total:		

E. Assumptions & Comments:

[1] Benefits should be estimated if costs have been incurred and the technology has been deployed. Benefits reflect the present value of the measure for the number of units deployed in the year, i.e. the 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 Appendix for each program)

A. **Name of the Program:** UOIT Energy Usage Study CDM 900

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

CFL Giveaway - includes Fall Home Show, The Green Show, Peaksaver Launch, Kiwanis Club, Probus Club, Community Presentations,

Measure(s):

	Measure 1	Measure 2 (if applicable)	Measure 3 (if applicable)
Base case technology:	60W Incandescent		
Efficient technology:	CFL Screw-In 15W		
Number of participants or units delivered for reporting year:	1018		
Measure life (years):	4		
Number of Partipants or unites delievered lfe to date			

B. **TRC Results:**

	Reporting Year	Life-to-date TRC Results:
[1] *TRC Benefits ($):*	$ -	22.9
[2] *TRC Costs ($):*		
Utility program cost (excluding incentives):	$ 30.00	$ 90.00
Incremental Measure Costs (Equipment Costs)		
Total TRC costs:	$ 30.00	$ 90.00
Net TRC (in year CDN $):		0.25
Benefit to Cost Ratio (TRC Benefits/TRC Costs):		

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

Cumulative Results:

Conservation Programs:

Demand savings (kW): *Summer* 21

Winter

	lifecycle	*in year*	*Cumulative Lifecycle*	Cumulative Annual Savings
Energy saved (kWh):	*382604*	95651	41444	478255
Other resources saved :				
Natural Gas (m3):				
Other (specify):				

Demand Management Programs:

Controlled load (kW)

Energy shifted On-peak to Mid-peak (kWh):

Energy shifted On-peak to Off-peak (kWh):

Energy shifted Mid-peak to Off-peak (kWh):

Demand Response Programs:

Dispatchable load (kW):

Peak hours dispatched in year (hours):

Power Factor Correction Programs:

Amount of KVar installed (KVar):

Distribution system power factor at begining of year (%):

Distribution system power factor at end of year (%):

Line Loss Reduction Programs:

	lifecycle	in year
Peak load savings (kW):		
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):	

D. **Actual Program Costs:**

		Reporting Year	Cumlative Life to Date
Utility direct costs ($):	*Incremental capital:*		
	Incremental O&M:	$ 30.00	$ 90.00
	Incentive:		
	Total:	$ 30.00	$ 90.00
Utility indirect costs ($):	*Incremental capital:*		
	Incremental O&M:		
	Total:		

E. Assumptions & Comments:

[1] Benefits should be estimated if costs have been incurred and the technology has been deployed. Benefits reflect the present value of the measure for the number of units deployed in the year, i.e. the 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 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 the formulas, please insert the additional rows in the middle of the list below.

	TRC Benefits (PV)	TRC Costs (PV)	$ Net TRC Benefits	Benefit/Cost Ratio	Report Year Total kWh Saved	Lifecycle (kWh) Savings	Total Peak Demand (kW) Saved	Report Year Gross C&DM Expenditures ($)
Library Watt Reader Program - CFL C	$ 3	$ -	$ 3	0.00	13,416	53,664	3	$ -
Every Kilowatt Counts (Spring)	$ -	$ -	$ -	0.00	0	0	0	$ -
Every Kilowatt Counts (Fall)	$ -	$ -	$ -	0.00	0	0	0	$ -
Residential - Establish Baselines and	$ -	$ 1	-$ 1	0.00				$ 1
Replace Bulk with Individual Meters 1	$ -	$ -	$ -	0.00	0	0	0	$ -
5 and 50 Points Pilot Project	$ -	$ 2	-$ 2	0.00				$ 2
System Prototype & Pilot	$ -	$ -	$ -	0.00				$ -
Customer Satisfaction Survey	$ -	$ -	$ -	0.00				$ -
Water Heater DSM Id.	$ -	$ -	$ -	0.00				$ -
Smart Meter Pilot	$ -	$ 76	-$ 76	0.00				$ 76
Smart Meter Operations Fee	$ -	$ 5	-$ 5	0.00				$ 5
Education CDM Spending (Media)	$ -	$ 25	-$ 25	0.00	0	0	0	$ 25
Generation Conservation	$ -	$ -	$ -	0.00				$ -
School Pilot CFL	$ -	$ -	$ -	0.00		3,745,880	30	$ 1
UIOT Energy Usage Study and CFL	$ -	$ -	$ -	0.00		382,604	21	90
Consulting CDM Reporting		$ -	$ 23	90.00				$ 2
***Totals App. B - Residential**	$ 3	$ 109	-$ 106	0.03	13,416	4,182,148	54	$ 202
Residential Indirect Costs not attributable to any specific program	→	$ -						
Total Residential TRC Costs		$ 109						
****Totals TRC - Residential**	**$ 3**	**$ 109**	**-$ 106**	**0.03**				

2. Commercial Programs

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

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

	TRC Benefits (PV)	TRC Costs (PV)	$ Net TRC Benefits	Benefit/Cost Ratio	Report Year Total kWh Saved	Lifecycle (kWh) Savings	Total Peak Demand (kW) Saved	Report Year Gross C&DM Expenditures ($)
Christmas Lighting Retrofit	$ -	$ -	$ -	0.00	0	0	0	$ -
Com/Ind. System Prototype & Pilot	$ -	$ -	$ -	0.00				$ -
HVAC Upgrade			$ -	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	0	$ -
Commercial Indirect Costs not attributable to any specific program	→							
Total TRC Costs		$ -						
****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 (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 ($)
Non profit Retrofit Project	$ -	$ -	$ -	0.00	0	0	36	$ 41
Name of Program B			$ -	0.00				
Name of Program C			$ -	0.00				
Name of Program D			$ -	0.00				
Name of Program E			$ -	0.00				
Name of Program C			$ -	0.00				
Name of Program G			$ -	0.00				
Name of Program H			$ -	0.00				
Name of Program I			$ -	0.00				
Name of Program J			$ -	0.00				
***Totals App. B - Institutional**	$ -	$ -	$ -	0.00	0	0	36	$ 41
Institutional Indirect Costs not attributable to any specific program	→							
Total TRC Costs		$ -						
****Totals TRC - Institutional**	**$ -**	**$ -**	**$ -**	**0.00**				

4. Industrial Programs

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

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

	TRC Benefits (PV)	TRC Costs (PV)	$ Net TRC Benefits	Benefit/Cost Ratio	Report Year Total kWh Saved	Lifecycle (kWh) Savings	Total Peak Demand (kW) Saved	Report Year Gross C&DM Expenditures ($)
Transitional Demand Response Progr	$ -	$ -	$ -	0.00				$ 3
Name of Program C			$ -	0.00				
Name of Program C			$ -	0.00				

Name of Program D			$ -	0.00					
Name of Program E			$ -	0.00					
Name of Program F			$ -	0.00					
Name of Program G			$ -	0.00					
Name of Program H			$ -	0.00					
Name of Program I			$ -	0.00					
Name of Program J			$ -	0.00					
***Totals App. B - Industrial**	$ -	$ -	$ -	0.00	0	0	0	$	3
Industrial Indirect Costs not attributable to any specific program	→								
Total TRC Costs		$ -							
****Totals TRC - Industrial**	**$ -**	**$ -**	**$ -**	**0.00**					

5. Agricultural Programs

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

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

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

6. LDC System Programs

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

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

	TRC Benefits (PV)	TRC Costs (PV)	$ Net TRC Benefits	Benefit/Cost Ratio	Report Year Total kWh Saved	Lifecycle (kWh) Savings	Total Peak Demand (kW) Saved	Report Year Gross C&DM Expenditures ($)
System Opt/ Loss Analysis - Consulta	$ -	$ 43	-$ 43	0.00				$ 43

Sys Opt/ CDM Web Infrastructure	$ -	$ 120	-$	120	0.00				$ 120

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**	$ -	$ 163	-$ 163	0.00	0	0	0	$ 163	
LDC System Indirect Costs not attributable to any specific program →									
Total TRC Costs		$ 163							
****Totals TRC - LDC System**	**$ -**	**$ 163**	**-$ 163**	**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)	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 ($)
Total Resource Cost Tool for OEB Re	$ -	$ -	$ -	0.00				$ -
Name of Program B			$ -	0.00				
Name of Program C			$ -	0.00				
Name of Program D			$ -	0.00				
Name of Program E			$ -	0.00				
Name of Program F			$ -	0.00				
Name of Program G			$ -	0.00				
Name of Program H			$ -	0.00				
Name of Program I			$ -	0.00				
Name of Program J			$ -	0.00				
***Totals App. B - Other #1**	$ -	$ -	$ -	0.00	0	0	0	$ -
Other #1 Indirect Costs not attributable to any specific program →								
Total TRC Costs		$ -						
****Totals TRC - Other #1**	**$ -**	**$ -**	**$ -**	**0.00**				

9. Other #2 Programs

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

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

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

LDC's CDM PORTFOLIO TOTALS

	TRC Benefits (PV)	TRC Costs (PV)	$ Net TRC Benefits	Benefit/Cost Ratio	Report Year Total kWh Saved	Lifecycle (kWh) Savings	Total Peak Demand (kW) Saved	Report Year Gross C&DM Expenditures ($)
***TOTALS FOR ALL APPENDIX B**	$ 3	$ 272	-$ 269	0.01	$ 13,416	$ 4,182,148	$ 90	$ 409
*Any **other** Indirect Costs not attributable to any specific program* →		$ -						
TOTAL ALL LDC COSTS		$ 272						
****LDC' PORTFOLIO TRC**	$ 3	$ 272	-$ 269	0.01				

* 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.